



EUROPEAN COMMISSION

DG Competition

CASE M.8864 - VODAFONE / CERTAIN LIBERTY GLOBAL ASSETS

(Only the English text is authentic)

MERGER PROCEDURE REGULATION (EC) 139/2004

Article 8(2) Regulation (EC) 139/2004

Date: 18/07/2019

This text is made available for information purposes only. A summary of this decision is published in all EU languages in the Official Journal of the European Union.

Parts of this text have been edited to ensure that confidential information is not disclosed; those parts are enclosed in square brackets.



EUROPEAN
COMMISSION

Brussels, 18.7.2019
C(2019) 5187 final

PUBLIC VERSION

COMMISSION DECISION

of 18.7.2019

**declaring a concentration to be compatible with the internal market and the EEA
Agreement**

(Case M.8864 - VODAFONE / CERTAIN LIBERTY GLOBAL ASSETS)

(Only the English text is authentic)

TABLE OF CONTENTS

I.	Introduction	16
II.	The Parties.....	17
III.	The Transaction.....	17
IV.	Union dimension	18
V.	Procedure.....	18
VI.	The market investigation.....	20
VII.	Relevant markets	21
1.	Retail supply of fixed telephony services	21
1.1.	Product market definition.....	21
1.2.	Geographic market definition	22
2.	Retail supply of fixed internet access services.....	23
2.1.	Product market definition.....	23
2.2.	Geographic market definition	26
3.	Retail supply of mobile telecommunications services	27
3.1.	Product market definition.....	27
3.2.	Geographic market definition	28
4.	Retail supply of TV services	29
4.1.	Product market definition.....	30
4.2.	Geographic market definition	32
5.	Retail supply of TV signal transmission in Germany	33
5.1.	Product market definition.....	34
5.2.	Geographic market definition	41
6.	Retail supply of multiple play services	43
6.1.	Product market definition.....	46
6.2.	Geographic market definition	49
7.	Retail business connectivity services	49
7.1.	Product market definition.....	50
7.2.	Geographic market definition	50
8.	Retail internet hosting services	51
8.1.	Product market definition.....	51
8.2.	Geographic market definition	51
9.	Wholesale call termination services on fixed networks	52
9.1.	Product market definition.....	52
9.2.	Geographic market definition	53
10.	Wholesale leased lines	53
10.1.	Product market definition.....	53

10.2.	Geographic market definition	54
11.	Wholesale termination and hosting of calls to non-geographic numbers	54
11.1.	Product market definition.....	54
11.2.	Geographic market definition	55
12.	Wholesale provision of domestic call transit on fixed networks	55
12.1.	Product market definition.....	55
12.2.	Geographic market definition	56
13.	Wholesale international carrier services	56
13.1.	Product market definition.....	56
13.2.	Geographic market definition	56
14.	Wholesale internet connectivity services	57
14.1.	Product market definition.....	57
14.2.	Geographic market definition	58
15.	Wholesale access and call origination on mobile networks.....	58
15.1.	Product market definition.....	59
15.2.	Geographic market definition	59
16.	Wholesale market for call termination on mobile networks	59
16.1.	Product market definition.....	60
16.2.	Geographic market definition	60
17.	Wholesale international roaming services	60
17.1.	Product market definition.....	61
17.2.	Geographic market definition	61
18.	Wholesale supply and acquisition of TV channels	61
18.1.	Product market definition.....	62
18.2.	Geographic market definition	64
19.	Wholesale TV signal transmission.....	64
19.1.	Product market definition.....	65
19.2.	Geographic market definition	68
20.	Intermediary TV signal delivery in Germany	69
20.1.	Product market definition.....	70
20.2.	Geographic market definition	70
21.	Licensing and acquisition of broadcasting rights for TV content	71
21.1.	Product market definition.....	71
21.2.	Geographic market definition	72
VIII.	Competitive assessment	73
A.	Analytical framework.....	73
1.	Horizontal effects	74

1.1.	Non-coordinated effects	74
1.2.	Coordinated effects	75
1.3.	Effects on potential competition	75
2.	Vertical effects	76
3.	Conglomerate effects	77
B.	Outline of the competitive assessment	77
C.	Germany	78
1.	Affected markets	78
1.1.	Horizontally affected markets	78
1.2.	Vertically affected market	78
1.3.	Other markets in which the Transaction may have a significant impact	79
2.	Horizontal non-coordinated effects	80
2.1.	Horizontal non-coordinated effects in the retail supply of fixed telephony services in Germany	80
2.1.1.	The Notifying Party's view	80
2.1.2.	The Commission's assessment	80
2.1.3.	Conclusion	82
2.2.	Horizontal non-coordinated effects in the retail supply of fixed internet access services in Germany	82
2.2.1.	The Notifying Party's view	82
2.2.2.	The Commission's assessment	84
2.2.2.1.	The German market for retail fixed internet access services	84
(i)	Network infrastructure	84
(ii)	Regulatory regime	85
(iii)	Competitive parameters	87
2.2.2.2.	Market shares and concentration levels	88
(i)	Introduction	88
(ii)	National market shares	91
(iii)	Shares in cable footprints	94
(iv)	Shares at federal state and district level	96
(v)	Concentration levels	96
(vi)	Conclusion	97
2.2.2.3.	Competitive constraint exerted by the Parties	97
(i)	Unitymedia	97
(ii)	Vodafone	100
(iii)	Competitive constraint exerted by the Parties on each other	106
(a)	Competitive interaction between the Parties' cable businesses	106

(b) Competitive interaction within Unitymedia's footprint	107
Qualitative evidence	108
Quantitative evidence	114
Conclusion.....	118
(iv) Conclusion on the competitive constraint exerted by the Parties	118
2.2.2.4. Competitive constraint from other competitors	118
(i) Deutsche Telekom.....	119
(ii) United Internet	125
(iii) Telefónica.....	126
(iv) Other players	127
2.2.2.5. Likely overall effects of the Transaction	127
(i) Qualitative assessment	127
(ii) Quantitative analysis of the likely price effects	128
(a) Introduction	128
(b) Notifying Party's submissions on likely price effects.....	130
(c) Commission's assessment.....	133
Quantitative UPP and IPR analyses	133
Quantitative evidence on evolution of prices following Vodafone/Kabel Deutschland	136
Conclusion.....	138
2.2.2.6. No likely entry and no countervailing buyer power.....	139
2.2.2.7. Efficiencies.....	139
(i) Framework of assessment	139
(ii) Migration synergies.....	140
(a) Notifying Party's submission.....	140
(b) Commission's assessment.....	142
(iii) Acceleration of infrastructure development in Germany.....	145
(a) Notifying Party's submission.....	145
(b) Commission's assessment.....	145
Verifiability and merger specificity	145
Benefit to consumers	147
(iv) Sharing backhaul infrastructure	147
(a) Notifying Party's submission.....	147
(b) Commission's assessment.....	147
Benefit to consumers	147
Verifiability and merger specificity	148
(iv) Conclusion on efficiencies	148
2.2.3. Conclusion.....	148

2.3.	Horizontal non-coordinated effects in the retail supply of mobile telecommunications services in Germany	148
2.3.1.	The Notifying Party's view	148
2.3.2.	The Commission's assessment.....	149
2.3.2.1.	The German market for retail mobile telecommunications services	149
2.3.2.2.	Market shares and concentration levels	149
2.3.2.3.	Assessment.....	152
2.3.3.	Conclusion.....	153
2.4.	Horizontal non-coordinated effects in the retail supply of TV signal transmission to MDU customers	153
2.4.1.	The Notifying Party's view	153
2.4.2.	The Commission's assessment.....	154
2.4.2.1.	The German market for the retail TV signal transmission to MDU customers	154
(i)	Network infrastructure	154
(ii)	Regulatory Regime.....	155
(iii)	General market developments and characteristics	155
(iv)	Competitive parameters	158
2.4.2.2.	Market shares and concentration levels	159
(i)	National market shares	159
(ii)	Shares in cable footprints	162
(iii)	Concentration levels.....	162
(iv)	Conclusion.....	163
2.4.2.3.	Competitive constraint exerted by the Parties.....	163
(i)	Vodafone	163
(ii)	Unitymedia.....	169
(iii)	Competitive constraint exerted by the Parties on each other	171
(a)	No actual direct competition	171
(b)	No actual indirect competition	173
2.4.2.4.	Competitive constraint from competitors.....	176
(i)	Competitive constraint pre-Transaction	176
(a)	Tele Columbus	176
(b)	Deutsche Telekom.....	180
(c)	Other players	183
(ii)	Competitive constraint post-Transaction	185
2.4.2.5.	Likely overall effect of the Transaction	188
2.4.3.	Conclusion.....	188
2.5.	Horizontal non-coordinated effects in the retail supply of TV signal transmission to SDU customers.....	188

2.5.1.	The Notifying Party's view	188
2.5.2.	The Commission's assessment.....	189
2.5.2.1.	The German market for the retail TV signal transmission to SDU customers	189
2.5.2.2.	Market shares and concentration levels	190
(i)	National market shares.....	190
(ii)	Shares in cable footprints	191
(iii)	Concentration levels.....	192
(iv)	Conclusion.....	193
2.5.2.3.	Competitive constraint exerted by the Parties.....	193
(i)	Vodafone	193
(ii)	Unitymedia.....	195
(iii)	Competitive constraint exerted by the Parties on each other	196
(a)	No actual direct competition	196
(b)	No actual indirect competition	196
2.5.2.4.	Competitive constraint from competitors.....	197
2.5.2.5.	Likely overall effect of the Transaction	199
2.5.3.	Conclusion.....	199
2.6.	Horizontal non-coordinated effects in the retail supply of TV services in Germany	199
2.6.1.	The Notifying Party's view	199
2.6.2.	The Commission's assessment.....	200
2.6.2.1.	The German market for retail TV services	200
2.6.2.2.	Market shares and concentration levels	200
(i)	National market shares.....	200
(ii)	Shares in cable footprints	203
(iii)	Concentration levels.....	204
(iv)	Conclusion.....	204
2.6.2.3.	Assessment.....	205
(i)	Basic retail TV services	205
(ii)	Premium retail TV services.....	205
2.6.3.	Conclusion.....	209
2.7.	Horizontal non-coordinated effects in the retail supply of multiple play 2P bundles including fixed telephony services and fixed internet access services in Germany	209
2.7.1.	The Notifying Party's view	209
2.7.2.	The Commission's assessment.....	209
2.7.3.	Conclusion.....	210

2.8.	Horizontal non-coordinated effects in the retail supply of multiple play 3P bundles including fixed telephony services, fixed internet access services and mobile telecommunications services in Germany.....	210
2.8.1.	The Notifying Party's view	210
2.8.2.	The Commission's assessment.....	210
2.8.3.	Conclusion.....	212
2.9.	Horizontal non-coordinated effects in the retail supply of multiple play 3P bundles including fixed telephony services, fixed internet access services and TV services in Germany.....	213
2.9.1.	The Notifying Party's view	213
2.9.2.	The Commission's assessment.....	213
2.9.3.	Conclusion.....	218
2.10.	Horizontal non-coordinated effects in the retail supply of multiple play 4P bundles in Germany.....	219
2.10.1.	The Notifying Party's view	219
2.10.2.	The Commission's assessment.....	219
2.10.3.	Conclusion.....	224
2.11.	Horizontal non-coordinated effects in the market for the wholesale supply and acquisition of TV channels and in the market for the wholesale TV signal transmission in Germany.....	225
2.11.1.	Introduction	225
2.11.2.	The Notifying Party's views	225
2.11.3.	The Commission's assessment	229
2.11.3.1.	Market shares in the wholesale supply and acquisition of TV channels.....	229
2.11.3.2.	Market shares in the wholesale TV signal transmission	232
2.11.3.3.	Size of cable platforms and market power	236
2.11.3.4.	Increase in market power following the Transaction	239
2.11.3.5.	The regulatory framework.....	243
2.11.3.6.	The countervailing power of TV broadcasters	245
2.11.3.7.	The alleged absence of any anticompetitive effects of the Transaction due to the non-overlapping nature of the Parties' cable networks	253
2.11.3.8.	The alleged absence of anticompetitive effects due to the indispensability of the Parties.....	254
2.11.3.9.	Analysis of potential anti-competitive effects due to the increased market power of the merged entity	257
(i)	Whether the merged entity would obtain terms and conditions from broadcasters for access to content that ultimately have a negative impact on the access of competing retail TV providers to that very same content	259
(a)	The Notifying Party's view	259
(b)	The Commission's assessment.....	260

The possibility of exclusive acquisition by the merged entity of premium channels/content	261
The Parties' internal documents on premium channels/content acquisition	265
The possible effects of a hypothetical exclusive acquisition strategy	266
Conclusion.....	266
(ii) Whether the merged entity would negatively influence the breadth and quality of the TV offer in Germany.....	267
(a) The Notifying Party's view	267
(b) The Commission's assessment.....	267
The merged entity could foreclose access to its platform	268
The possible incentive to foreclose access to the merged entity's platform	271
The Parties' internal documents on channel foreclosure	274
The possible effects of a foreclosure strategy	275
- Total foreclosure of small Pay TV channels	275
- Partial foreclosure of (any type of) TV channels	276
Conclusion.....	277
(iii) Whether the merged entity would hamper the emergence of innovative TV services (OTT – HbbTV)	278
(a) The Notifying Party's view	278
(b) The Commission's assessment.....	278
The ability to hamper the emergence of innovative TV services.....	278
The incentive to hamper the emergence of innovative TV services	279
The possible effects of a strategy aimed at hampering the emergence of innovative TV services.....	281
Conclusion.....	282
(iv) Whether the merged entity could hamper the emergence of ATV applications	282
(a) The Notifying Party's view	282
(b) The Commission's assessment.....	283
Aggregated data.....	286
Individual data.....	286
Conclusion.....	287
2.11.4. Conclusion on the wholesale market for the TV signal transmission	287
2.12. Horizontal non-coordinated effects in the market for the licensing and acquisition of TV broadcasting rights	287
2.12.1. The Notifying Party's views	288
2.12.2. The Commission's assessment	288
2.12.3. Conclusion.....	290
3. Horizontal coordinated effects	290
3.1. Introduction	290

3.2.	Horizontal coordinated effects in the retail market for fixed internet access services in Germany.....	292
3.2.1.	Reaching terms of coordination	292
3.2.1.1.	The Notifying Party's views	292
3.2.1.2.	The Commission's assessment.....	293
(i)	Complexity of the economic environment.....	293
(ii)	Demand and supply conditions	295
(iii)	Increased symmetry	296
(iv)	Conclusion.....	299
3.2.2.	Monitoring deviations	299
3.2.2.1.	The Notifying Party's view	299
3.2.2.2.	The Commission's assessment.....	300
3.2.3.	Deterrent mechanism	301
3.2.3.1.	The Notifying Party's views	301
3.2.3.2.	The Commission's assessment.....	302
3.2.4.	Reactions of outsiders	303
3.2.4.1.	The Notifying Party's views	303
3.2.4.2.	The Commission's assessment.....	303
3.2.5.	Other possible means of coordination.....	304
3.2.5.1.	Coordination with regard to investments	305
(i)	The Notifying Party's views	305
(ii)	The Commission's assessment.....	305
3.2.5.2.	Coordination to refuse wholesale access to the merged entity's and Deutsche Telekom's telecommunications networks.....	306
(i)	The Notifying Party's views	306
(ii)	The Commission's assessment.....	307
3.2.6.	Conclusion.....	307
3.3.	Horizontal coordinated effects in the possible retail markets for multiple play 3P bundles including fixed telephony services, fixed internet access services and mobile telecommunications services and 4P bundles in Germany	307
3.3.1.	The Notifying Party's views	308
3.3.2.	The Commission's assessment.....	308
3.3.3.	Conclusion.....	309
4.	Vertical non-coordinated effects	310
4.1.	Foreclosure of wholesale access and call origination services on mobile networks to retail suppliers of mobile telecommunications services in Germany.....	310
4.1.1.	The Notifying Party's view	310
4.1.2.	The Commission's assessment.....	310

4.1.2.1.	The German market for wholesale access and call origination services on mobile networks	310
4.1.2.2.	Market shares	311
4.1.2.3.	Assessment.....	312
(i)	Ability to engage in input foreclosure.....	313
(ii)	Incentive to engage in input foreclosure	314
(iii)	Effects on competition	315
4.1.3.	Conclusion.....	317
4.2.	Foreclosure of retail suppliers of TV signal transmission to MDU customers in Germany.....	317
4.2.1.	The Notifying Party's view	317
4.2.2.	The Commission's assessment.....	317
4.2.2.1.	The German market for intermediary TV signal delivery	318
4.2.2.2.	Market shares	319
4.2.2.3.	Assessment.....	319
(i)	Ability to engage in input foreclosure.....	321
(ii)	Incentive to engage in input foreclosure	322
(iii)	Effects on competition	323
4.2.3.	Conclusions	325
4.3.	Foreclosure of access to wholesale leased lines to retail suppliers of mobile telecommunications services in Germany.....	325
4.3.1.	Introduction	325
4.3.2.	The Notifying Party's view	326
4.3.3.	The Commission assessment.....	326
5.	Conglomerate effects	327
5.1.	Introduction	327
5.2.	The Notifying Party's view	327
5.3.	The Commission's assessment	329
5.3.1.	Ability to foreclose.....	331
5.3.2.	Incentive to foreclose	336
5.3.3.	Impact on competition and on consumers.....	337
5.1.	Conclusion.....	339
D.	Czechia.....	339
1.	Affected markets	340
1.1.	Horizontally affected markets	340
1.2.	Vertically affected markets	342
1.3.	Other markets in which the Transaction may have a significant impact	343
2.	Conglomerate effects	344

2.1.	Introduction	344
2.1.1.	Retail fixed internet services	344
2.1.2.	Retail TV services	345
2.1.3.	Retail mobile telecommunications services	347
2.1.4.	Retail multiple play services	347
2.2.	Conglomerate effects with regard to 2P bundles comprising of TV and mobile telecommunications services and 3P bundles comprising of TV, fixed internet access and mobile telecommunications services	347
2.2.1.	The Notifying Party's views	348
2.2.2.	The Commission's assessment.....	348
2.2.2.1.	Ability to foreclose.....	348
2.2.2.2.	Incentive to foreclose	351
2.2.2.3.	Impact on prices and choice	351
2.3.	Possible conglomerate effects with regard to mobile telecommunications services	352
2.4.	Conglomerate effects with regard to FMC bundles	352
2.4.1.	The Notifying Party's views	353
2.4.2.	The Commission's assessment.....	354
2.4.2.1.	Ability to foreclose.....	354
2.4.2.2.	Incentive to foreclose	357
2.4.2.3.	Impact on prices and choice	358
2.5.	Conclusion.....	358
E.	Hungary.....	359
1.	Affected markets	360
1.1.	Horizontally affected markets	360
1.2.	Vertically affected markets	361
1.3.	Other markets in which the Transaction may have a significant impact	362
2.	Horizontal non-coordinated effects in the retail market for the provision of mobile telecommunications services.....	363
2.1.	The Notifying Party's view	363
2.2.	The Commission's assessment.....	363
2.3.	Conclusion.....	364
3.	Vertical non-coordinated effects	364
3.1.	Foreclosure of providers of mobile telecommunications services due to the merged entity's position in the wholesale market for access and call origination services on mobile networks in Hungary	364
3.1.1.	The Notifying Party's view	364
3.1.2.	The Commission's assessment.....	365

3.2.	Foreclosure of competing providers of mobile telecommunications services due to the merged entity's position in the wholesale market for the supply of leased lines in Hungary	366
3.2.1.	The Notifying Party's view	366
3.2.2.	The Commission's assessment.....	366
4.	Conglomerate effects	368
4.1.	Introduction	368
4.2.	The Notifying Party's view	368
4.3.	The Commission's assessment.....	369
4.3.1.	Ability to foreclose.....	369
4.3.2.	Incentive to foreclose	371
4.3.3.	Impact on prices and choice	372
4.4.	Conclusion.....	372
F.	Romania	373
1.	Affected markets	373
1.1.	Horizontally affected markets	373
1.2.	Vertically affected markets	374
1.3.	Other markets in which the Transaction may have a significant impact	375
2.	Vertical non-coordinated effects	376
2.1.	Foreclosure of wholesale access to leased lines of providers of mobile telecommunications services in Romania	376
2.1.1.	The Notifying Party's view	376
2.1.2.	The Commission's assessment.....	376
3.	Conglomerate effects	376
3.1.	Introduction	376
3.2.	The Notifying Party's view	377
3.3.	The Commission's assessment.....	378
3.3.1.	Ability to foreclose.....	378
3.3.2.	Incentive to foreclose	379
3.3.3.	Impact on prices and choice	379
3.4.	Conclusion.....	380
G.	International markets.....	380
4.	Wholesale international carrier services	380
5.	Wholesale internet connectivity	381
IX.	Commitments	382
1.	Analytical Framework.....	382
2.	Procedure.....	383
3.	Assessment of the Commitments	384

3.1.	The First Commitments.....	384
3.1.1.	Description of the First Commitments.....	384
3.1.1.1.	WCBA Commitment.....	384
3.1.1.2.	OTT Commitment.....	386
3.1.1.3.	Monitoring and Arbitration.....	388
3.1.2.	Results of the Market Test	388
3.1.2.1.	WCBA Commitment.....	389
3.1.2.2.	OTT Commitment.....	391
3.1.2.3.	Monitoring and Arbitration.....	393
3.1.2.4.	Overall results of the Market Test.....	393
3.1.3.	The Commission’s assessment of the First Commitments	394
3.1.3.1.	WCBA Commitment.....	394
(i)	Scope.....	394
(ii)	Effective implementation and monitoring	402
3.1.3.2.	OTT Commitment.....	402
	The concerns related to the emergence of innovative TV services such as HbbTV signals and OTT Services	403
	The concerns related to partial foreclosure of Pay and FTA TV channels	404
3.1.3.3.	Overall assessment.....	405
3.2.	The Final Commitments.....	406
3.2.1.	Description of the Final Commitments.....	406
3.2.1.1.	WCBA Commitment.....	406
3.2.1.2.	OTT Commitment and additional commitments to limit the merged entity’s market power vis-à-vis broadcasters in the wholesale TV signal transmission market.....	406
3.2.1.3.	Monitoring and Arbitration.....	407
3.2.2.	The Commission’s assessment of the Final Commitments.....	408
3.2.2.1.	WCBA Commitment.....	408
3.2.2.2.	OTT Commitment.....	408
3.2.2.3.	Feed-in Fee Commitment.....	408
3.2.2.4.	HbbTV Commitment	410
3.2.2.5.	Overall assessment.....	411
4.	Suitability of Telefónica as New Cable Provider.....	411
4.1.	Independence.....	411
4.2.	Financial resources.....	412
4.3.	Proven expertise	412
4.4.	Ability and incentive to operate as a viable and active competitor.....	412
4.5.	Absence of prima facie competition problem	414

5.	The Framework Agreement	416
6.	Conclusion.....	416
X.	Conditions and obligations.....	417

COMMISSION DECISION

of 18.7.2019

declaring a concentration to be compatible with the internal market and the EEA Agreement

(Case M.8864 - VODAFONE / CERTAIN LIBERTY GLOBAL ASSETS)

(Only the English text is authentic)

THE EUROPEAN COMMISSION,

Having regard to the Treaty on the Functioning of the European Union,

Having regard to the Agreement on the European Economic Area, and in particular Article 57 thereof,

Having regard to Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings, and in particular Article 8(2) thereof,

Having regard to Commission Decision of 11 December 2018 to initiate proceedings in this case,

Having given the undertakings concerned the opportunity to make known their views on the objections raised by the Commission,

Having regard to the opinion of the Advisory Committee on Concentrations¹,

Having regard to the final report of the Hearing Officer in this case,

Whereas:

I. INTRODUCTION

- (1) On 19 October 2018, the Commission received notification of a proposed concentration pursuant to Article 4 of Regulation (EC) No 139/2004 ("the Merger Regulation")² by which the undertaking Vodafone Group Plc ("Vodafone" or the "Notifying Party"), based in the United Kingdom, intends to acquire sole control of Liberty Global Plc's ("Liberty Global"), based in the United Kingdom, telecommunications businesses in Czechia, Germany, Hungary and Romania ("the Target Business") ("the Transaction"). Vodafone and the Target Business are collectively referred to as the "Parties".
- (2) This Decision is structured as follows. Section II describes the Parties. Section III explains why the Transaction constitutes a concentration. Section IV explains why the concentration brought about by the Transaction has a Union dimension. Section V describes the procedure followed in this case. Section VI describes the

¹ Opinion of the Advisory Committee on Concentrations of 28 June 2019.

² OJ L 24, 29.1.2004, p. 1 ("the Merger Regulation"). With effect from 1 December 2009, the Treaty on the Functioning of the European Union ("TFEU") has introduced certain changes, such as the replacement of "Community" by "Union" and "common market" by "internal market". The terminology of the TFEU will be used throughout this Decision.
In this Decision, [CONFIDENTIAL] and [CONF] refer to confidential information redacted from the version of this Decision notified to the Notifying Party.

investigation undertaken by the Commission into the Transaction. Section VII defines the relevant product and geographic markets. Section VIII sets out the Commission's assessment of whether the Transaction is likely to significantly impede effective competition, taking into account the Notifying Party's efficiencies claims. Section IX sets out the Commission's assessment of the commitments submitted by the Notifying Party. Section X contains the Commission's conclusions.

II. THE PARTIES

- (3) Vodafone is a group of companies active globally in the operation of mobile telecommunications networks as mobile network operator ("MNO") and in the provision of mobile telecommunications services, such as voice telephony, messaging, data and content services. Some of its operating companies also provide cable television, fixed line telephony, broadband internet access and/or IPTV services³. Within the EU, Vodafone is active in 12 Member States. In particular, in Czechia, Hungary and Romania, Vodafone provides primarily retail mobile telecommunications services and to a limited extent fixed telecommunications services. In Germany, Vodafone is active in the supply of retail mobile telecommunications services nationwide, owns the Kabel Deutschland cable network, which covers urban areas within 13 of the 16 Federal States, and offers fixed telecommunications services nationwide based on wholesale access to Deutsche Telekom AG's ("Deutsche Telekom") fixed network.
- (4) Liberty Global owns and operates cable networks offering TV, broadband and voice telephony services worldwide and in particular in 11 Member States in the EU.
- (5) The Target Business comprises the operations of Liberty Global in each of Czechia, Germany, Hungary and Romania. In Czechia, the Target Business operates through UPC Česká republika, s.r.o.; in Germany through Unitymedia GmbH ("Unitymedia"); in Hungary through UPC Magyarország Kft; and in Romania through UPC Romania S.R.L. (the Target Business in each of Czechia, Hungary and Romania is collectively referred to as "UPC").⁴ The Target Business provides fixed telephony, broadband and TV services through its cable networks. In Germany, the Target Business operates the Unitymedia cable network, which covers the three Federal States where Vodafone's cable network is not present, that is North Rhine-Westphalia, Hesse and Baden-Wuerttemberg. In addition, the Target Business is active as a mobile virtual network operator ("MVNO") on Telefónica's network in Germany and on Vodafone's network in Hungary.

III. THE TRANSACTION

- (6) By means of a sale and purchase agreement entered into on 9 May 2018, Vodafone will acquire 100% of the shares of the corporate entities of the Target Business, which will become wholly-owned subsidiaries of Vodafone.

³ IPTV is the abbreviation for internet Protocol TV; it is a system through which television services are delivered using the internet protocol over a packet-switched network such as the internet, instead of being delivered through traditional terrestrial, satellite signal and cable television formats.

⁴ The satellite TV activities of each of UPC Česká republika, s.r.o., UPC Magyarország Kft, and UPC Romania S.R.L. has been sold by Liberty Global to a third party, M7.

- (7) Therefore, the Transaction consists of the acquisition of sole control by Vodafone over the Target Business and thus constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

IV. UNION DIMENSION

- (8) In 2017⁵, the undertakings concerned have a combined aggregate worldwide turnover of more than EUR 5 000 million⁶ (Vodafone: EUR 47 631 million, the Target Business: [DETAILS OF FINANCIAL RESULTS]). Each of them has an EU-wide turnover in excess of EUR 250 million (Vodafone: [DETAILS OF FINANCIAL RESULTS], the Target Business: [DETAILS OF FINANCIAL RESULTS]), but they do not achieve more than two-thirds of their aggregate EU-wide turnover within one and the same Member State. The notified operation therefore has a Union dimension pursuant to Article 1(2) of the Merger Regulation.

V. PROCEDURE

- (9) The Transaction was notified to the Commission on 19 October 2018.
- (10) On 7 November 2018, the Federal Cartel Office ("FCO"), the competent authority of Germany, issued a request pursuant to Article 9 of the Merger Regulation for the part of the Transaction affecting Germany to be referred to it with a view to that part of the Transaction being assessed according to German competition rules (the "Referral Request").
- (11) After a preliminary examination of the notification, and based on the first phase market investigation, the Commission raised serious doubts as to the compatibility of the Transaction with the internal market and adopted a decision to initiate proceedings pursuant to Article 6(1)(c) of the Merger Regulation on 11 December 2018 (the "Article 6(1)(c) Decision").
- (12) After the Commission adopted the Article 6(1)(c) Decision, the FCO did not send a reminder pursuant to Article 9(5) of the Merger Regulation. The Referral Request is therefore deemed to have been withdrawn by the FCO.
- (13) The Parties submitted their written comments on the Article 6(1)(c) Decision on 7 January 2019 (the "Response to the Article 6(1)(c) Decision").
- (14) On 15 January 2019, a state of play meeting took place between the Parties and the Commission.
- (15) On 18 January 2019, the Commission adopted a decision pursuant to Article 11(3) of the Merger Regulation, addressed to Vodafone, following Vodafone's failure to provide complete information in response to a request for information (the "RFI") from the Commission (the "Vodafone Article 11(3) Decision"). Also on 18 January 2019, the Commission adopted a second decision pursuant to Article 11(3) of the Merger Regulation, following Liberty Global's failure to provide complete information in response to a RFI from the Commission (the "Liberty Global Article 11(3) Decision"). Both the Vodafone Article 11(3) Decision and the Liberty Global Article 11(3) Decision compelled their addressees to submit a complete response to the RFIs originally sent by the Commission and had the effect of suspending the time limits referred to in the first subparagraph of Article 10(3) of the Merger Regulation.

⁵ The last financial year for which data was available at the time of the notification.

⁶ Turnover calculated in accordance with Article 5 of the Merger Regulation.

Liberty Global complied with the Liberty Global Article 11(3) Decision on 6 February 2019 and Vodafone complied with the Vodafone Article 11(3) Decision on 8 February 2019. Therefore, the suspension of the time limits expired at the end of 8 February 2019.

- (16) On 19 March 2019, a state of play meeting took place between the Parties and the Commission.
- (17) On 25 March 2019, the Commission issued a Statement of Objections to the Notifying Party (the “Statement of Objections”). In the Statement of Objections, the Commission came to the preliminary view that the notified concentration would significantly impede effective competition in a substantial part of the internal market within the meaning of Article 2(3) of the Merger Regulation, as a result of (1) horizontal non-coordinated effects (i) in the retail supply of fixed internet access services in Germany; (ii) in the retail supply of dual play bundles including fixed telephony services and fixed internet access services in Germany; and (iii) in the market for the wholesale TV signal transmission in Germany; as well as (2) vertical non-coordinated effects in the retail supply of TV signal transmission to MDU customers in Germany or in the potential regional market corresponding to the Target Business’s footprint.⁷
- (18) The first access to file was granted to the Parties on 25 March 2019, the day after the issue of the Statement of Objections. Subsequent access to the file was provided on 25 March 2019, 29 March 2019, 3 April 2019, 10 April 2019, 17 April 2019, 8 May 2019, 21 May 2019, 6 June 2019, 13 June 2019 and 28 June 2019. Access to confidential data and information relied upon by the Commission in the Statement of Objections was granted to the Parties’ economic advisors in accordance with the data room procedure.⁸
- (19) On 8 April 2019, the Parties submitted their written reply to the Statement of Objections (the “Response to the Statement of Objections”).
- (20) On 15 April 2019, pursuant to Article 10(3), second subparagraph, third sentence of the Merger Regulation, the Commission adopted a decision extending the periods set out in the first subparagraph of Article 10(3) of the Merger Regulation by a total of 10 working days.
- (21) On 26 April 2019, a state of play meeting took place between the Parties and the Commission.
- (22) On 6 May 2019, the Notifying Party submitted commitments pursuant to Article 8(2) of the Merger Regulation in order to address the competition concerns identified by

⁷ Cable “footprint” (also referred to as cable “territory”) refers to the scope of the cable network (in the sense of technical reach) and does not refer to all households in the Federal States in which their cable networks are located.

⁸ Business secrets and other confidential information of third parties within the meaning of Article 339 TFEU, Article 18(3) of the Merger Regulation and Article 17(3) of the Commission Implementing Regulation (EU) No 1269/2013 of 5 December 2013 amending Regulation (EC) No 802/2004 implementing Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings (OJ L 336, 14.12.2013, p. 1) can exceptionally be made available to the addressee of a statement of objections within the framework of the data room procedure and under the strict conditions set out in data room rules. The data room procedures are set in the “Best practices on the disclosure of information in data rooms in proceedings under Articles 101 and 102 TFEU and under the EU Merger Regulation”, 2 June 2015.

the Commission. On 7 May 2019, the Commission launched a market test of the commitments submitted by the Notifying Party on 6 May 2019.

- (23) On 23 May 2019, pursuant to Article 10(3), second subparagraph, third sentence of the Merger Regulation, the Commission adopted a second decision extending the periods set out in the first subparagraph of Article 10(3) of the Merger Regulation by a total of 10 working days.
- (24) The Commission gave the Parties detailed feedback on the outcome of the market test during calls on 20 May 2019 and 24 May 2019 as well as during a meeting on 28 May 2019 and a call on 7 June 2019.
- (25) On 11 June 2019, the Notifying Party submitted revised commitments pursuant to Article 8(2) of the Merger Regulation.
- (26) The Advisory Committee discussed a draft of this Decision on 28 June 2019 and issued a favourable opinion.

VI. THE MARKET INVESTIGATION

- (27) This Decision contains the Commission's findings on the basis of the market investigation it carried out: prior to the notification of the Transaction; in the first phase; and in the second phase of the investigation.
- (28) Prior to the notification of the Transaction, the Commission sent six RFIs to the Parties, responses to which were included in the notification.
- (29) During the first phase investigation the Commission sent around 180 RFIs to the Parties, their competitors, broadcasters and housing association customers in Czechia, Germany, Hungary and Romania. The Commission also sent data requests to the Parties.
- (30) During the second phase investigation, the Commission sent around 40 RFIs to the Parties and close to 150 RFIs to market participants in Germany, that is: (i) TV broadcasters and over-the-top (“OTT”) providers⁹, (ii) competing retail providers of telecommunications and TV services, and (iii) housing associations as well as their respective industry organisations. The Commission also sent RFIs to market participants in the provision of telecommunications and TV services in Czechia. The Commission sent further data requests to the Parties, as well as their largest competitors and TV broadcasters in Germany. Finally, the Commission reviewed around 500 000 internal documents of the Parties.
- (31) Throughout the whole market investigation, that is during pre-notification, the first phase and second phase investigation, the Commission conducted multiple interviews with the Parties' competitors, broadcasters and housing association customers as well as their respective industry associations. During the second phase investigation, the Commission had a technical meeting with the Parties during which the Parties' respective investment strategies were discussed in depth.

⁹ OTT refers to film and television content provided via a high-speed internet connection rather than a cable or satellite provider.

VII. RELEVANT MARKETS

- (32) The Parties are active at the different levels of the value chain in the telecommunications and TV sectors in each of Czechia, Germany, Hungary and Romania.¹⁰

1. RETAIL SUPPLY OF FIXED TELEPHONY SERVICES

- (33) Fixed telephony services to end customers comprise the provision of subscriptions enabling access to public telephone networks at a fixed location for the purpose of making and/or receiving calls and related services.
- (34) Germany is the only Member State in which both Vodafone and the Target Business provide fixed telephony services. In Czechia, Hungary and Romania only the Target Business offers fixed telephony services. The Parties' activities in relation to the supply of fixed telephony services in Germany are based on their own respective cable networks, which do not overlap. However, the Parties' activities nevertheless overlap in the three regions where Unitymedia's network is located (North Rhine-Westphalia, Hesse and Baden-Wuerttemberg), where Vodafone provides fixed telephony services based on wholesale access to Deutsche Telekom's fixed network instead of via a cable network.

1.1. Product market definition

- (35) The Notifying Party submits that the market for retail fixed telephony services constitutes one single market without the need to distinguish between type of call (local, national and international) or technology (traditional fixed lines or Voice over internet Protocol ("VoIP")¹¹). Nonetheless, it agrees that the product market definition can be left open for the purposes of the assessment of the Transaction.
- (36) In previous decisions¹², the Commission considered whether a distinction should be drawn between local/national and international calls, as well as between residential and non-residential customers, on the basis of the distinctions in the Commission Recommendation 2003/311/EC¹³, but ultimately left open the exact product market definition.
- (37) More recently, the Commission has considered that managed VoIP services and traditional telephony are interchangeable and therefore belong to the same market.¹⁴ The same conclusion was reached by the Commission in *Liberty Global/BASE*

¹⁰ The Commission notes that in Germany Vodafone [DETAILS OF COMMERCIAL ACTIVITIES] and it is thus not considered active in the wholesale supply of local access provided at a fixed location pre-Transaction.

¹¹ VoIP is a technology that allows users to make voice calls using a broadband internet connection instead of a regular (or analogue) phone line.

¹² Commission decision of 7 September 2005 in Case M.3914 – *Tele2/Versatel*, paragraph 10; Commission decision of 29 June 2010 in Case M.5532 – *Carphone Warehouse/Tiscali UK*, paragraphs 35 and 39; Commission decision of 9 January 2010 in Case M.5730 – *Telefónica/Hansenet Telekommunikation*, paragraphs 16 and 17.

¹³ Commission Recommendation of 11 February 2003 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communication networks and services (Text with EEA relevance) (notified under document number C(2003) 497), OJ L 114, 8.5.2003, p. 45–49. .

¹⁴ Commission decision of 20 September 2013 in Case M.6990 - *Vodafone/Kabel Deutschland*, paragraph 131.

*Belgium*¹⁵ and in *Vodafone/Liberty Global/Dutch JV*¹⁶ where the Commission considered that an overall retail market for fixed telephony services exists, which includes VoIP services.

- (38) For Czechia, Hungary, and Romania, the market investigation did not provide any reasons to depart from the Commission's precedents.
- (39) As regards Germany, the majority of respondents to the market investigation in this case have stated that the retail provision of fixed telephony services through fixed telephony lines and through VoIP services are interchangeable.¹⁷ As for the distinction between residential and non-residential customers, the results of the market investigation were not conclusive as to whether these customer groups constitute separate markets or rather separate segments within the same market.¹⁸
- (40) For the purposes of this Decision, the Commission considers that the relevant product market encompasses the retail provision of fixed telephony services both through fixed telephony lines and through VoIP services, while the question as to whether residential and non-residential customers constitute separate markets or rather separate segments within the same market can be left open as, irrespective of the answer to that question, the Transaction would not significantly impede effective competition.

1.2. Geographic market definition

- (41) The Notifying Party submits that, in line with the previous approaches taken by the Commission, the relevant geographic scope of the market is national.
- (42) In previous decisions, the Commission concluded that the retail market for the provision of fixed telephony services was national in scope.¹⁹
- (43) As regards Germany, the market investigation in this case supports the Commission's precedents that the market for the retail supply of fixed telephony services is national in scope.²⁰
- (44) Specifically, the Commission has found that in Germany the competitive conditions for the retail supply of fixed telephony services do not currently differ across the country even if some competitors are only active in certain geographic regions. This is in particular due to the fact that all players with national operations have confirmed that they apply a national pricing strategy and that they do not employ any regional promotions schemes.²¹
- (45) For Czechia, Hungary, and Romania, the market investigation did not provide any reasons justifying a departure from the Commission's precedents, that is to say, a national scope of the market. This is because of the continuing importance of national regulation in the telecommunications sector, the supply of upstream

¹⁵ Commission decision of 4 February 2016 in case M.7637 – *Liberty Global/BASE Belgium*, recital 69.

¹⁶ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 26.

¹⁷ Replies to questionnaire Q8, question 27.

¹⁸ Replies to questionnaire Q8, question 28.

¹⁹ See Commission decision of 30 May 2018 in Case M.7000 – *Liberty Global/Ziggo*, paragraph 150; Commission decision of 19 May 2015 in Case M.7421 – *Orange/Jazztel*, recital 37. Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 29.

²⁰ Replies to questionnaire Q8, question 30.

²¹ Replies to questionnaire Q11, question 76.

wholesale services that works on a national basis, and the fact that the pricing policies of telecommunications providers are predominantly national.

- (46) Therefore, for the purposes of this Decision, the Commission considers that the relevant geographic market for the retail provision of fixed telephony services is national in scope and corresponds to each of the territories of Czechia, Germany, Romania and Hungary.

2. RETAIL SUPPLY OF FIXED INTERNET ACCESS SERVICES

- (47) Fixed internet access services at the retail level consist of the provision of subscriptions enabling customers to access the internet through a fixed telecommunications connection.
- (48) Czechia and Germany are the only two Member States in which both Vodafone and the Target Business offer fixed internet access services at retail level. In Czechia, Vodafone mainly provides internet access services via wholesale access to the incumbent's Česká telekomunikační infrastruktura a.s. ("CETIN") fixed Digital Subscriber Line ("DSL") network, whereas the Target Business operates its own cable network. In Germany, the Parties' activities in relation to the supply of these services are based on their own respective cable networks, which do not overlap. However, Parties' activities nevertheless overlap in the three regions where Unitymedia's network is located (North Rhine-Westphalia, Hesse and Baden-Wuerttemberg), where Vodafone offers fixed broadband based on wholesale access to Deutsche Telekom's fixed network (instead of via a cable network). In Hungary and Romania, the Target Business offers retail fixed internet access services, while Vodafone offers fixed-wireless services provided over its mobile network.²²

2.1. Product market definition

- (49) The Notifying Party submits that the relevant product market is the overall market for the retail provision of fixed internet access services, without further segmentations. In particular, the Notifying Party considers that a distinction by distribution mode (DSL, fibre or cable) is not needed and that the market for the retail supply of fixed internet access services should include both residential and small business customers. The Notifying Party also considers that the market should not be further segmented on the basis of the different download speeds as it is not aware of any separate demand for specific higher speeds and there is a high degree of substitutability between the various speeds on offer. Finally, the Notifying Party considers that in limited situations broadband services that rely on mobile networks could substitute fixed internet access services, but considers in any case that the inclusion of such services can be left open.
- (50) In recent cases, the Commission considered but ultimately left open possible segmentations within the supply of retail fixed internet access services according to (i) product type, distinguishing between narrowband, broadband and dedicated access and (ii) distribution mode, distinguishing between xDSL, fibre, cable, and mobile broadband.²³ Conversely, the Commission noted that the retail market for fixed internet access services should not be segmented according to download

²²

²³

[DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS]

See Commission decision of 29 June 2010 in Case M.5532 – *Carphone Warehouse/Tiscali UK*, paragraphs 7-21; Case M.6990 *Vodafone/Kabel Deutschland*, paragraphs 192-194. Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 38.

speed.²⁴ The Commission also considered distinguishing between residential and small business customers, on the one hand, and larger business and public authorities, on the other hand, but ultimately left the question open.²⁵

- (51) In line with the Notifying Party's submission and the results of the market investigation²⁶, the Commission considers that no distinction should be made between the provision of fixed internet services to residential and small business customers, while large business customers are part of a separate market. This is because the requirements of residential and small business customers are rather standardised and similar, while large business customers need special infrastructure, such as VPNs and dedicated lines, and require customised solutions in terms of transmission quality (availability, latency, bandwidth), service level agreements (conditions for interference elimination), connection concepts (redundant connection), etc. The needs of large business customers are satisfied by the provision of business connectivity services discussed in section VII.7.
- (52) Similarly, based on the results of the market investigation²⁷, the Commission considers that the market for the retail provision of fixed internet access services should include all product types and all fixed different infrastructures, that is DSL, cable and fibre. Indeed, the overwhelming majority of suppliers of fixed internet access services consider that all products are direct substitutes from the customer's perspective, irrespective to the distribution technology (provided that the customer's premises is connected to the relevant infrastructure).
- (53) As regards the inclusion in the relevant market of fixed internet services provided through mobile network infrastructure, the results of the market investigation in this case clearly indicated that such services are not part of the retail provision of fixed internet access services.²⁸ This is because of the existence, still, of major differences in terms of quality and price in the countries at stake. In particular, market participants explain that, in terms of latency, mobile technology is significantly inferior to fixed broadband connections. In addition, both technologies differ concerning the data prices because mobile networks are primarily designed for nomadic use. While fixed broadband products are priced according to the maximum download speed, mobile broadband products are priced on data volume, for which a high-speed connection is available before it is capped. Additional criteria such as stability of the network connection and having a secured access are especially relevant for fixed broadband. Moreover, respondents point to a limited substitutability between the two services, as fixed internet services provided through

²⁴ See Commission decision of 29 June 2010 in Case M.5532 – *Carphone Warehouse/Tiscali UK*, paragraphs 7-21; Case M.6990 – *Vodafone/Kabel Deutschland*, paragraphs 192-194. Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 38.

²⁵ See Commission decision of 19 May 2015 in case M.7421 – *Orange/Jazztel*, recital 42; Commission decision of 30 May 2018 in case M.7000 – *Liberty Global/Ziggo*, paragraph 165; Commission decision of 7 October 2016 in case M.8131 – *Tele2 Sverige/TDC Sverige*, paragraph 32.

²⁶ Replies to questionnaire Q1, question 11; questionnaire Q3, question 15; questionnaire Q4, question 11; questionnaire Q8, question 33.

²⁷ Replies to questionnaire Q1, question 11, and questionnaire Q13, questions 3-6; questionnaire Q3, question 15; questionnaire Q4, question 11; questionnaire Q8, question 31. As regards Germany, in the Referral Request, the FCO preliminarily agreed with the definition of an overall market for the retail provision of fixed internet access services (that is to say, including different product types and distribution modes), which is in line with the previous decisions of the German Federal Network Agency and considerations of the German Monopolies Commission (Referral Request, paragraph 79).

²⁸ Replies to questionnaire Q1, questions 13-14; questionnaire Q3, questions 17-18; questionnaire Q4, questions 13-14 questionnaire Q8, question 32.

mobile network infrastructure are only partially substitutable to low-speed xDSL services. Furthermore, the uptake of these services in each of Czechia, Germany, Hungary and Romania is limited and is not expected to increase significantly in the two to three years following the Transaction.²⁹ Therefore, the Commission considers that those services are not part of the retail market for the supply of internet access services.³⁰

- (54) As regards Germany, in the first phase investigation, some participants pointed to a certain difference in competitive dynamics with regard to higher speeds or bandwidths, especially higher than 250 Mbit/s, where DSL would be only partially able to compete with cable or fibre.³¹ Similarly, in the Referral Request, the FCO submitted that the question whether a distinction should be made between download speeds should be further investigated.³² This aspect was further investigated in the second phase investigation, where the majority of respondents expressed the view that all infrastructures are able, and will be able in the foreseeable future, to deliver the speeds/bandwidths needed to satisfy basic consumer demand.³³ As for the group of customers demanding high-speed connections, such as heavy users or households with multiple users, the results of the market investigation were not conclusive regarding the required speed or bandwidth as well as the capability of DSL of delivering it. Moreover, respondents to the market investigation did not univocally identify the share of customers requiring a high-speed connection or the minimum speed required by customers in the hypothetical high-speed segment. Several respondents, however, pointed out that DSL based on super vectoring can achieve speeds of up to 250 Mbit/s and that 250 Mbit/s will likely be sufficient to satisfy demand of all customer groups at least in the foreseeable future.³⁴
- (55) The market investigation also confirmed that the market for fixed internet access services should not be further segmented by speed/bandwidth in Czechia, Hungary, and Romania.³⁵
- (56) Therefore, for the purposes of this Decision, the Commission considers that the relevant product market is the overall retail market for the provision of fixed internet

²⁹ See Form CO, paragraphs 6.141 and following, 6.797 and following, 6.1417 and following, 6.1608 and following.

³⁰ As regards Germany, this conclusion, reached both in the Article 6(1)(c) Decision and in the Statement of Objections, has not been contested by the Notifying Party either in the Response to the Article 6(1)(c) Decision or in the Response to the Statement of Objections. Likewise, as regards Czechia, this conclusion, reached in the Article 6(1)(c) Decision, has not been contested by the Notifying Party in the Response to the Article 6(1)(c) Decision.

As regards Romania and Hungary, the Commission notes that no overlap between the Parties' activities would arise should Vodafone's fixed internet access services based on its mobile network be excluded from the relevant market. Nonetheless, the Commission also notes that no affected market would arise in Romania, even if Vodafone's fixed internet access services based on its mobile network were included in the relevant market. As regards Hungary, the possible overlap between the Parties' activities is discussed in section VIII.E.2.

³¹ Replies to questionnaire Q8, question 31.

³² Referral Request, paragraph 79.

³³ Replies to questionnaire Q11, questions 30-34.

³⁴ Replies to questionnaire Q11, questions 30-34.

³⁵ For Czechia, respondents to the market investigation confirmed that all of xDSL, cable, fibre and Wi-Fi technologies provide for download speeds that meet basic customer demand. With regard to xDSL, respondents clarified that only xDSL technology capable of delivering speeds above 30 Mbit/s meets current and future basic customer demand. See replies to questionnaire Q1, question 11; questionnaire Q13, questions 7-13. For Hungary and Romania, see replies to questionnaire Q3, question 15; questionnaire Q4, question 11.

access services, including all product types, distribution modes and speeds/bandwidths, to residential and small business customers, excluding the supply of fixed internet services provided through mobile network infrastructure.³⁶

2.2. Geographic market definition

- (57) The Notifying Party submits that the relevant geographic scope is national or can be left open, noting that, regardless of the geographic market definition, there is no competition between non-overlapping network footprints.
- (58) In previous decisions, the Commission concluded that the retail market for the provision of fixed internet services was national in scope.³⁷ In *Liberty Global/BASE Belgium* the Commission considered whether the geographic scope of the market should be defined on a regional basis or by reference to the footprint of the operators' networks, but ultimately left the question open.³⁸
- (59) As regards Germany, in its Referral Request, the FCO argued that the market is at most national in scope and underlined that the presence of regional players should, at least, be reflected in the competitive assessment.³⁹ Similarly, in the first phase investigation, the vast majority of respondents stated that the market is national in scope, although certain respondents active in Germany raised the possibility that the market is local in scope.⁴⁰ This aspect was further investigated in the second phase investigation. The second phase investigation supports the view that the market for the retail supply of fixed internet access services is national in scope. Specifically, respondents stated that in Germany the competitive conditions for the retail supply of fixed internet access services do not currently differ across the country even if some competitors are only active in certain geographic regions. This is in particular due to the fact that all players with national operations have confirmed that they apply a national pricing strategy and that they do not employ any regional promotions schemes.⁴¹ During the market investigation in this case, the Commission did not receive any indications as to a possible geographic dimension of the market that would be broader than national. This is because the retail supply of fixed internet access services is subject to national regulatory regimes.
- (60) Similarly, for Czechia, Hungary, and Romania, the results of the market investigation in this case indicates that the market for the retail supply of fixed internet access services is national in scope, and not local or supranational.⁴² This is because of the

³⁶ The Parties' activities as regards the provision of fixed telecommunications services to large business customers are discussed in section VII.7 on the retail market for business connectivity services.

³⁷ See Commission decision of 29 June 2010 in Case M.5532 – *Carphone Warehouse/Tiscali UK*, paragraph 47; Case M.5730 – *Telefónica/Hansenet*, paragraph 28; Case M.6990 – *Vodafone/Kabel Deutschland*, paragraph 197. Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 40.

³⁸ Commission decision of 4 February 2016 in case M.7637 – *Liberty Global/BASE Belgium*, recitals 62-64.

³⁹ Referral Request, paragraph 79.

⁴⁰ Replies to questionnaire Q8, question 34.

⁴¹ Replies to questionnaire Q11, question 84.

⁴² Replies to questionnaire Q1, question 15 and questionnaire Q13, questions 14-17; questionnaire Q3, question 19; questionnaire Q4, question 15. One respondent to the market investigation in Czechia submitted that the market should be local. It submitted that, during the review of the regulation of the wholesale access market for internet access services, ČTÚ preliminarily found the scope of the market to be local. See Nej CZ's submission of 30 October 2018, paragraph 28 [ID 2400]. However, the respondent submitted that the regulator eventually found the scope of the market to be national, following consultation with the Commission. Because the market investigation suggested a national

continuing importance of national regulation in the telecommunications sector, the supply of upstream wholesale services that works on a national basis, and the fact that the pricing policies of telecommunications providers are predominantly national.

- (61) Therefore, for the purposes of the present Decision, the Commission considers that the relevant geographic market for the retail provision of fixed internet services is national in scope and corresponds to each of the territories of Czechia, Germany, Hungary and Romania. Nonetheless, as regards Germany, since the Parties' cable network footprints do not overlap and Unitymedia is only active in the supply of fixed internet access services on the basis of its own network, in the competitive assessment the Commission takes into account the different extent to which, pre-Transaction, the Parties compete with each other in the different regions of Germany, delimited by the Parties' respective cable footprints.

3. RETAIL SUPPLY OF MOBILE TELECOMMUNICATIONS SERVICES

- (62) Mobile telecommunications services to end customers consists of the sale of subscriptions enabling access to public mobile telecommunications networks. Such access allows end users to make voice national and international calls, send and receive messages and use mobile data.⁴³
- (63) Germany and Hungary are the only Member States in which Vodafone and the Target Business provide mobile telecommunications services at the retail level to end-customers. Vodafone provides such services as a MNO and the Target Business as a MVNO active based on Telefónica's network in Germany and based on Vodafone's network in Hungary. In Czechia and Romania only Vodafone provides mobile telecommunications services.

3.1. Product market definition

- (64) The Notifying Party submits that, in line with previous Commission decisions, the relevant product market is the overall retail market for mobile telecommunications services. It considers that it is not necessary for the Commission to further subdivide this market by reference to type of customer (business or private), service (national or international calls, internet data services, voice and text services), tariff (post-paid or pre-paid) or network technology.
- (65) In previous cases concerning mobile telecommunications services, the Commission has considered that there is an overall retail market for mobile telecommunications services constituting a separate market from retail fixed telecommunications services.⁴⁴ The Commission did not further subdivide the overall retail mobile market based on the type of service (voice calls, SMS, MMS, mobile internet data

scope of the market, and because the respondent itself acknowledged that the national telecommunications regulator eventually adopted a national scope of the market, the Commission considers that the geographic scope of the market for fixed internet access services in Czechia is national.

⁴³ See, among others, Commission decision of 1 September 2016 in case M.7758 – *Hutchison 3G Italy / Wind / JV*, recital 118; Commission decision of 30 May 2018 in Case M.7000 – *Liberty Global/Ziggo*, paragraph 199.

⁴⁴ Commission decision of 27 November 2018 in case M.8792 – *T-Mobile NL/Tele2 NL*, recital 160; Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefónica UK*, recital 252; Commission decision of 30 May 2018 in Case M.7000 – *Liberty Global/Ziggo*, paragraph 206 and Commission decision of 2 July 2014 in case No M.7018 – *Telefónica Deutschland/E-Plus*, recital 64.

services), or network technology.⁴⁵ The Commission considered possible distinctions in the overall retail market for mobile telecommunications services between pre-paid or post-paid services and concluded that these did not constitute separate product markets, but represent rather market segments within an overall retail market.⁴⁶ In addition, the Commission did not identify separate markets for the provision of mobile telecommunications services to private customers and business customers. This was principally due to supply-side substitutability considerations relevant to the area of overlap between the parties involved in those cases.⁴⁷ Finally, the Commission ultimately concluded that OTT services do not fall within the same relevant market as mobile telecommunications services, as OTT services rely on mobile telecommunications (data) services and fixed broadband services to function.⁴⁸

- (66) In line with the Notifying Party's submission, the market investigation in this case has not revealed any element which would justify a departure from the product market definition in the Commission's precedents.⁴⁹
- (67) Therefore, for the purposes of this Decision, the Commission considers that there is an overall product market for the retail provision of mobile telecommunications services.

3.2. Geographic market definition

- (68) The Notifying Party submits that, in line with the Commission's previous decisions,⁵⁰ the market for mobile telecommunications services to end customers is national in scope.

⁴⁵ Commission decision of 1 September 2016 in case M.7758 – *Hutchison 3G Italy / Wind / JV*, recitals 135-140; Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 74; Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefónica UK*, recitals 255, 261, 270, 279, 287; Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*, recitals 31 to 55; Commission decision of 30 May 2018 in Case M.7000 – *Liberty Global/Ziggo*, paragraph 206; Commission decision of 28 May 2014 in case M.6992 – *Hutchison 3G UK/Telefónica Ireland*, recital 141; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, recital 58.

⁴⁶ Commission decision of 27 November 2018 in case M.8792 – *T-Mobile NL/Tele2 NL*, recital 202; Commission decision of 1 September 2016 in case M.7758 – *Hutchison 3G Italy / Wind / JV*, recitals 146-149; Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 74; Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefónica UK*, recitals 255, 261, 270, 279, 287; Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*, recitals 31 to 55; Commission decision of 30 May 2018 in Case M.7000 – *Liberty Global/Ziggo*, paragraph 206; Commission decision of 28 May 2014 in case M.6992 – *Hutchison 3G UK/Telefónica Ireland*, recital 141; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, recital 58.

⁴⁷ Commission decision of 1 September 2016 in case M.7758 – *Hutchison 3G Italy / Wind / JV*, recitals 153-161; Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 74; Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefónica UK*, recitals 255, 261, 270, 279, 287; Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*, recitals 31 to 55; Commission decision of 30 May 2018 in Case M.7000 – *Liberty Global/Ziggo*, paragraph 206; Commission decision of 28 May 2014 in case M.6992 – *Hutchison 3G UK/Telefónica Ireland*, recital 141; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, recital 58.

⁴⁸ Commission decision of 27 November 2018 in case M.8792 – *T-Mobile NL/Tele2 NL*, recital 169; Commission decision of 1 September 2016 in case M.7758 – *Hutchison 3G Italy/WIND/JV*, recital 145; Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefónica UK*, recital 265.

⁴⁹ Replies to questionnaire Q1, questions 6-7 ; questionnaire Q3, questions 6-7; questionnaire Q4, questions 6-7 ; questionnaire Q8, question 37.

- (69) The market investigation in this case has not revealed any element which would justify departing from the geographic market definition in the Commission precedents.⁵¹
- (70) Therefore, for the purposes of this Decision, the Commission considers that the market for mobile telecommunications services is national in scope and corresponds to each of the territories of Czechia, Germany, Hungary and Romania.⁵²

4. RETAIL SUPPLY OF TV SERVICES

- (71) Regarding TV content, the Commission has previously identified the relevant market for the supply of TV services where the suppliers of linear and non-linear TV services serve end customers who wish to purchase such services. The TV services supplied by TV distributors to end users consist of packages of linear Free-to-Air (“FTA”) or Pay TV channels, and content aggregated in non-linear services (mainly Video on Demand (“VOD”), Subscription VOD, Transaction VOD and Pay Per View (“PPV”). TV content can be delivered to end users through a number of technical means including cable, satellite, terrestrial television and IPTV⁵³. So-called OTT players deliver channels and content in both a linear and non-linear fashion through the use of the internet.
- (72) Both Vodafone and the Target Business offer retail TV services in Germany and Romania. [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS]⁵⁴
- (73) In Germany, FTA channels can be accessed via satellite and terrestrial TV (DVB-T) for free. This includes FTA channels of public and private broadcasters in Standard Definition (“SD”) quality, and in High Definition (“HD”) quality for public broadcasters’ channels.⁵⁵ The same FTA channels are available via cable, IPTV or OTT but, in those cases, a basic paid TV subscription for the transmission of the TV signal is usually required.^{56,57}
- (74) In Germany, retail TV subscriptions fall into two broad categories: basic TV subscriptions and premium TV subscriptions. The retail TV access to basic TV

⁵⁰ Commission decision of 1 September 2016 in case M.7758 – *Hutchison 3G Italy / Wind / JV*, recital 166; Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 76; Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefónica UK*, recitals 293; Commission decision of 30 May 2018 in Case M.7000 – *Liberty Global/Ziggo*, paragraph 211; Commission decision of 2 July 2014 in case No M.7018 – *Telefónica Deutschland/E-Plus*, recital 74; Commission decision in case M.6497 – *Hutchison 3G Austria/Orange Austria*, recital 73; Commission decision in case No M.5650 – *T Mobile/Orange UK*, paragraphs 25 and 26 and Commission decision of 28 May 2014 in case No M.6992 – *Hutchison 3G UK/Telefónica Ireland*, recital 164.

⁵¹ Replies to questionnaire Q1, question 8 ; questionnaire Q3, question 8 ; questionnaire Q4, question 8 ; questionnaire Q8, question 39.

⁵² The retail supply of mobile telecommunications services in Czechia and Romania is only discussed as part of the assessment of possible conglomerate effects in sections VIII.D. and VIII.F. as there is no horizontal overlap.

⁵³ See footnote 2.

⁵⁴ [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS].

⁵⁵ See Form CO, paragraph 6.479 ff; Annex 6.C.IV.11; Annex 6.C.IV.14; Annex 6.C.IV.25.

⁵⁶ There are OTT streaming services that require registration and carry ads but have no subscription fees. Instead, viewers have to watch ads when starting or switching channels.

⁵⁷ In some contexts, especially in certain third party reports’ (see for example section VII.6. on multiple play bundles) the basic TV subscription is also referred to as pay TV as it related to a paid subscription in the case of cable and IPTV.

subscriptions in Germany is further discussed with respect to the Germany-specific market for retail TV signal transmission in section VII.5. which addresses the infrastructure component as well as the supply of the basic TV subscription, including German FTA channels.

- (75) Premium TV subscriptions, on the other hand, comprise enhanced TV services that offer more than a basic TV channel line-up, including German and international Pay TV channels.⁵⁸

4.1. Product market definition

- (76) The Notifying Party submits that it is not relevant to delineate the market for the retail provision of TV services based on the segmentation analysed by the Commission in previous decisions⁵⁹, namely: (i) the type of technology used; (ii) the nature of TV services provided in terms of Pay TV and FTA TV services; and, (iii) the nature of TV services provided in terms of linear and non-linear services.
- (77) In previous decisions the Commission considered the retail provision of FTA TV and Pay TV services as separate markets, but ultimately left open the product market definition⁶⁰. The Commission also considered whether retail TV can be segmented further according to linear versus non-linear TV services⁶¹ and distribution technologies (cable, OTT, satellite, IPTV or terrestrial).⁶² However, the Commission has left open the market definition with regard to each of these potential sub-segments.
- (78) With regard to Czechia, Hungary and Romania, the market investigation in this case has not revealed any element that would justify a departure from the product market definition in the Commission's previous decisions.⁶³

⁵⁸ [INFORMATION ON PRICING STRUCTURE].

⁵⁹ Commission decision of 21 December 2010 in case M.5932 – *News Corp/BskyB*; Commission decision of 22 September 2006 in case M.4353 – *Permira/All3Media Group*; Commission decision of 15 April 2013 in case M.6880 – *Liberty Global/Virgin Media*; Commission decision of 24 February 2015 in case M.7194 – *Liberty Global/Corelio/W&W/De Vijver Media*.

⁶⁰ Commission decisions of 18 July 2007 in case M.4504 – *SFR/Télé 2 France*, recital 40, and of 25 June 2008 in case M.5121 – *News Corp / Premiere*, paragraph 20. See also, Commission decision of 7 April 2017 in case M.8354 – *Fox / Sky*, paragraph 97; Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 56; Commission decisions of 24 February 2015 in case M.7194 – *Liberty Global / Corelio / W&W / De Vijver Media*, recital 119-120, of 25 June 2008 in case M.5121 – *News Corp/Premiere*, paragraphs 15 and 21, and of 30 May 2018 in case M.7000 – *Liberty Global/Ziggo*, recital 79); Commission decisions of 6 February 2018 in case M.8665 – *Discovery/Scripps*, paragraph 33.

⁶¹ Commission decision of 6 February 2018 in case M.8665 – *Discovery / Scripps*, paragraph 33; Commission decision of 7 April 2017 in case M.8354 – *Fox / Sky*, paragraph 98 and 99; Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 58; Commission decision of 24 February 2015 in case M.7194 *Liberty Global / Corelio / W&W / De Vijver Media*, recital 124. Commission decision of 25 June 2008 in case M.5121 *News Corp/Premiere*, paragraph 21. Commission decision of 30 May 2018 in case M.7000 *Liberty Global/Ziggo*, recitals 109–79.

⁶² Commission decision of 6 February 2018 in case M.8665 – *Discovery / Scripps*, paragraph 33; Commission decision of 7 April 2017 in case M.8354 – *Fox / Sky*, paragraph 100; Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 62; Commission decision of 24 February 2015 in case M.7194 – *Liberty Global / Corelio / W&W / De Vijver Media*, recital 127. Commission decision of 25 June 2008 in case M.5121 – *News Corp/Premiere*, paragraph 22; Commission decision of 21 December 2010 in case M.5932 – *News Corp/BskyB*, paragraph 105. Commission decision of 30 May 2018 in case M.7000 – *Liberty Global/Ziggo*, paragraph 79.

⁶³ Replies to questionnaire Q1, question 59; questionnaire Q3, question 63; questionnaire Q4, question 59.

- (79) As regards Germany, the results of the market investigation in this case indicate that a distinction exists between basic and premium TV services.⁶⁴ Basic TV services offer access to the TV signal including German FTA channels.⁶⁵ As regards premium TV services, respondents generally refer to additional Pay TV channels or add-ons with individual Pay TV providers. According to respondents, there are differences in both prices and types of content between the different types of TV channels included in basic and premium TV services. FTA channels that are typically part of a basic TV package show content of general interest, including news, entertainment shows, talk shows, while Pay TV channels offer dedicated content and are sold on top of the basic package for higher price. Pay TV typically offers more exclusive content, for instance recent movies (first exhibition window), live sports and thematic/niche content. Premium TV services are hence seen as complementary to basic TV services which is also corroborated by the fact that for several operators premium TV packages can only be purchased as add on to the basic TV subscription.⁶⁶ The results of the market investigation also indicate a distinction between linear Pay TV channels and non-linear Pay TV and/or OTT services, however, with regard to film content they are substitutable to some degree.⁶⁷
- (80) The majority of the respondents explained that cable and IPTV are interchangeable. The results of the market investigation were mixed as to the question whether cable and IPTV are interchangeable with satellite. The stated shortcomings of satellite mainly related to the means of deployment (investment and installation required) but less to the quality and scope of the service. Finally, a large majority of the respondents confirmed that DVB-T is not interchangeable with cable and IPTV. Most respondents explained that the number of TV channels and additional service features available via DVB-T is too limited compared to other means of signal transmission.⁶⁸ With regard to linear OTT TV services, respondents to the market investigation explained that there are a few OTT providers, such as Zattoo or waipu.tv⁶⁹, that offer access to linear television with a comparable number of channels to those included in traditional basic TV subscriptions.⁷⁰ These would be substitutable for certain customers that accept that the customer experience differs compared to traditional TV. Moreover, traditional retail TV providers have started offering TV packages as stand-alone OTT products, such as Deutsche Telekom and Vodafone, respectively, in October and November 2018.⁷¹
- (81) However, respondents also point out that OTT services require a fixed internet access infrastructure, and, in terms of quality, are provided based on a non-managed, best-effort basis only. Based on a recent report, while the number of so-called cord cutters, that is to say those who watch TV exclusively through OTT and no longer use any of the traditional means of TV transmission, is very low (0.5%), the survey

⁶⁴ Replies to questionnaire Q8, question 22.

⁶⁵ Basic TV services (essentially offering all German FTA channels) can be accessed for free via satellite or terrestrial or via a paid basic subscription with cable, IPTV or OTT providers.

⁶⁶ Replies to questionnaire Q11, question 21; Parties' reply to RFI 40, question 3.

⁶⁷ Replies to questionnaire Q8, question 23 and 25; replies to questionnaire Q4, question 59.1.

⁶⁸ Replies to questionnaire Q7, question 18 and 19 ; replies to questionnaire Q11, question 17.

⁶⁹ Waipu.tv (partially owned by Freenet) describes itself as IPTV service (and is described as such in some public sources). However, the offer is delivered OTT.

⁷⁰ Replies to questionnaire Q8, question 25; replies to questionnaire Q11, question 23.

⁷¹ See <https://www.broadbandtvnews.com/2018/10/23/deutsche-telekom-makes-major-ott-move/> [ID 6772], <https://www.broadbandtvnews.com/2018/11/22/exclusive-vodafone-launches-ott-service-in-germany/> [ID 6775].

information suggests that around 12% of TV households could imagine using OTT exclusively in the future.⁷²

- (82) Finally, for Germany, respondents state that the market for the supply of TV services should also take into account the specific characteristics of MDU and SDU customers discussed in section VII.5.⁷³
- (83) For the purposes of this Decision, the question whether the market for the supply of TV retail services should be segmented can be left open. Irrespective of the exact product market definition, the Commission considers that the Transaction would not significantly impede effective competition in relation to the supply of retail TV services.

4.2. Geographic market definition

- (84) The Notifying Party considers that the relevant geographic scope of the supply of TV services is national or can be left open, as there is no competition between non-overlapping footprints in any event, including as regards the Parties' non-overlapping cable networks in Germany.
- (85) The Commission has in the past considered that the geographic scope of the market for the retail provision of TV services could be national since providers of retail TV services compete on a nationwide basis or limited to the coverage area of each cable operator.⁷⁴
- (86) Most respondents to the market investigation have submitted that the market would be national in scope, with a few respondents for Germany pointing to a regional scope, due to availability of the network.⁷⁵
- (87) As regards Germany, the second phase investigation supports the initial view that the market for the retail supply of TV services is national in scope. The Commission has found that in Germany the competitive conditions for the retail supply of TV services do not differ across the country even if some competitors are only active in certain geographic regions. This is in particular due to the fact that all players with national operations have confirmed that they apply a national pricing strategy and that they do not employ any regional promotions schemes.⁷⁶
- (88) Therefore, the Commission considers, for the purposes of this Decision, that the relevant geographic market for the retail supply of TV services is national in scope

⁷² Die Medienanstalten, Digitisation complete – how linear is the future of television?, page 29/30 (Form CO, Annex 6.C.IV.9), https://www.die-medienanstalten.de/fileadmin/user_upload/die_medienanstalten/Publikationen/Digitalisierungsbericht_Video_2018/Digitisation_2018_video_english_web.pdf) [ID 6781].

⁷³ Replies to questionnaire Q11, questions 21-26.

⁷⁴ Commission decision of 26 February 2007 in case M.4521 – *LGI/Telenet*, paragraph 25; Commission decision of 24 February 2015 in case M.7194 – *Liberty Global/Corelio/W&W/De Vijver Media*, recital 139. Commission decision of 25 June 2008 in Case M.5121 – *News Corp/Premiere*, paragraph 24; Commission decision of 25 January 2010 in Case M.5734 – *Liberty Global Europe/Unitymedia*, paragraphs 40 and 43; Commission decision of 21 December 2010 in Case M.5932 – *NewsCorp/BSkyB*, paragraph 109; Commission decision of 21 December 2011 in Case M.6369 – *HBO/Ziggo/HBO Nederland*, paragraph 42; Commission decision of 15 April 2013 in Case M.6880 – *Liberty Global/Virgin Media*, paragraph 54; Commission decision of 30 May 2018 in case M.7000 – *Liberty Global/Ziggo*, paragraph 89.

⁷⁵ Replies to questionnaire Q1, question 60; questionnaire Q3, question 64; questionnaire Q4, question 60; questionnaire Q8, question 26.

⁷⁶ Replies to questionnaire Q11, questions 76 and 84.

and corresponds to each of the territories of Czechia, Germany, Hungary and Romania.⁷⁷

5. RETAIL SUPPLY OF TV SIGNAL TRANSMISSION IN GERMANY

- (89) In past decisions and with specific reference to Germany, the Commission has identified relevant markets for TV services on the basis of the content that was delivered (in the context of the retail supply of TV services) as well as on the basis of the distribution method and infrastructure via which the TV signal was delivered (in the context of the retail supply of TV signal transmission). The retail supply of TV services, with focus on content, is discussed in section VII.4.
- (90) Regarding the retail supply of TV signal transmission, and with specific reference to Germany, in past decisions the Commission has identified a distinct market comprising end customers on the demand side who negotiate with infrastructure operators on the supply side for the supply of television signals mainly via cable, satellite, terrestrial and IPTV.⁷⁸
- (91) This additional characteristic in the provision of TV services in Germany stems from the importance of the rental market and housing associations in Germany. Housing associations typically negotiate and conclude basic TV supply contracts on behalf of their tenants and then pass on the fees as part of the monthly rent. The majority of retail TV households in Germany are in apartment buildings, so-called multi-dwelling-units ("MDUs"), owned by housing associations or owned by private landlords. In single-family households, so-called single-dwelling-units ("SDUs"), the end customer typically chooses its own TV distributor and pays directly for its subscription.
- (92) According to the 2014 census (no more recent data available), it is estimated that 9.3 million multi-dwelling units in Germany were managed by professional housing associations, with a further 14.3 million multi-dwelling units managed by private landlords. The distribution of housing stock in Germany is set out in Table 1:

Table 1: Overview of housing stock in Germany (based on 2014 census data)

In million	Flats	One- or two family houses	Total	Percentage
Owner-occupied	3.8	13.2	17.0	42%
Private landlords	9.1	5.2	14.3	35%
Professional housing associations	9.3	-	9.3	23%
Total	22.2	18.4	40.6	100%

Source: Bundesverband deutscher Wohnungs- und Immobilienunternehmen e.V. ("GdW")'s non-confidential reply to RFI 22, question 1 (similar but less recent information was provided in the Form CO) [ID 4315].

- (93) Housing associations differ with respect to their reach. As explained in section VIII.4.2.1., there are only a small number of nationally operating housing associations that are active across Germany or in several Federal States while the majority of housing associations operate either regionally or locally. Moreover, housing associations differ with respect to their ownership structure. While some

⁷⁷ The retail supply of TV services in Czechia, Hungary and Romania is only discussed as part of the assessment of possible conglomerate effects in sections VIII.D., VIII.E. and VIII.F as there are no horizontally affected markets.

⁷⁸ Commission Decision of 20 September 2013 in case M.6990 – *Vodafone/Kabel Deutschland*, paragraphs 82-83.

housing associations are under private ownership, others are owned by the Federal Republic of Germany or the municipality and are thus publicly owned.

- (94) While publicly owned housing associations are legally obliged to initiate formal public procurement procedures for the supply of TV services, privately-owned housing associations are under no such obligation. While some private housing associations still initiate formal procurement procedures, many privately owned housing associations do not do so. Rather, the incumbent cable operator typically approaches the respective housing association [DETAILS OF COMMERCIAL ACTIVITIES] before the existing concession agreement ends in order to negotiate the conditions for an extension of that agreement. In such a situation, the housing association then often invites or asks competing infrastructure providers to also submit bids.
- (95) Both Vodafone and the Target Business offer retail TV services in Germany.

5.1. Product market definition

- (96) The Notifying Party submits that the market for retail supply of TV signal transmission constitutes one single market without the need to distinguish between TV signal delivered to SDUs and TV signal delivered to MDUs. In any case, the Notifying Party considers that any possible distinction between single and multiple user contracts would not change the competitive assessment of the case. With respect to the different technologies available (cable, satellite, IPTV, terrestrial), the Notifying Party submits that they are all regarded as alternatives by both SDUs and MDUs and that therefore there is no reason to segment the relevant product market on the basis of transmission technologies.
- (97) While, most recently, the Commission has left the product market definition for TV signal transmission open,⁷⁹ in earlier decisions,⁸⁰ the Commission distinguished between a market for the retail supply of TV signal transmission to SDUs and a market for the retail supply of TV signal transmission to MDUs, usually housing associations.⁸¹
- (98) In this context, the Commission notes that past FCO decisions made the same distinction,⁸² but that in annulment proceedings against the FCO's clearance decision regarding the acquisition of Kabel Baden-Württemberg ("KBW") by Liberty Global, the Higher Regional Court of Düsseldorf only defined one single retail market for both kinds of customers.⁸³
- (99) As regards a possible segmentation between the different technical modes of TV signal transmission, the Commission, in *LGI/ KBW*, regarded the market for the retail supply of signal transmission to MDUs as comprising cable and potentially satellite

⁷⁹ Commission Decision of 20 September 2013 in case M.6990 – *Vodafone/Kabel Deutschland*, paragraph 96.

⁸⁰ Commission decision of 16 June 2011 in case M.5900 – *LGI/KBW*, paragraph 32.

⁸¹ In SDUs the end customer typically chooses its own TV distributor and pays directly for their subscription. In MDUs, on the other hand, it is common to have a collective agreement between the landlord / housing association and a single TV distributor, for a basic TV package. Then individual customers, who own or rent apartments in the building, can also sign top-up contracts with the TV distributor to receive extra TV channels.

⁸² FCO case B7-70/12 *Kabel Deutschland/Tele Columbus*, paragraph. 54 and FCO case B7-66/11 *Liberty/KBW*, paragraph 38.

⁸³ Higher Regional Court Düsseldorf case VI Kart 1/12 [V] *Liberty/KBW*, p. 17.

transmission, but not other transmission modes such as IPTV or terrestrial.⁸⁴ In a recent case, the Commission left the product definition open in this respect.⁸⁵

- (100) The Commission takes note that the FCO previously considered that the retail TV signal transmission markets comprised only cable and IPTV, but not satellite and/or terrestrial solutions.⁸⁶
- (101) In its Referral Request, the German FCO, based on its preliminary analysis, recalls its precedents, arguing for a distinction between the retail supply of TV signal transmission to MDU and to SDU customers.⁸⁷ With regard to different transmission technologies, the FCO preliminarily concludes that the MDU market would include cable, IPTV⁸⁸ and potentially certain satellite solutions⁸⁹, while excluding terrestrial transmission. According to the FCO, the SDU market would include cable and IPTV, leaving open whether satellite and terrestrial transmission would be included in the market.
- (102) The majority of respondents to the market investigation, including housing associations, telecommunications operators and TV distributors, stated that the market for the retail supply of TV signal transmission should be further segmented in Germany into a MDU market and a SDU market, due to differences in product characteristics as well as a lack of both demand-side and supply-side substitutability. Important differentiating characteristics of the MDU market include differences in prices, contract length, ancillary cost privileges (*Nebenkostenprivileg*), procurement, service and infrastructure requirements etc.⁹⁰
- (103) Firstly, there are substantial price differences between MDU contracts on the one hand and SDU contracts on the other hand. In particular, MDU contracts are typically considerably cheaper compared to SDU contracts as the price per unit of a SDU contract is typically several times higher compared to an MDU contract.
- (104) Secondly, an important differentiator between SDU and MDU contracts is the contract length. While SDU contracts can be terminated at least biannually, MDU contracts have a minimum duration of [...] years, average durations of 5 to 10 years and sometimes even contract durations of [...] years or longer.
- (105) Thirdly, contracts with MDUs involve bilateral negotiations between MDU customers and providers or formal tender proceedings while SDU contracts entail a contract with a single dweller at standardised terms. While contracts with private landlords or smaller housing associations can and oftentimes do rely on standardised contracts, these still closely follow the contract structure of MDU contracts with professional housing associations.⁹¹

⁸⁴ Commission decision of 16 June 2011 in case M.5900 – *LGI/KBW*, paragraphs 29 et seq.

⁸⁵ Commission Decision of 20 September 2013 in case M.6990 – *Vodafone/Kabel Deutschland*, paragraph 96.

⁸⁶ FCO case B7-66/11 *Liberty/KBW*, paragraph 46 et seq.; FCO case B7-70/12 *Kabel Deutschland/Tele Columbus*, paragraph 56 et seq. and paragraph 248 et seq.

⁸⁷ Referral Request, paragraph 29 and 58.

⁸⁸ This is solely based on the fact that it is technically feasible for IPTV providers to supply MDU customers. At the same time, the FCO notes that IPTV has a marginal market position with regard to MDU customers.

⁸⁹ This only includes satellite solutions installed by network operators.

⁹⁰ Replies to questionnaire Q8, question 17; replies to questionnaire Q9, question 5; replies to questionnaire Q11, questions 9, 10; replies to questionnaire Q12, questions 2-4.

⁹¹ See Form CO, Annex 6.C.IV.5.

- (106) Fourthly, contractual arrangements, most notably the payment mode, differ between MDU and SDU contracts. While SDU contracts are paid through individual invoice (Einzelinkasso) by definition, MDU contracts often involve bulk invoice (Sammelinkasso). This is possible due to a specificity of the German law (Nebenkostenprivileg) according to which the costs for basic cable TV can be included in the fees in monthly rental charges of tenants.
- (107) Fifthly, infrastructure and service level requirements differ considerably between SDU and MDU contracts. While there are specific and individually negotiated infrastructure, service and maintenance requirements stipulated in MDU contracts between the TV signal provider and the MDU customer, this is not the case for SDU contracts as the latter are based on standardised contracts. In MDU contracts, infrastructure and service level requirements range from the upgrade, modernisation and expansion of the Level 3 and 4 infrastructure (for example to DOCSIS 3.1, fibre to the home or fibre to the building), service level guarantees (for example on-call service, 24/7 hotline etc.), lists of guaranteed channels to be included in basic TV product to the provision of a supplementary basic Internet offer. With regard to modernisation of the Level 3 and 4 infrastructure, MDU customers and operators responding to the market investigation confirm that such infrastructure requirements are increasingly part of MDU contracts due to increased demand for high-speed broadband connections via the cable infrastructure.⁹²
- (108) Sixthly, the provision of additional fixed telecommunications services, in particular premium TV, broadband and telephony, is increasingly a requirement in formal tender rules. In return for the upgraded infrastructure explained above, operators are usually granted the exclusive right and obligation to market additional fixed services and may pay a revenue share to the owner of the in-house wiring for the pass through of its products.
- (109) Overall, respondents to the market investigation, including housing associations, telecommunications operators and TV distributors, agree that retail TV transmission services to MDUs offer a higher standard of product quality and service.⁹³
- (110) These differences also lead to the competitive parameters taken into account for choosing a provider are different with respect to MDUs and SDUs. MDU contracts and SDU contracts serve different needs. SDUs demand TV signal transmission for their own consumption so that individual preferences in terms of availability, programme diversity, add-on services, and costs determine the customer's choice. By contrast, MDUs demand TV signal transmission not for their own consumption. Instead, housing associations conclude MDU contracts to improve the quality and attractiveness of their property for tenants and to ensure modernisation of the network infrastructure.
- (111) The Notifying Party itself has acknowledged that there are differences between MDU and SDU customers.⁹⁴ The observation of differences between MDU and SDU customers is also corroborated by the Parties' internal documents [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁹⁵

⁹² Replies to questionnaire Q11, question 49; replies to questionnaire Q12, questions 11 and 12; Tele Columbus, submission of 12 November 2018, EU Competitive Assessment Vodafone Unitymedia, page 7 [ID 2974].

⁹³ Replies to questionnaire Q11, question 10; replies to questionnaire Q12, question 4.1.

⁹⁴ See Form CO, paragraph 6.425 ff.

⁹⁵ [REFERENCE TO INTERNAL DOCUMENTS].

- (112) From a demand-side perspective, retail TV signal transmission services to MDUs and SDUs are not substitutable. SDU customers cannot demand retail TV signal transmission services targeted at MDUs as these are exclusively offered to MDU customers (in other words private landlords of multi-apartment buildings or housing associations). For MDU customers, retail TV signal transmission to SDUs is not a substitute because SDU contracts do not offer the same services and contract features as included in offers targeted at MDU customers (for example, in terms of price and additional service and infrastructure requirements). Individual tenants living in MDUs are covered by and pay for the retail TV signal transmission services organised by their private landlord or housing association. Therefore, they have no incentive to purchase additional basic TV services targeted at SDU customers at extra cost.⁹⁶
- (113) The fact that MDU customers have different needs, require additional services and conclude different types of agreements applies in particular to housing associations and private landlords which rent out a significant number of units. For instance, [INFORMATION ON MARKET SEGMENTS].⁹⁷ In this respect, the Commission considers that this fact has no bearing on a finding of demand-side substitutability between SDU and MDU customers. Those small MDU customers effectively do not belong to the customer group of MDU customers with specific demand requirements and are effectively SDU customers for the purposes of the provision of retail TV signal transmission.
- (114) On the basis of the above elements, the Commission concludes that, from the demand side, two separate customer groups are identifiable with respect to the provision of retail TV signal transmission: MDU and SDU customers.
- (115) From a supply-side perspective, respondents to the market investigation explain that competitors active in retail TV signal transmission to SDU customers cannot easily start supplying MDU customers, primarily because of the additional service and infrastructure requirements.⁹⁸ This is also evidenced by the fact that certain of the Parties' competitors are only active in the retail TV signal transmission to SDU customers, such as United Internet, but have not entered the MDU market.
- (116) On the basis of the above elements, the Commission concludes that, also from the supply side, two separate markets are identifiable with respect to the provision of retail TV signal transmission.
- (117) The Commission, therefore, concludes that given the clear lack of demand side and supply side substitutability the market for the retail supply of TV signal transmission services to MDU and to SDU customers constitute separate markets.
- (118) Regarding whether cable TV signal transmission is constrained within the MDU market by other transmission technologies such as satellite, IPTV or terrestrial, the results of the market investigation indicates that these latter technologies are not regarded as substitutable for TV signal transmission to MDU customers via cable. The Commission explains in the following recitals why these technologies are not substitutable for cable from a demand side perspective.
- (119) The majority of the respondents to the market investigation including retail TV providers and housing associations did not regard **IPTV** substitutable with cable as

⁹⁶ Replies to questionnaire Q12, question 5.

⁹⁷ See Form CO, Annex 6.C.IV.5.

⁹⁸ Replies to questionnaire Q11, question 8.

regards for the provision of TV signal transmission services for MDUs.⁹⁹ The majority of respondents stated that TV signal transmission contracts to MDUs were never or rarely lost/given to providers offering IPTV solutions. This illustrates that MDUs typically do not opt for IPTV as a solution for the provision of TV signal delivery to their tenants. Among the underlying reasons stated was the fact that IPTV solutions are considerably more expensive compared to cable, especially since each tenant would need an individual set-top box. IPTV solutions also do not meet the infrastructure requirements of MDU customers as IPTV providers would not take care of the maintenance and modernisation of the existing cable infrastructure. The quality of the network has become a very important component in recent years given the increasing importance of speed/bandwidth for end customers. Housing associations explain that tenants expect a reliable second infrastructure to be able to access high-speed cable broadband products in addition to the available DSL products. Such infrastructure can only be provided by cable network operators and not by IPTV providers.

- (120) Moreover, IPTV has technical shortcomings in comparison to cable TV. Firstly, it requires that all tenants have a high-speed Internet connection in order to avoid performance issues. Secondly, the multi-use possibilities of IPTV are limited and mass event viewings such as sports events may still cause malfunction of the TV signal transmission via IPTV.¹⁰⁰ Cable, on the other hand, uses a multicast signal having the technical advantage that it is readily available for all end customers regardless how many people access it, even via several devices, at the same time.¹⁰¹ Thirdly, IPTV does not allow for TV services in multiple rooms (multi-room capability).
- (121) In addition, competitors offering IPTV solutions explain that they can also not start competing for MDU customers because of the Nebenkostenprivileg.¹⁰² Indeed, retail TV signal transmission via cable benefits from ancillary cost privileges. While costs for cable infrastructure can be included in the monthly rental charges, irrespective of usage, this is not the case for other infrastructures. Housing associations responding to the market investigation are not aware that IPTV solutions are used in their industry. Some housing associations explain that IPTV is rather a complementary product to cable TV that some tenants may choose on top of their basic cable TV product.¹⁰³
- (122) Further evidence of the lack of substitutability of IPTV for MDU customers, provide the existing business strategies of operators in the market. Firstly, [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS].¹⁰⁴ Secondly, Deutsche Telekom, a provider of IPTV services, introduced a cable TV product in order to be able to address the specific needs of MDU customers.¹⁰⁵ While IPTV is a B2C mass product, the cable TV product was designed as an individualised B2B product for housing associations.

⁹⁹ Replies to questionnaire Q11, question 2 and 12-12.2; replies to questionnaire Q12, questions 6-6.2; Deutsche Telekom's non-confidential reply to RFI 20, question 7 [ID 4793].

¹⁰⁰ Tele Columbus' reply to questionnaire Q11, question 4 [ID 4020]; Deutsche Telekom's non-confidential reply to RFI 20, question 7 [ID 4793].

¹⁰¹ Tele Columbus, Submission of 12 November 2018, EU Competitive Assessment Vodafone Unitymedia, page 21 [ID 2974].

¹⁰² Replies to questionnaire Q11, questions 2.1 and 8.1.

¹⁰³ Replies to questionnaire Q12, question 6.1.

¹⁰⁴ See Response to the Article 6(1)(c) Decision, paragraph 186.

¹⁰⁵ Deutsche Telekom's non-confidential reply to RFI 20, questions 3, 7 [ID 4793].

- (123) Similarly, respondents to the market investigation stated that **satellite** was never or rarely chosen by MDU customers in the past years.¹⁰⁶ Respondents explained that there are hardly any advantages¹⁰⁷ of using satellite instead of cable, but rather satellite has several significant shortcomings. Reasons for the limited substitutability of satellite solutions for the provision of the TV signal delivery to MDU customers include the lack of additional fixed telecommunications services, that is to say broadband or fixed telephony. Due to the increasing importance of broadband services, satellite solutions have become less suitable in the last years and are no longer future proof according to respondents. Moreover, as a result of the missing bi-directionality, satellite is much less suitable compared to cable TV to offer interactive services such as VOD. [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS]¹⁰⁸
- (124) Several respondents stated that satellite is only used in areas outside existing cable networks and/or if connection to cable network is too expensive, whereas if cable is available, it is the preferred option. Competing operators explain that they have not received requests for the installation of satellite systems in recent years. Where MDUs are still connected via satellite, satellite is increasingly replaced by cable-based signal transmission.¹⁰⁹ MDU customers responding to the market investigation also unanimously confirmed that the prices of satellite and terrestrial do not constrain cable prices at all.¹¹⁰
- (125) Satellite systems operated by private landlords or housing associations themselves are particularly inappropriate as, in addition to the disadvantages stated above, this solution requires administrative effort (construction, maintenance, contract management, copyright payments).¹¹¹ Another reason stated was the lack of build-out, service and maintenance offerings if a housing association were to opt for satellite self-supply. Therefore, this solution does not constitute a substitute for MDU customers looking for the usual features and advantages of retail TV signal transmission contract targeted at MDU customers. In addition, MDU customers and tenants face legal restrictions, such as municipal statutes, preventing them from installing individual satellite solutions.¹¹²
- (126) The Commission notes that there are, however, MDU customers, especially private landlords with few housing units and small housing associations, that find it sufficient to provide TV via satellite solutions to their tenants.¹¹³ The Notifying Party explains that satellite is more cost-effective for smaller buildings with fewer units and presents fewer logistical challenges.¹¹⁴
- (127) In this respect the Commission considers that this fact has no bearing on a finding of demand-side substitutability between cable and satellite for the retail TV signal

¹⁰⁶ Replies to questionnaire Q11, question 13; replies to questionnaire Q12, question 7.

¹⁰⁷ The only advantage stated was the greater availability of foreign channels via satellite, which is only relevant for a small share of MDU customers.

¹⁰⁸ See Parties' reply to RFI 22, question 23.

¹⁰⁹ The win/loss data submitted by the Notifying Party shows [...] (see Form CO, paragraph 6.497 ff.). The provided analysis, while not in line with the market investigation and the review of the Parties' internal documents, has important methodological limitations. Importantly, [...]. Therefore, any relative conclusions regarding switching drawn based on this analysis are not meaningful.

¹¹⁰ Replies to questionnaire Q12, question 23.

¹¹¹ Tele Columbus, Meeting presentation of 29 August 2018, page 9 [ID 2606].

¹¹² Deutsche Telekom, Meeting presentation of 20 February 2019, page 5 [ID 4428].

¹¹³ See Form CO, paragraph 6.511 ff.

¹¹⁴ See Form CO, paragraph 6.530.

transmission to MDU customers. Indeed, the fact that certain smaller MDU customers, in reason of their specific more limited requirements, rely on satellite solutions, does not contradict the Commission's findings. Those small MDU customers effectively do not belong to the customer group of MDU customers with specific demand requirements and are effectively SDU customers for the purposes of the provision of retail TV signal transmission (see recital (112)).

- (128) Lastly, the large majority of respondents to the market investigation stated that MDUs never or rarely opted for **DVB-T** signal delivery for providing TV services for the tenants of their MDUs.¹¹⁵ Respondents stated that similar to satellite, the quality of terrestrial is inferior to cable and the reception of DVB-T signals is poor in many regions. Moreover, the scope of services is much more limited compared to cable, in particular the number of channels is much smaller compared to cable TV. What is more, terrestrial also does not offer bi-directionality which implies that broadband services cannot be offered.¹¹⁶
- (129) Cable TV signals with bi-directional functionality for the fixed internet access connection can be transmitted either via cable or via **fibre networks (“FTTB/H”)**.¹¹⁷ There is no practical difference for MDU customers. This can be seen from the fact that numerous city carriers¹¹⁸ throughout Germany compete for MDU contracts based on their fibre networks.¹¹⁹ This is also reflected in housing associations' responses to the market investigation where several respondents note that they seek FTTB/H for new buildings and/or are upgrading existing housing stocks to FTTB/H.¹²⁰ Therefore, fibre networks, if used for the transmission of a cable TV signal, are fully substitutable with cable networks.
- (130) From a supply-side perspective, providers of cable TV, IPTV, satellite and terrestrial are active based on different infrastructures and technologies and therefore there is no supply-side substitutability between these operators. It would require significant time and investments to build a new cable or fibre network.
- (131) For the purposes of this Decision, considering the results of the market investigation and taking into account the specific characteristics of the MDU market in Germany, the Commission considers that the retail supply of TV signal to MDU customers should be distinguished from retail supply of TV signal to SDU customers. As for the substitutability of different transmission technologies, the Commission considers that neither satellite, terrestrial nor IPTV are substitutes for the retail TV signal transmission to MDU customers via cable and fibre.
- (132) As regards SDU customers, the majority of the respondents explained that cable TV and IPTV are interchangeable. The results of the market investigation were mixed as to the question whether cable TV and IPTV are interchangeable with satellite. The stated shortcomings of satellite mainly related to the means of deployment (investment and installation required) but less to the quality and scope of the service. Finally, a large majority of the respondents confirmed that DVB-T is not interchangeable with cable and IPTV. Most respondents explained that the number of

¹¹⁵ Replies to questionnaire Q11, question 14; replies to questionnaire Q12, question 8.

¹¹⁶ Replies to questionnaire Q11, question 14.1.

¹¹⁷ [DETAILS OF COMMERCIAL ACTIVITIES AND CAPABILITIES].

¹¹⁸ Local and regional operators active in a specific area.

¹¹⁹ NetCologne's comments on the Statement of Objections [5854], section 1.1.

¹²⁰ Replies to questionnaire Q12, question 12.1.

TV channels and additional service features available via DVB-T is too limited compared to other means of signal transmission.¹²¹

- (133) With regard to linear OTT TV services, respondents to the market investigation explained that there are a few OTT providers, such as Zattoo or waipu.tv, that offer access to linear television with a comparable number of channels to those included in traditional basic TV subscriptions.¹²² These would be substitutable for certain customers that accept that the customer experience differs compared to traditional TV. Moreover, traditional retail TV providers have started offering TV packages as stand-alone OTT products, such as Deutsche Telekom and Vodafone.¹²³
- (134) However, respondents also point out that OTT services require a fixed internet access infrastructure, and, in terms of quality, are provided based on a non-managed, best-effort basis only. While OTT services offer access to the same TV content, they may not be directly comparable to TV-specific transmission technologies given the differences in customer experience and transmission quality.
- (135) With regard to retail TV signal transmission to SDU customers, for the purposes of this Decision, it can be left open which technologies are included in the market. Irrespective of the market definition, the Commission considers that the Transaction would not significantly impede effective competition in relation to the market for the retail supply of TV signal transmission to SDU customers.

5.2. Geographic market definition

- (136) The Notifying Party submits that the relevant geographic market is national in scope or can be left open, in particular considering that there is no geographic overlap between the Parties' cable footprints.
- (137) From a geographical perspective, the Commission has in previous decisions considered that the market for retail supply of TV signal transmission for both MDU and SDU customers can be defined either as national or regional, the latter corresponding to the cable network operator's regional footprint.
- (138) As regards MDU customers, the Commission concluded previously that the market appears to be national, but ultimately left open the precise definition.¹²⁴ The FCO, in turn, defined the geographic scope as national, noting that a regional cable network operator could expand its activities to areas outside of its network.¹²⁵ However, in the previously referred annulment proceedings against the FCO's clearance decision regarding the acquisition of KabelBW by Liberty Global, the Higher Regional Court of Düsseldorf considered that the relevant geographic market had to be limited to the regional area covered by the network of the respective cable operators.¹²⁶

¹²¹ Replies to questionnaire Q7, question 19 ; replies to questionnaire Q11, question 17.

¹²² Replies to questionnaire Q8, question 25, replies to questionnaire Q11, question 23.

¹²³ See <https://www.broadbandtvnews.com/2018/10/23/deutsche-telekom-makes-major-ott-move/> [ID 6772], <https://www.broadbandtvnews.com/2018/11/22/exclusive-vodafone-launches-ott-service-in-germany/> [ID 6775].

¹²⁴ Commission decisions of 16 June 2011 in case COMP/M.5900 – *LGI/KBW*, paragraph 41 and of 20 September 2013 in case M.6990 – *Vodafone/Kabel Deutschland*, paragraph 104 (although, in this latter case, the market investigation provided indications that the relevant market was regional in scope).

¹²⁵ FCO's decision in case B7-66/11 *Liberty/KBW*, paragraphs. 56-58; FCO's decision in case B7-70/12 *Kabel Deutschland/Tele Columbus*, paragraphs 70-72.

¹²⁶ In its decision, the Higher Court of Düsseldorf emphasized that customers can realistically only purchase services of cable network operators active at their respective location and acknowledged that

- (139) As regards the market for the retail supply of TV signals to SDU customers, the Commission has previously left the precise definition open.¹²⁷ The Commission notes that in previous decisions the FCO defined the market as regional.¹²⁸
- (140) The results of the market investigation are mixed in this respect. Regarding both MDU and SDU customers, some participants pointed to a national market and others to a regional one.¹²⁹
- (141) With regard to SDU customers, for the purposes of this Decision, the market definition can be left open. Irrespective of the geographic market definition, the Commission considers that the Transaction would not significantly impede effective competition in relation to the supply of retail TV signal transmission services to SDU customers.
- (142) With regard to MDU customers, respondents to the market investigation explain that MDU customers used to conclude contracts on regional basis, depending on the cable network operators active in certain regions, and due to the fact that MDU customers, including housing associations, were mostly active on a regional basis.¹³⁰ However, market participants also point to the consolidation in the housing industry leading to a growing number of housing associations that are active across Germany.¹³¹ Therefore, demand has become more national.
- (143) Nevertheless, housing associations explain that negotiations and tenders continue to be mostly regional in scope within given cable footprints. According to respondents, this is due to the preferences of the Parties, the two largest cable network operators, who insist on separate regional agreements and who do not participate in tenders concerning regions outside their current cable footprint.¹³² Vodafone and Unitymedia submit that they can only compete for customers within their respective footprints as they do not have any network or sales infrastructure outside their footprints.¹³³ The other two main competitors, Deutsche Telekom and Tele Columbus, are active nationwide.
- (144) Regarding regional price differences, the results from the market investigation are mixed. While most operators responding to the market investigation state that there are regional price differences, several other respondents do not observe regional price differences.¹³⁴ There is agreement that prices do not vary by geographic region per se, but rather vary depending on the level of competition, infrastructure costs (for example, civil engineering costs) and clustering of the buildings to be supplied. In particular, [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS]/[DETAILS OF PRICING ARRANGEMENTS].

the large majority of cable network operators does not offer their services outside their respective footprints.

¹²⁷ Commission decisions of 16 June 2011 in case COMP/M.5900 *LGI/KBW*, paragraph 42 and of 20 September 2013 in case M.6990, *Vodafone/Kabel Deutschland*, paragraph 104 (although, in this latter case, the market investigation provided indications that the relevant market was regional in scope).

¹²⁸ FCO case B7-66/11 *Liberty/KBW*, paragraph 235; FCO case B7-70/12 *Kabel Deutschland/Tele Columbus*, paragraphs 253 et seq.

¹²⁹ Replies to questionnaire Q6, questions 18-19; replies to questionnaire Q7, questions 20-21; replies to questionnaire Q8, questions 20-21.

¹³⁰ Replies to questionnaire Q11, question 15; replies to questionnaire Q12, question 9.

¹³¹ Replies to questionnaire Q11, question 15.1.1.

¹³² Replies to questionnaire Q11, question 52.1.

¹³³ See Form CO, paragraph 6.494.

¹³⁴ Replies to questionnaire Q11, question 48; replies to questionnaire Q12, question 24.2.1.

- (145) Therefore, the Commission considers that, for the purposes of this Decision, the relevant geographic market for the retail supply of TV signal transmission services to MDU customers can be left open. Irrespective of the geographic market definition, the Commission considers that the Transaction would not significantly impede effective competition in relation to the supply of retail TV signal transmission services to MDU customers.

6. RETAIL SUPPLY OF MULTIPLE PLAY SERVICES

- (146) The term "multiple play" relates to products comprising two or more of the following services provided to retail consumers on the basis of a single or multiple contracts by the same provider: mobile telecommunications services, fixed telephony services, fixed internet access and TV services. Multiple play offers comprising two, three or four of these services are referred to as dual play ("2P"), triple play ("3P") and quadruple play ("4P") respectively.
- (147) Three of the four services referenced in recital (146), namely fixed telephony services, TV services and fixed internet access, are fixed services as they are provided over a fixed network such as cable, copper or fibre infrastructure. Multiple play offers comprising any combination of two or more of these fixed services without a mobile component are referred to as "fixed multiple play" products. Multiple play offers comprising one or more of these fixed services in combination with a mobile component are referred to as "fixed-mobile multiple play" or "fixed-mobile convergence" ("FMC") products. FMC products may involve a single mobile subscription or more than one mobile subscription combined with the fixed services.
- (148) Both Parties sell multiple play bundles in Czechia and Germany. Furthermore, the Target Business offers multiple play packages in Hungary and Romania and [DETAILS OF COMMERCIAL STRATEGY].¹³⁵
- (149) As in other EU Member States, in Czechia, Germany, Hungary and Romania an increasing number of customers purchase multiple play offers. According to data provided by the Notifying Party, the uptake of multi-play offers varies depending on the Member State and the type of package. Generally, fixed-only multi-play services are much more prevalent than fixed-mobile offerings. More precisely:
- (a) As regards Czechia:
- (i) According to data of the Czech Telecommunications Office, in the second quarter of 2016, 37% of retail internet access services were bundles with one or more services, most commonly, dual-play bundles comprising of fixed internet services and pay TV.¹³⁶
- (ii) As regards FMC, according to a market study, less than 20% of customers purchase both fixed and mobile telecommunications services from the same provider.¹³⁷
- (b) As regards Germany:

¹³⁵ [DETAILS OF COMMERCIAL STRATEGY]. See Parties' reply to RFI 36, question 1. The Commission will discuss the possible entry of Vodafone in those markets in sections VIII.D.1.1, VIII.E.1.1, and VIII.F.1.1.

¹³⁶ See Commission decision of 26 June 2017 in cases CZ/2017/1985 and CZ/2017/1986, Wholesale local access provided at a fixed location for mass-market products in the Czech Republic, page 6.

¹³⁷ Market Meter, 2017, Annex 6.B.VIII.2 to the Form CO.

(i) According to a third party report submitted by a respondent to the market investigation, in Germany there exist four main types of multiple play products: 2P bundles including both fixed telephony and internet services; 3P bundles including fixed telephony, internet and TV services; 3P bundles including fixed telephony, internet and mobile services; and 4P bundles including fixed telephony, internet, mobile and TV services.¹³⁸

(ii) Based on the data compiled by the German telecommunications regulator, Bundesnetzagentur (the “BNetzA”), the majority of customers in Germany, that is to say, 23.2 million customers in 2017, purchase 2P product, bundling together retail fixed telephony and retail broadband services. This corresponds to respectively 60% of fixed telephony customers and 70% of fixed broadband customers in 2017.¹³⁹

(iii) Around 31.5% of the fixed internet customer base, corresponding to 10.3 million subscribers, purchased a bundle including pay TV in 2017 according to third party reports.¹⁴⁰ Conversely, third party reports estimate that in 2017 36.4% of pay TV subscribers purchase a bundle including a fixed broadband connection.¹⁴¹ Absent the Transaction, these percentages are expected to marginally increase up to 35.2% of the fixed internet customer base and 43.8% of the pay TV subscriber customer base.¹⁴²

(iv) FMC products started being offered in Germany only in 2014 by Deutsche Telekom and Vodafone. According to third party reports, in 2017 around 8.4% of households, or 10.8% of the fixed broadband base, that is to say, 3.5 million households, purchase an FMC product.¹⁴³ Conversely, third party reports estimate that in 2017 5.4% of mobile customers purchased a bundle including a fixed broadband connection.¹⁴⁴

(v) The current low penetration of FMC offers in Germany is confirmed by the Parties’ competitors in the market investigation. For instance, Telefónica explains that FMC products have not played a significant role in Germany. The total percentage of households that purchase FMC products in Germany is low, only 9% as of Q4 2017, as opposed to, for example, 47% in Belgium and 61% in Spain.¹⁴⁵ Similarly, a study submitted by United Internet shows that Germany is the country with the lowest uptake of FMC by households.¹⁴⁶ United Internet also submitted a presentation of Vodafone of 2017 showing

¹³⁸ WIK-Consulting study, annex to EWE’s comments on the Statement of Objections [ID 5872].

¹³⁹ BNetzA, Jahresbericht 2017 – Netze für die Zukunft, pages 51 and 54 [ID 4667].

¹⁴⁰ E.g. Analysis Mason, Fixed-Mobile Convergence in Europe: Trends And Forecasts 2017–2022, Annex 6.C.XIII.1 to the Form CO. [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]. See Annex 6.C.XIII.2 to the Form CO. In the same vein, RBC Capital Markets, Equity Research Note on European Telecoms, State of Convergence 2018, (dated 16 January 2018), states (at page 1) that Germany “remains one of the least converged markets” in Europe and (at page 3) that, “despite [providers] offering c. €10 discounts, convergence in Germany continues to lag”. See Annex 6.C.XIII.3 to the Form CO.

¹⁴¹ See Parties’ reply to RFI 33, question 1.1.

¹⁴² See Parties’ reply to RFI 33, question 1.1. and Analysis Mason, Fixed-Mobile Convergence in Europe: Trends And Forecasts 2017–2022, Annex 6.C.XIII.1 to the Form CO.

¹⁴³ E.g. Analysis Mason, Fixed-Mobile Convergence in Europe: Trends And Forecasts 2017–2022, Annex 6.C.XIII.1 to the Form CO. See also the other studies cited in the previous footnote.

¹⁴⁴ See Parties’ reply to RFI 33, question 1.2.

¹⁴⁵ Telefónica, submission of 26 October 2018, Memorandum Theories of Harm, page 10 [ID 2803].

¹⁴⁶ Bain & Company, Fixed-Mobile Convergence: Quarterly State of Play 18Q4, 18 March 2019, slides 11, 12, 13 [ID 6367].

that Germany is the country with the slowest speed of convergence among the countries where Vodafone is active.¹⁴⁷ A study submitted by EWE reports that, among 3P products, only 7% of the bundles sold included mobile instead of TV services, while 4P products have been purchased only by a few thousand customers on the basis of a single contract.¹⁴⁸

(vi) Absent the Transaction, predicted FMC penetration in Germany in 2022 is 24.3% as a proportion of the fixed broadband base, 21% as a proportion of households, or 16% as a proportion of mobile contracts, ranking Germany, respectively, second and third to last of the ten EU Member States covered by the data provided by the Notifying Party.¹⁴⁹ Similarly, the study submitted by EWE concludes that in the near future there are not going to be significant changes in competitive dynamics in Germany due to bundling of fixed and mobile products together, as German customers still purchase the two products separately.¹⁵⁰

(c) As regards Hungary:

(i) Based on the data submitted by the Parties, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] of the Hungarian households currently subscribe to fixed multi-play offers.

(ii) Across all services, pay TV is the most popular service to be included in multi-play offers: [...] of all multi-play offers include a TV subscription in the package. Household penetration of fixed-TV bundles (as a proportion of all fixed lines) has increased steadily from [...] in 2013 to [...] in 2017. Nonetheless, a significant number of customers/households still purchase separate subscriptions for individual services [INFORMATION CONCERNING SALES].¹⁵¹

(iii) FMC penetration has been growing steadily in recent years and reached (a still relatively modest) [...] of all fixed subscribers at the end of 2017. Penetration of FMC offers, in particular 4P, is expected to continue to increase. Nonetheless, a significant number of customers/households still purchase separate subscriptions for individual services [INFORMATION CONCERNING SALES].¹⁵²

(d) As regards Romania:

(i) Fixed-mobile convergence is at a relatively advanced stage in Romania and Vodafone estimates that approximately [...] of all fixed broadband customers are “converged” – that is to say, they purchase their fixed broadband

¹⁴⁷ Vodafone’s presentation, Fixed Convergence Open Office, 19 September 2017, slides 11 [ID 6375].

¹⁴⁸ WIK-Consulting study, annex to EWE’s comments on the Statement of Objections [ID 5872].

¹⁴⁹ See Form CO, Section 6, paragraph 6.1204(iii), based on Analysys Mason, Fixed-Mobile Convergence in Europe: Trends And Forecasts 2017–2022, Annex 6.C.XIII.1 to the Form CO. See Parties’ reply to RFI 33, question 1.2.

¹⁵⁰ WIK-Consulting study, annex to EWE’s comments on the Statement of Objections [ID 5872]. Original version: *"Bis-lang sind allerdings keine wettbewerbliche Auswirkungen aufgrund von FMB zu beobachten, unter anderem weil Kunden in Deutschland noch in sehr begrenztem Umfang Mobilfunk- und Festnetztelekommunikationsdienste gebündelt erwerben. Einen regulär-torischen Handlungsbedarf besteht zumindest derzeit noch nicht. Die Entwicklung von FMBs sollte jedoch weiter kritisch beobachtet werden, so dass bei negativen wettbe-werblichen Auswirkungen entsprechend reagiert werden kann."*

¹⁵¹ [REFERENCE TO INTERNAL DOCUMENT].

¹⁵² [REFERENCE TO INTERNAL DOCUMENT].

and mobile services together from the same operator.¹⁵³ The Parties also submit that the share of fixed-mobile bundles as a proportion of fixed broadband subscriptions has increased steadily in Romania over the last three years, from [...] in 2015 to [...] in 2017.

(ii) The share of fixed-mobile bundles as a proportion of fixed broadband subscriptions has increased steadily in Romania over the last three years, from [...] in 2015 to [...] in 2017.¹⁵⁴

(iii) The proportion of mobile customers that are converged is lower. The Notifying Party submits that evidence from a supply side survey conducted on behalf of Vodafone suggested that in October 2017 around [...] of households in Romania with a mobile subscription, representing [...] of total households in Romania, purchased at least a dual-play fixed-mobile offer (minimum of one fixed service and one mobile service).¹⁵⁵

(iv) The Parties submit that multiple play offers, usually a combination of TV and broadband, are now available from most fixed operators, such as Digi, Orange, and Telekom Romania.

6.1. Product market definition

- (150) The Notifying Party submits that there is no separate retail market for multiple play services. In particular, there would not be indication of a lack of demand-side or supply-side substitutability between multiple play offers and the standalone services of which they are comprised. Furthermore, from a practical perspective, given the large number of possible permutations of offers, it would be unclear which package of services should be taken as a possible candidate market. As regards Czechia, the Notifying Party submits that despite a trend towards convergence, the majority of mobile customers purchase mobile services on a standalone basis. Finally, as regards Germany, while some increase in the FMC penetration has to be expected, [ASSESSMENT OF MARKET POSITION].
- (151) In previous cases, the Commission considered but ultimately left open the question as to whether there exist one or more multiple play markets which are distinct from each of the underlying individual telecommunications services.¹⁵⁶ It also noted that, due to different services, delivered over different infrastructures (fixed for 2P and 3P or fixed and mobile for 4P), that are included in the different multiple play bundles, instead of one possible market for multiple play, there could be several candidate multiple play markets: a market for fixed bundles (dual play and triple play) and another separate market for FMC bundles. The possibility for several mobile subscriptions to be included in a quadruple play bundle further complicates the picture.¹⁵⁷
- (152) The results of the market investigation in this case are not sufficiently conclusive to establish with the required degree of certainty the existence of a separate market for

¹⁵³ See Form CO, Annex 6.E.X.1.

¹⁵⁴ See Form CO, Annex 6.E.X.1.

¹⁵⁵ See Form CO, Annex 6.E.X.1 and Annex 6.E.VIII.1.

¹⁵⁶ Commission decision of 3 August 2016 in case M.7978 – *Vodafone / Liberty Global / Dutch JV*, paragraph 108; Commission decision of 4 February 2016 in case M.7637 – *Liberty Global / BASE Belgium*, recital 96; Commission decision of 19 May 2015 in case M.7421 – *Orange / Jazztel*, recitals 86 and 91.

¹⁵⁷ Commission decision of 3 August 2016 in case M.7978 – *Vodafone / Liberty Global / Dutch JV*, paragraph 107.

multiple play bundles and which combinations of services would be included in such market, if it were to exist. This conclusion applies irrespective of the country being considered for the purposes of this Decision.

- (153) With regard specifically to Czechia, Hungary, and Romania, results of the market investigation are mixed. Respondents to the market investigation stated that consumers favour bundled products, mainly because of the price discount associated with bundled services, but also because of the convenience of having a single provider and the additional services/benefits that come with the bundle.¹⁵⁸ Nonetheless, respondents' view were mixed as to whether bundles and standalone products satisfy the same customer needs. Respondents provided mixed answers as regards the difficulty of switching from a bundled product to standalone products.¹⁵⁹ When respondents stated that switching is difficult, they mainly stated contractual obligations as an obstacle, which equally hinders customer switching between standalone products.¹⁶⁰ Respondents further recognise that the provision of telecommunications bundles entails economies of scope for the provider, in particular as regards multiple play bundles including telecommunications services provided over fixed networks.¹⁶¹
- (154) Therefore, with respect to Czechia, Hungary, and Romania, the Commission will assess the effects of the Transaction as regards any possible multiple play bundles, as well as each of the standalone markets, where the Parties are active or might be potential entrants.
- (155) With specific respect to Germany, the market investigation also provided no clear evidence as to the substitutability between multiple play services on the one hand and combinations of standalone services on the other hand.¹⁶² Indeed, even though there is a growing demand for multiple play offers in Germany, the results of the market investigation suggested that the majority of customers still expects standalone products to be offered and compares the prices and combination of integrated multiple play offers with the respective standalone products. As a consequence, standalone offers have a significant impact on the pricing and product proposition of multiple play offerings and similarly, vice versa.¹⁶³ Furthermore, among those respondents in Germany which argue that the retail supply of multiple play offers should be considered as a distinct market, separate from the retail supply of the respective unbundled offers, the opinions differ on which offers (double, triple or quadruple) should be relevant.¹⁶⁴
- (156) As explained in section VIII, the Transaction is likely to significantly impede effective competition in relation to the retail supply of fixed internet access services in Germany, which is one of the components of several bundle offers. The Commission has therefore investigated whether there is any hypothetical market for

¹⁵⁸ Replies to questionnaire Q1, question 28 ; questionnaire Q3, question 32 ; questionnaire Q4, question 28.

¹⁵⁹ Replies to questionnaire Q1, question 31 ; questionnaire Q3, question 35 ; questionnaire Q4, question 31.

¹⁶⁰ Replies to questionnaire Q1, question 31.1 ; questionnaire Q3, question 35.1 ; questionnaire Q4, question 31.1.

¹⁶¹ Replies to questionnaire Q1, questions 32-32.2.1 ; questionnaire Q3, question 36-36.2.1 ; questionnaire Q4, questions 32-32.2.1..

¹⁶² In the Referral Request, the FCO has left it open whether a separate market for the retail supply of multiple play services exists; see Referral Request, paragraph 85.

¹⁶³ Replies to questionnaire Q8, question 43; replies to questionnaire Q11, question 35.

¹⁶⁴ Replies to questionnaire Q8, questions 43-44; replies to questionnaire Q11, questions [35-36].

the supply of bundles in Germany where the Transaction is likely to give rise to effects similar to the ones in the retail supply of fixed internet access services.

- (157) As stated at recital (149)(b), in Germany 60% of fixed telephony customers and 70% of fixed broadband customers are in fact purchasers of a 2P product comprising fixed internet and telephone. Furthermore, respondents to the market investigation clearly stated that, within 2P products comprising fixed internet and telephone, the main driver of product differentiation and customers' choice is fixed internet access services and that therefore the competitive dynamics of fixed internet access services standalone and 2P products comprising fixed internet and telephone are very similar. In this respect, for example, Deutsche Telekom stated that, *"[a]ccording to [our] view on the market, fixed voice products as stand-alone offerings have not played a major role in the marketing activities of the relevant player in recent years. Instead, the marketing focus of all fixed network operators is on double play products consisting of a voice and a broadband component"* and therefore it considers that, when looking at the market conditions and competitive relationship between the Parties and their competitors, there is no need to *"distinguish between fixed voice products and double play products consisting of a fixed voice and broadband component."*¹⁶⁵ A similar view on the fact that fixed voice is not an important differentiator was expressed by Tele Columbus,¹⁶⁶ while Telefónica explained that *"[i]f one were to look at fixed Internet access services only, the market structure and in particular market shares would not differ significantly since fixed voice and fixed Internet access services are usually supplied together and stand-alone fixed voice services account only for a fraction of customers."*¹⁶⁷
- (158) The Commission notes that also the Notifying Party's submissions seem to confirm the relevance of 2P products bundling retail internet access services and fixed telephony services and the fact that dynamics of competition for such products would be very similar to those for fixed internet access services. For example, in relation to fixed number portability data, the Notifying Party explained that, *"[a]lthough the port out data relates to number porting (i.e. fixed voice), [...] it is the most reliable source available for broadband switching data as the vast majority of consumers purchase voice and broadband together (over [...] of new Vodafone broadband customers and [...] of new Unitymedia broadband customers also purchased fixed voice). As such, the fixed number porting process is also likely to indicate the destination of broadband customers in almost all cases."*¹⁶⁸ Moreover, the pricing analyses presented by the Notifying Party, as well as by competitors, for retail fixed internet access services almost exclusively refer to 2P bundles consisting of retail fixed internet access and fixed telephony services.
- (159) As regards other types of product bundles, whilst, as stated at recital (155), market participants do not agree on which products combinations should be considered relevant market, the Commission notes that [INFORMATION CONCERNING SALES].¹⁶⁹ Furthermore, in the market investigation complaints have been presented to the Commission in relation to the effects of the Transaction as regards to the retail supply of FMC bundles in Germany.

¹⁶⁵ Deutsche Telekom's reply to questionnaire Q8, question 71 [ID 2554].

¹⁶⁶ Pyur's reply to questionnaire Q11, question 80 [ID 4020].

¹⁶⁷ Telefónica's reply to questionnaire Q8, question 84.1 [ID 2437].

¹⁶⁸ See Form CO, paragraph 6.769.

¹⁶⁹ See Vodafone's reply to data RFI 17 and Unitymedia's reply to data RFI 7.

- (160) Therefore, with respect to Germany, the Commission will assess the effects of the Transaction as regards the following possible multiple play bundles: 2P bundles including both fixed telephony and internet services; 3P bundles including fixed telephony, internet and TV services; 3P bundles including fixed telephony, internet and mobile services; and 4P bundles.
- (161) In light of the above, the Commission considers that, for the purposes of this Decision, the question as to whether there exist one or more multiple play markets, which are distinct from each of the underlying individual telecommunications services, can be left open. Irrespective of the exact product market definition, the Commission considers that the Transaction would not significantly impede effective competition in relation to the supply of any multiple play products, with the only exception of the supply of retail internet access services bundled with fixed telephony in Germany.

6.2. Geographic market definition

- (162) The Notifying Party submits that the relevant geographic scope of a possible retail market for multiple play services would be national.
- (163) In previous decisions, the Commission considered that the geographic scope of any possible retail market for multiple play services would be national since the components of the multiple play offers are offered individually at national level and the bundling of the services would not change the geographic scope of the components. It nevertheless ultimately left open the question of the exact geographic delineation of the possible retail market for multiple play services.¹⁷⁰
- (164) Most respondents to the market investigation of this case considered that a possible market for multiple play (irrespective of what type of multiple play bundles are included in such possible market) would be national in scope.¹⁷¹ In particular, respondents to the market investigation confirmed that, also in relation to bundles, they apply a national pricing policy and that they do not employ regional promotion schemes.¹⁷²
- (165) Therefore, for the purposes of this Decision, the Commission considers that the geographic scope of any plausible retail market for multiple play services would be national and corresponds to each of the territories of Czechia, Germany, Romania and Hungary.

7. RETAIL BUSINESS CONNECTIVITY SERVICES

- (166) The retail market for business connectivity includes fixed telecommunications services purchased by large businesses, enterprises and public sector customers in order to provide data connectivity between multiple sites.
- (167) Both Vodafone and the Target Business offer retail business connectivity services in Czechia, Germany, Hungary and Romania.

¹⁷⁰ Commission decision of 3 August 2016 in case M.7978 – *Vodafone / Liberty Global / Dutch JV*, paragraph 112; Commission decision of 19 May 2015 in Case M.7421 – *Orange/Jazztel*, recitals 89-90; Commission decision of 30 May 2018 in Case M.7000 – *Liberty Global/Ziggo*, paragraph 232; Commission decision of 20 September 2013 in Case M.6990 – *Vodafone/Kabel Deutschland*, paragraphs 263-265; Commission decision of 16 June 2011 in Case M.5900 – *LGI/KBW*, paragraphs 183-186.

¹⁷¹ Replies to questionnaire Q1, question 33; questionnaire Q3, question 37; questionnaire Q4, question 33.

¹⁷² Replies to questionnaire Q8, question 45.

7.1. Product market definition

- (168) The Notifying Party considers that retail business connectivity services provided to large enterprise customers constitute a separate product market (including voice services).
- (169) In previous decisions, the Commission¹⁷³ has considered potential subdivisions into: (i) broadband access for large business customers;¹⁷⁴ (ii) leased lines;¹⁷⁵ and (iii) VPN services.¹⁷⁶ The Commission also distinguished between two separate markets for connectivity services. Firstly, connectivity services offered to residential, SMEs and small-office-home-offices customers, which are part of the retail market for fixed internet access services; and secondly, connectivity services to large business customers, which are part of the retail market for business connectivity services. This is because of the peculiar requirements and purchase processes of larger business customers.¹⁷⁷
- (170) The results of the market investigation did not provide reasons to depart from the Commission's previous approach in this case.¹⁷⁸
- (171) In any event, for the purposes of this Decision, the Commission considers that the question whether the market for the retail business connectivity services should be further segmented into (i) broadband access for large business customers, (ii) leased lines, and (iii) VPN services can be left open, as the Transaction does not raise competition concerns under any possible product market definition.

7.2. Geographic market definition

- (172) The Notifying Party submits that the geographic scope of the retail market for business connectivity services is at least national, but that in any case this can be left open as it would not affect the competitive assessment.
- (173) In previous decisions, the Commission has found that the retail market for business connectivity was national in scope.¹⁷⁹
- (174) The market investigation largely validated the national scope of the market, although certain respondents stressed the cross-border nature of the market.¹⁸⁰
- (175) In light of the result of the market investigation, the Commission considers that in this case there is no reason to depart from the geographic market definition adopted in previous decisions.

¹⁷³ Commission decisions of 14 April 2014 in case M.7109 – *Deutsche Telekom / GTS* paragraph 26; and of 29 January 2010 in case M.5730 – *Telefónica/Hansenet Telekommunikation*, paragraph 6 and subsequent.

¹⁷⁴ Retail broadband access to business customers with significant needs which require higher performance in terms of security, bandwidth and functionality.

¹⁷⁵ Leased lines are part-circuits that allow communication providers to connect their own networks to end user sites for the supply of business connectivity (Commission decision of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, paragraph 28 and subsequent).

¹⁷⁶ An encryption technology enabling to secure shared access as if it were a dedicated one.

¹⁷⁷ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 126.

¹⁷⁸ Replies to questionnaire Q1, question 50; questionnaire Q3, question 54; questionnaire Q4, question 50 ; questionnaire Q8, question 35.

¹⁷⁹ Commission decisions of 14 April 2014 in case M.7109 – *Deutsche Telekom / GTS* paragraph 30 and of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, paragraph 10 and of 29 January 2010 in case M.5730 - *Telefónica/Hansenet Telekommunikation*, paragraph 28.

¹⁸⁰ Replies to questionnaire Q1, question 51 ; questionnaire Q3, question 55 ; questionnaire Q4, question 51 ; questionnaire Q8, question 36.

- (176) Therefore, for the purposes of this Decision, the Commission considers that the relevant geographic market for the retail supply of business connectivity is national in scope and corresponds to each of the territories of Czechia, Germany, Romania and Hungary.

8. RETAIL INTERNET HOSTING SERVICES

- (177) Internet hosting service providers operate internet servers and offer organisations and individuals to serve content to the internet via these servers. By using internet hosting services, organisations outsource their internal IT applications and infrastructure.
- (178) Vodafone offers internet hosting services in Czechia, Germany and Romania. The Target Business offers retail internet hosting services in Czechia, Hungary and Romania.

8.1. Product market definition

- (179) The Notifying Party submits that the relevant market definition can be left open, as the Transaction will not give rise to any competition concerns under any possible segmentation of the internet hosting market.
- (180) In past decisions decision, the Commission has considered four potential segments within the overall web-hosting market, based on the range of different services and products offered: (i) the local (limited to the area where the web-hosting centre is located) supply of basic co-location services such as connectivity, power, and the facilities; (ii) the national supply of shared and dedicated hosting consisting of hosting a customer's web-site on the web host's servers and providing the necessary support applications; (iii) the national, possibly cross-border regional, supply of managed services to outsource complex enterprise applications and support infrastructure, including "front-end" and "back-office" applications hosted on the providers' platforms (so-called ASP), and (iv) the national supply of content delivery services such as Streaming Content Delivery Services and Static Content Delivery Products.¹⁸¹ However, the Commission did not conclude on the exact market definition, that is on the question as to whether the segments constitute separate markets or not.
- (181) The market investigation did not provide any reasons to depart from the Commission's precedents.
- (182) Therefore, the Commission considers that, for the purpose of this Decision, the product market definition can be left open, as the Transaction does not raise competition concerns under any possible product market definition.

8.2. Geographic market definition

- (183) The Notifying Party submits that for the purposes of this Transaction, the retail market for internet hosting services is wider than national in scope, although the precise market definition can be left open.

¹⁸¹ Commission decisions of 20 September 2013 in case M.6990 – *Vodafone/Kable Deutschland*, paragraph 201; and of 16 January 2002 in case M.2648 – *Kpnqwest / Ebone / GTS*, paragraphs 19 and 20.

- (184) In previous decisions, the Commission did not conclude on the exact definition of the geographic market for retail internet hosting services, whether it is national, EEA-wide or worldwide.¹⁸²
- (185) The market investigation did not provide any reasons to depart from the Commission's precedents.
- (186) For the purpose of this Decision, the Commission considers that the exact geographic market definition can be left open, as the Transaction does not raise competition concerns under any possible geographic market definition. Should the market be considered national in scope, it would correspond to each of the territories of Czechia, Germany, Romania and Hungary.

9. WHOLESALE CALL TERMINATION SERVICES ON FIXED NETWORKS

- (187) As explained in recital (252), call termination is the wholesale service provided by network operators that allows users of different networks to communicate with each other.
- (188) The market for wholesale termination of calls on fixed networks is therefore vertically related to the retail markets for fixed and mobile telephony services.
- (189) Vodafone is active in the provision of wholesale call termination services on fixed networks in Czechia, Germany and Romania. The Target Business is active in Czechia, Germany, Hungary and Romania

9.1. Product market definition

- (190) In line with previous Commission decisions¹⁸³, the Notifying Party submits that the relevant product market is the wholesale market for call termination on each individual fixed network.
- (191) In previous decisions, the Commission held that there is no substitute for call termination on each individual network, since the network operator transmitting a call outgoing from his network to another network can reach the recipient only through the respective other network operator.¹⁸⁴ The commission did not consider it necessary to further segment the market.
- (192) Nothing in the Commission's file would justify a departure from the previous position.
- (193) For the purposes of the present Decision, the Commission therefore retains its previous product market definition and considers that each of the Parties' individual network constitutes a separate product market.

¹⁸² Commission decisions of 20 September 2013 in case M.6990 – *Vodafone/Kable Deutschland*, paragraph 205; and of 16 January 2002 in case M.2648 *Kpnqwest / Ebone / GTS*, paragraph 23.

¹⁸³ See Commission decision of 3 August 2016 in case M.7978 – *Vodafone / Liberty Global / Dutch JV*; Commission decision of 27 November 2007 in case M.4947 - *Vodafone/Tele2 Italy/Tele2 Spain*, paragraph 13; Commission decision of 1 March 2010 in case M.5650 - *T-Mobile/Orange*, paragraph 37; Commission decision of 3 July 2012 in case M.6584 - *Vodafone/Cable & Wireless*, paragraph 23; and Commission decision of 20 September 2013 in case M.6990 - *Vodafone/Kabel Deutschland*, paragraph 117.

¹⁸⁴ See Commission decision of 3 August 2016 in case M.7978 – *Vodafone / Liberty Global / Dutch JV*; Commission decision of 4 February 2016 in case M.7637 - *Liberty Global/BASE Belgium*, recital 126; Commission decision of 3 July 2012 in case M.6584 - *Vodafone/Cable & Wireless*, paragraph 23; Commission decision of 1 March 2010 in case M.5650 - *T-Mobile/Orange*, paragraph 37.

9.2. Geographic market definition

- (194) The Notifying Party considers the geographic scope of the wholesale market for call termination on fixed networks to be national. This is primarily due to regulatory barriers as the geographical scope of licenses is in principle limited to areas which do not extend beyond the borders of a Member State.
- (195) In line with previous decisions and taking into account that nothing in the Commission's file would justify a departure from the previous position, for the purposes of this Decision, the Commission considers the geographic scope of the wholesale market for call termination on a fixed network to be national and to correspond to each of the territories of Czechia, Germany, Romania and Hungary.¹⁸⁵

10. WHOLESALE LEASED LINES

- (196) Wholesale leased lines are part-circuits that allow telecommunications providers to connect their own networks to end user sites for the supply of business connectivity services. In addition, wholesale leased lines are an input for the provision of fixed and mobile telecommunications services.
- (197) Vodafone is active in the provision of wholesale leased lines in Germany. The Target Business is active in the provision of wholesale leased lines in Czechia, Germany, Hungary and Romania.

10.1. Product market definition

- (198) The Notifying Party submits that the relevant market definition can be left open, as the Transaction will not give rise to any competition concerns under any possible segmentation of the wholesale market for leased lines.
- (199) In previous decisions, the Commission has considered that the market for wholesale leased lines could be further segmented between trunk and terminating segments but ultimately left the market definition open.¹⁸⁶ In the past the Commission has also considered a further segmentation of the wholesale leased lines market into terminating leased lines with bandwidth above and below 2 Mbit/s respectively but ultimately left the exact product market definition open.¹⁸⁷ The Commission has also considered a further segmentation of the wholesale leased lines market into passive (dark fibre) and active infrastructure (traditional managed leased lines, Ethernet services with guaranteed bandwidth) but finally left the exact product market definition open.¹⁸⁸
- (200) The results of the market investigation did not provide reasons to depart from the Commission's previous approach in this case.

¹⁸⁵ See Commission decision of 3 August 2016 in case M.7978 – *Vodafone / Liberty Global / Dutch JV*; Commission decision of 20 September 2013 in case M.6990 – *Vodafone/Kabel Deutschland*, paragraph 121; Commission decision of 4 February 2016 in case M.7637 – *Liberty Global/BASE Belgium*, recital 128; Commission decision of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, paragraph 24; Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, paragraph 38; Commission decision of 27 November 2007 in case M.4947 – *Vodafone/Tele2 Italy/Tele2 Spain*, paragraph 16.

¹⁸⁶ Commission decision of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, paragraph 30; Commission decision of 4 February 2016 in case M.7637 – *Liberty Global/BASE Belgium*, recital 146; Commission decision of 14 April 2014 in case M.7109 – *Deutsche Telekom/GTS*, paragraph 70.

¹⁸⁷ Commission decision of 14 April 2014 in case M.7109 – *Deutsche Telekom/GTS*, paragraph 70.

¹⁸⁸ Commission decision of 14 April 2014 in case M.7109 – *Deutsche Telekom/GTS*, paragraph 70.

- (201) The Commission considers that in this case the question whether the product market should be further segmented according to (i) trunk vs. terminating segments, (ii) terminating leased lines with bandwidth above vs. below 2 Mbit/s or (iii) active vs. passive infrastructure can be left open, as the Transaction does not raise competition concerns under any possible product market definition.

10.2. Geographic market definition

- (202) The Notifying Party considers that the geographic scope of the wholesale market for leased lines is national, although the precise market definition can be left open.
- (203) In line with previous decisions and taking into account that nothing in the Commission's file would justify a departure from the previous position¹⁸⁹, for the purposes of this Decision, the Commission considers that the market for wholesale leased lines irrespective of its precise product market definition is nationwide in scope and corresponds to each of the territories of Czechia, Germany, Romania and Hungary.

11. WHOLESALE TERMINATION AND HOSTING OF CALLS TO NON-GEOGRAPHIC NUMBERS

- (204) Voice calls are not only made to geographic numbers but also to non-geographic numbers. A non-geographic number is a number associated with a country, but not to any single geographic location within that country. Non-geographic number services are less frequently used than standard services and are typically used for free and paid information services, for example, for helpdesks, subscription services, TV voting lines etc.
- (205) When a caller initiates a call to a non-geographic number, the call is automatically transferred from the originating operator to the terminating operator hosting the service provider that operates the service related to the non-geographic number, irrespective of the location.
- (206) Unlike ordinary call termination services, call origination and call termination regulation does not apply to these numbers. Therefore, different revenue sharing agreements exist between the originating operator, the terminating operator, and the service provider.
- (207) Vodafone is active in the provision of wholesale termination and hosting calls to non-geographic numbers in Czechia and Germany. The Target Business is active in the provision of wholesale termination and hosting calls to non-geographic numbers in Czechia.

11.1. Product market definition

- (208) The Notifying Party submits that the wholesale market for termination of calls to non-geographic numbers is distinct from a regular wholesale termination market, although the definition can be left open.
- (209) In previous decisions, the Commission considered that there is an overall wholesale market for termination and hosting of calls to non-geographic numbers, without it

¹⁸⁹ Commission decision of 3 July 2012 in case M.6584 - *Vodafone/Cable & Wireless*, paragraph 31; Commission decision of 4 February 2016 in case M.7637 - *Liberty Global/BASE Belgium*, recital 148; Commission decision of 14 April 2014 in case M.7109 - *Deutsche Telecom/GTS*, paragraph 74.

being necessary to consider further possible segmentations.¹⁹⁰ This market is distinct from the supply of other wholesale termination services because of the different regulatory regimes.

- (210) The results of the market investigation did not provide reasons to depart from the Commission's previous approach in this case.
- (211) For the purposes of this Decision, the Commission retains its previous product market definition and considers that the relevant product market is the overall wholesale market for termination and hosting of calls to non-geographic numbers, without it being necessary to consider further possible segmentations. In any event, the Commission considers that the Transaction does not raise competition concerns on that market, irrespective of the exact product market definition.

11.2. Geographic market definition

- (212) The Notifying Party submits that the relevant market is national in scope.
- (213) In line with previous decisions and taking into account that nothing in the Commission's file would justify a departure from the previous position, for the purposes of this Decision, the Commission considers that the geographic scope of the wholesale market for termination and hosting of calls to non-geographic numbers is national and corresponds to each of the territories of Czechia and Germany.¹⁹¹

12. WHOLESALE PROVISION OF DOMESTIC CALL TRANSIT ON FIXED NETWORKS

- (214) Domestic call transit on a fixed network is a wholesale service provided by a third party where there is no direct connection between originating communication providers and terminating communication providers.
- (215) Vodafone is active in the provision of wholesale domestic call transit on fixed networks in Czechia and Germany. The Target Business is active in Czechia, Germany and Hungary.

12.1. Product market definition

- (216) The Notifying Party, in line with the product market definition considered in previous decisions by the Commission, submits that the wholesale provision of domestic call transit services on fixed networks constitutes a separate product market. The Notifying Party also submits that the market is shrinking and likely to disappear in the mid-term due to the advent of new technologies.
- (217) In previous decisions, the Commission has considered that there is a separate market for the wholesale provision of domestic call transit services on fixed networks, distinct from the international wholesale market for voice carrier services.¹⁹²

¹⁹⁰ Commission decision of 4 February 2016 in case M.7637 - *Liberty Global/BASE Belgium*, recitals 137-139 and Commission decision of 3 July 2012 in case M.6584 - *Vodafone/Cable & Wireless*, paragraphs 58-60, where the Commission considered that market shares could be defined differently depending on whether one considered one overall market across networks, or distinguishing each terminating network as a separate market.

¹⁹¹ Commission decision of 4 February 2016 in case M.7637 - *Liberty Global/BASE Belgium*, recital 142 and Commission decision of 3 July 2012 in case M.6584 - *Vodafone/Cable & Wireless*, paragraphs 18.

¹⁹² Commission decision of 3 July 2012 in case M.6584 - *Vodafone/Cable & Wireless*, paragraph 26. In its subsequent decision of 14 April 2014 in case M.7109 - *Deutsche Telekom/GTS*, the Commission considered that, in the specific circumstances of the case, the exact definition of the relevant market for the provision of wholesale domestic call transit services of fixed networks could be left open, as the

- (218) The results of the market investigation did not provide reasons to depart from the Commission's previous approach in this case.
- (219) For the purposes of this Decision, the Commission retains its previous product market definition and considers that the relevant product market is the wholesale market for the provision of domestic call transit services on fixed networks.

12.2. Geographic market definition

- (220) The Notifying Party submits that the relevant market is national in scope.
- (221) In line with the Commission's previous practice and taking into account that nothing in the Commission's file would justify a departure from the previous position, for the purposes of this decision, the Commission considers that the geographic scope of the wholesale market for domestic call transit on fixed networks is national and corresponds to each of the territories of Czechia, Germany and Hungary.¹⁹³

13. WHOLESALE INTERNATIONAL CARRIER SERVICES

- (222) The wholesale market for carrier services involves the provision of transmission capacity on telecommunications infrastructure (typically international cable networks) to other telecommunications companies and business communications providers.
- (223) In cases where there is no direct connection between originating communications providers and terminating communications providers, third party networks are typically used to carry calls between them (domestic transit services).
- (224) Only Vodafone is active in the supply of wholesale international carrier services.

13.1. Product market definition

- (225) The Notifying Party submits that the exact market definition may be left open, as the Transaction does not raise any competitive concerns under any plausible market definition.
- (226) In *Vodafone/Cable & Wireless*, the Commission found that the wholesale market for international carrier services comprised the lease of transmission capacity and the provision of related services to third party telecommunications traffic carriers and service providers.¹⁹⁴
- (227) The results of the market investigation did not provide reasons to depart from the Commission's previous approach in this case.
- (228) For the purposes of this Decision, the exact definition of the product market can be left open, as the Transaction does not raise competition concerns under any possible product market definition.

13.2. Geographic market definition

- (229) The Notifying Party submits that the market for the carrier services is global in scope.

transaction did not give rise to competition concerns on the basis of any alternative plausible market definitions (see in particular paragraph 77).

¹⁹³ Commission decision of 3 July 2012 in case M.6584 - *Vodafone/Cable & Wireless*, paragraphs 26, 27; Commission decision of 4 February 2016 in case M.7637 - *Liberty Global/BASE Belgium*, recitals 127, 128 and Commission decision of 14 April 2014 in case M.7109 - *Deutsche Telekom/GTS*, paragraph 77.

¹⁹⁴ Commission Decision of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, paragraphs 33-34.

- (230) In previous decisions, the Commission found that the market for wholesale international carrier services is worldwide in scope.¹⁹⁵
- (231) The results of the market investigation did not provide reasons to depart from the Commission's previous approach in this case. The Commission therefore concludes that the geographic market for wholesale international carrier services is global in scope.

14. WHOLESALE INTERNET CONNECTIVITY SERVICES

- (232) Internet connectivity services allow corporate customers to be present on the internet by providing access to the entire routing table of the global internet or to a subset of the same, in which case the customer will need to cover the totality of its needs by means of a multi-homing strategy. Connectivity to the internet can be achieved (i) by the purchasing of transit services, (ii) by means of peering with selected networks, or (iii) by means of a combination of the two. Entities which do not connect directly to the internet may also call upon hosting providers, who aggregate hosting needs and procure in turn internet connectivity for their customers.¹⁹⁶ Whilst global coverage is a primary requirement, more specific performance criteria also enter into a customer's internet connectivity strategy such as latency, reliability, speed and minimization of traffic-related costs.
- (233) Transit is a service whereby a customer pays for access to all or a large part of the internet, with performance characteristics which may vary according to the destination of the traffic. Peering, on the other hand, whether settlement-free or paid, provides access to individual networks but no further onward connectivity. Providers of transit services will in turn use a combination of peering relationships and paid commercial relationships with other transit providers in order to provide global internet coverage. A transit provider which does not purchase transit services from other providers because it is able to reach the entire internet merely by means of peering relationships is referred to as a "Tier 1" transit provider.
- (234) Operators of retail internet access networks, sometimes referred to as "eyeball networks", procure internet connectivity in the same way as any other corporate customer, and may themselves also provide wholesale internet connectivity services. Certain internet access providers ("IAPs") offer transit services, whereas many offer direct connectivity to their own network and subscribers. To the extent that the IAP purchases transit services, these may also be used to reach its users. The end users of a given IAP can also be reached by means of relationships with those networks which peer with the IAP in question.
- (235) Of the Parties, only Vodafone is active in the provision of internet connectivity services.

14.1. Product market definition

- (236) The Notifying Party submits that the relevant market definition can be left open, as the Transaction will not give rise to any competition concerns under any possible segmentation of the market for wholesale internet connectivity services.

¹⁹⁵ Commission Decision of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, paragraph 27.

¹⁹⁶ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 260; see also Commission decision of 14 April 2014 in case M.7109 – *Deutsche Telecom/GTS*, paragraph 19.

- (237) In previous decisions, the Commission considered an overall market for wholesale internet connectivity services, as both transit and peering services could be considered substitutes satisfying similar consumer needs, that is to say, providing access to the entire routing table—or subset thereof—of the global internet. In addition, the Commission considered a possible segmentation, within such market, between peering and transit, but ultimately left the exact product market definition open.¹⁹⁷ In *MCI/Verizon* the Commission identified a separate market for Tier 1 transit providers.¹⁹⁸
- (238) The results of the market investigation did not provide reasons to depart from the Commission’s previous approach in this case.
- (239) In this case, the question whether the overall market for wholesale internet connectivity services should be further segmented between transit and peering, as well as the existence of a separate market for Tier 1 transit providers can be left open, as the Transaction does not raise competition concerns under any possible product market definition.

14.2. Geographic market definition

- (240) The Notifying Party submits that the relevant geographic market definition can be left open, as the Transaction will not give rise to any competition concerns under any possible geographic definition of the market for wholesale internet connectivity services.
- (241) The Commission has in the past considered that markets for internet connectivity were global or regional in scope, depending on the reach of the networks being connected, but ultimately left the exact market definition open.¹⁹⁹
- (242) The results of the market investigation did not provide reasons to depart from the Commission’s previous approach in this case.
- (243) In this case, the question whether the geographic market definition is global or regional can be left open, as the Transaction does not raise competition concerns under any possible geographic market definition.

15. WHOLESALE ACCESS AND CALL ORIGINATION ON MOBILE NETWORKS

- (244) MNOs provide wholesale access and call origination services which enable operators without their own network, namely MVNOs and Service Providers, to have access to one or more of the MNOs’ networks in order to provide mobile telecommunications services to end customers. “Full” or “thick” MVNOs maintain their own core infrastructure and use MNOs only for access to a radio network. By contrast, “light” or “thin” MVNOs do not have their own infrastructure and rely entirely on the infrastructure of an MNO.²⁰⁰
- (245) Only Vodafone is active on this market in Czechia, Germany, Hungary and Romania.

¹⁹⁷ Commission decisions of 7 October 2015 in Case M.3752 - *MCI/Verizon*; and of 14 April 2014 in case M.7109 – *Deutsche Telekom / GTS*, paragraph 21.

¹⁹⁸ See Commission decision of 7 October 2015 in Case M.3752 - *MCI/Verizon*, paragraph 24.

¹⁹⁹ See Commission decisions of 7 October 2015 in Case M.3752 - *MCI/Verizon*; and of 14 April 2014 in Case M.7109 – *Deutsche Telekom / GTS*, paragraph 24.

²⁰⁰ Light MVNOs may also use the services of a mobile virtual network enabler (“MVNEs”), an organisation that provides business infrastructure solutions to MVNOs such as billing, administration, operations support, mobile site subsystem support and other related services.

15.1. Product market definition

- (246) In line with previous Commission decisions, the Notifying Party submits that there is an overall market for wholesale access and call origination services on mobile networks.
- (247) In previous cases,²⁰¹ the Commission defined a wholesale market for access and call origination on public mobile networks. The services provided by MNOs to non-MNOs were considered as key elements required for non-MNOs to be able to provide retail mobile communication services. Since both services were considered to be generally supplied together, they were seen as being part of a single market. The market investigation in this case has not provided any reasons to depart from this approach.²⁰²
- (248) In view of the above, for the purposes of this Decision, the Commission concludes that there is a distinct wholesale market for access and call origination on public mobile telephone networks.

15.2. Geographic market definition

- (249) In line with previous Commission decisions, the Notifying Party submits that the relevant geographic scope of the market for wholesale access and call origination on mobile networks is national, that is to say, limited to the territory of each relevant Member State.
- (250) In previous cases, the Commission considered the wholesale market for access and call origination to be national in scope due to regulatory barriers stemming from the fact that licenses granted to MNOs are generally national in scope.²⁰³ The market investigation in this case has not provided any reasons to depart from this approach.²⁰⁴
- (251) Based on the above, for the purposes of this Decision, the Commission concludes the wholesale market for access and call origination on public mobile networks to be national in scope and corresponds to each of the territories of Czechia, Germany, Hungary and Romania.

16. WHOLESALE MARKET FOR CALL TERMINATION ON MOBILE NETWORKS

- (252) Call termination services are provided when calls originate from one network and terminate on another network. Call termination thus allows users of different networks to communicate with one another. Call termination is a wholesale service provided by various network operators to one another on the basis of interconnection

²⁰¹ Commission decision of 3 August 2016 in case M.7978 – *Vodafone / Liberty Global / Dutch JV*, paragraph 187; Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefónica UK*, recitals 295 to 300; Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*, recitals 77 to 79; Commission decision of 28 May 2014 in case M.6992 – *Hutchison 3G UK/Telefónica Ireland*, recital 156; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, recitals 61 to 63; Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, paragraphs 27 to 30; Commission decision of 27 November 2007 in case M.4947 – *Vodafone/Tele2 Italy/Tele2 Spain*, paragraph 15.

²⁰² Questionnaire Q8, reply to question 46.

²⁰³ Commission decision of 3 August 2016 in case M.7978 – *Vodafone / Liberty Global / Dutch JV*, paragraph 190; Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefónica UK*, recitals 305 and Commission decision of 12 December 2014 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, recitals 74 to 77 with further references.

²⁰⁴ Questionnaire Q8, reply to question 47.

agreements, upstream of the provision of communication services to end customers.²⁰⁵ Call termination services could be provided either on mobile or fixed networks.

- (253) Vodafone is active on the wholesale market for call termination on mobile networks in Czechia, Germany, Hungary and Romania. The Target Business is only active in Hungary.

16.1. Product market definition

- (254) The Notifying Party submits that each individual network constitutes a separate wholesale market for call termination on mobile networks, in line with previous Commission decisions.
- (255) In previous cases, the Commission concluded that each individual mobile network constitutes a separate product market.²⁰⁶ More specifically, the Commission considered that there is no substitute for call termination on each individual network since the operator transmitting the outgoing call can reach the intended recipient only through the operator of the network to which the recipient is connected. Each individual network therefore constitutes a separate market for termination. This applies both to fixed networks and to mobile networks.²⁰⁷
- (256) The results of the market investigation did not provide reasons to depart from the Commission's previous approach in this case.
- (257) In view of the above, for the purposes of this Decision, the Commission concludes that each individual mobile network constitutes a separate wholesale market for call termination.

16.2. Geographic market definition

- (258) The Notifying Party submits that wholesale market for call termination should correspond to the dimensions of the operator's network and therefore be considered as national in scope.
- (259) Because the results of the market investigation did not provide reasons to depart from the Commission's previous approach in this case²⁰⁸, the Commission considers the geographic scope of this market to be national in scope and corresponds to each of the territories of Czechia, Germany, Hungary and Romania.

17. WHOLESALE INTERNATIONAL ROAMING SERVICES

- (260) In order for a provider of mobile telecommunications services to be able to provide its end customers with telecommunications services outside their home countries, it must enter into agreements with providers of wholesale international roaming services which are primarily active in other national markets.

²⁰⁵ See Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*, recital 84; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, paragraph 68; Commission decision of 1 March 2010 in case M.5650 – *T-Mobile/Orange*, paragraph 36.

²⁰⁶ See Commission decision of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, paragraph 47; Commission decision of 3 July 2012 in case M.5650 – *T-Mobile/Orange UK*, paragraphs 36, 37; See also Commission decision M.1493 – *Telia / Telenor*, M.2803 *Telia / Sonera* and M.3806 – *Téléfonica / Cesky*. See also Revised Commission Recommendation of 17 December 2007 referring to wholesale voice call termination on individual mobile networks.

²⁰⁷ See Commission decision of 3 July 2012 in case M.5650 – *T-Mobile/Orange UK*, paragraphs 36, 37.

²⁰⁸ See Commission decision of 3 July 2012 in case M.6584 – *Vodafone/Cable & Wireless*, paragraph 48; Commission decision of 3 July 2012 in case M.5650 – *T-Mobile/Orange UK*, paragraph 39.

- (261) Only Vodafone is active on this market, in Czechia, Germany, Hungary and Romania.
- (262) Roaming agreements can be concluded with a preferred foreign operator which offers tailor-made service conditions, as can be seen in particular in the creation of international roaming alliances.

17.1. Product market definition

- (263) The Notifying Party submits, in line with the Commission's previous decisions, that the relevant market is the wholesale market for international roaming services comprising both terminating calls and originating calls.²⁰⁹
- (264) In this case, the results of the market investigation did not provide reasons to depart from the Commission's previous approach in this case. For the purposes of this Decision, therefore, the Commission retains its previous product market definition of a separate wholesale market for international roaming comprising both terminating calls and originating calls.

17.2. Geographic market definition

- (265) In line with previous Commission decisions²¹⁰, the Notifying Party submits that the wholesale market for international roaming services is national in scope. This is due to the fact that wholesale international agreements can only be concluded with undertakings which have an operating licence in the relevant country and the licences to provide mobile services are restricted to a national territory.
- (266) In line with its past decisions²¹¹ and taking into account that the results of the market investigation did not provide reasons to depart from the Commission's previous approach in this case, for the purposes of this Decision, the Commission considers that the wholesale market for international roaming services is national in scope and corresponds to each of the territories of Czechia, Germany, Hungary and Romania.

18. WHOLESALE SUPPLY AND ACQUISITION OF TV CHANNELS

- (267) In the wholesale market for TV channels, TV broadcasters supply linear channels that retail TV providers either purchase or carry in order to provide audio-visual services to end-users. In particular, TV broadcasters package the TV content that they have acquired or produced in-house in order to create linear TV channels.

²⁰⁹ See Commission decision of 2 July 2014 in Case M.7018 - *Telefónica Deutschland/E-Plus*, recital 97; Commission decision of 20 September 2013 in Case M.6990 - *Vodafone/Kabel Deutschland*, paragraph 249; Commission decision of 3 July 2012 in case M.5650 - *T-Mobile/Orange*, paragraph 34; Commission decision of 12 December 2012 in case No. M.6497 - *Hutchison 3G Austria/Orange Austria*, paragraph 67; Commission decision of 4 February 2016 in Case M.7637 - *Liberty Global/Base Belgium*, recital 119.

²¹⁰ See Commission decision of 3 July 2012 in case M.5650 *T-Mobile/Orange*, paragraph 35; Commission decision of 12 December 2012 in case M.6497 *Hutchison 3G Austria/Orange Austria*, paragraph 78-79; Commission decision of 2 July 2014 in case M.7018 *Telefónica Deutschland/E-Plus*, recital 100; and Commission decision of 4 February 2016 in case M.7637 *Liberty Global/Base Belgium*, recital 122.

²¹¹ See Commission decision of 3 July 2012 in case M.5650 *T-Mobile/Orange*, paragraph 35; Commission decision of 12 December 2012 in case M.6497 *Hutchison 3G Austria/Orange Austria*, paragraph 78-79; Commission decision of 2 July 2014 in case M.7018 *Telefónica Deutschland/E-Plus*, recital 100; and Commission decision of 4 February 2016 in case M.7637 *Liberty Global/Base Belgium*, paragraph 122; Commission decision of 20 September 2013 in case M.6990 *Vodafone/Kabel Deutschland*, paragraph 252.

Subsequently, retailers of TV services incorporate those TV channels in their TV offerings to final viewers.

- (268) In this market, Vodafone is active as acquirer of TV channels, which it later packages in its respective TV offerings in Germany and Romania. Unitymedia is active as acquirer of TV channels, which it later packages in its respective TV offerings in Czechia, Germany, Hungary and Romania.

18.1. Product market definition

- (269) Both in its initial submission and in its Response to the Article 6(1)(c) Decision, the Notifying Party considers that there is one overall market for the supply and acquisition of TV channels.
- (270) The Notifying Party does not consider it appropriate to further segment the market. In any event, the Notifying Party submits that the precise market definition can be left open.
- (271) In previous decisions, the Commission has identified a wholesale market for the supply of TV channels. Within that market, in certain decisions the Commission has further identified two separate product markets for: (i) FTA TV channels; and (ii) Pay-TV channels.²¹² The Commission has further stated that within the Pay-TV channels market, there could be different segments for: (i) premium Pay-TV channels; and (ii) basic Pay-TV channels.²¹³
- (272) In previous decisions, the Commission also examined a number of other potential segmentations, including: (i) genre or thematic content (such as films, sports, news, youth, and others);²¹⁴ and (ii) the different means of infrastructure used for the delivery to the viewer (cable, satellite, DVB-T and IPTV).²¹⁵ It has ultimately left the market definition open in all these regards.
- (273) With respect to Czechia, Hungary, and Romania, the results of the market investigation did not provide reasons to depart from the Commission's previous approach in this case, which did not conclude on an exact product market

²¹² See Commission decision of 20 September 2013 in case M.6990 – *Vodafone/Kabel Deutschland*, paragraph 41 (identifying separate markets); Commission decision of 30 May 2018 in case M.7000 *Liberty Global/Ziggo*, paragraph 111 (leaving open the question as to whether FTA and Pay TV belong to separate markets, because of peculiarities of the Dutch TV market); Commission decision of 7 April 2017 in case M.8354 – *Fox / Sky*, paragraph 85 (leaving open the question whether the market for the wholesale supply of TV channels should be further segmented among FTA, basic Pay-TV and premium Pay-TV).

²¹³ Commission decision of 7 April 2017 in case M.8354 – *Fox / Sky*, paragraphs 80 and 81; see also Commission decision of 18 August 2014 in case M.7194 - *Liberty Global / Corelio / W&W / De Vijver Media*, recital 90. In case M.7194, it was not necessary to make a distinction between FTA and Pay-TV channels given the limited standalone presence of FTA channels

²¹⁴ Commission decision of 7 April 2017 in case M.8354 – *Fox / Sky*; Commission decision of 24 February 2015 in case M.7194 *Liberty Global / Corelio / W&W / De Vijver Media*, recital 92. Commission decision of 2 April 2003 in case M.2876 *Newscorp/Telepiù*, recital 76; Commission decision of 18 July 2007 in case M.4504 *SFR/Télé 2 France*, recitals 41–42; Commission decision of 26 August 2008 in case M.5121 *News Corp/Premiere*, paragraph 35; Commission decision of 21 December 2010 in case M.5932 *News Corp/BskyB*, paragraph 81; Commission decision of 30 May 2018 in case M.7000 *Liberty Global/Ziggo*, paragraph 112.

²¹⁵ Commission decision of 24 February 2015 in case M.7194 - *Liberty Global / Corelio / W&W / De Vijver Media*, recital 98. Commission decision of 18 July 2007 in case M.4504 *SFR/Télé 2 France*, recital 44; Commission decision of 26 August 2008 in case M.5121 *News Corp/Premiere*, paragraph 22.

definition.²¹⁶ Therefore, for those three countries, the Commission considers that the question whether the market should be further segmented (i) between FTA or Pay TV, (ii) Premium Pay TV or Basic Pay TV, (iii) by genre, or (iv) between different types of infrastructures can be left open, as no competition concerns would arise, irrespective of the product market definition.

- (274) With respect to Germany, the FCO has previously drawn a distinction between FTA and pay TV channels. It has also held that the relevant product market encompasses all distribution infrastructures and has not considered segmentation on the basis of genre or content.²¹⁷
- (275) The majority of German TV distributors, content providers and TV broadcasters that took part in the market investigation submitted that Pay TV channels and FTA channels are in general not substitutable with each other for TV channel acquirers.²¹⁸ According to a respondent, *“Free-[to-Air] TV and Pay-TV channels are very different in their approach to programming, licensing practice and target group focus. While most Free-[to-Air] TV stations try to attract a mass audience and serve more general topics including news, Pay-TV channels are mostly far more distinctive in their whole set-up. Addressing special interest audiences while not caring for a mass appeal is the core element of Pay-TV programming.”*²¹⁹ The same respondent stressed that the two concepts would be complementary to each other, as Pay TV could not really replace or substitute FTA, and vice-versa. Similarly, another respondent explained that *“Pay TV exploitation windows are generally located before the FTA windows and as well the programs that Pay TV channels offer very often have more niche appeal than the FTA channels which cater a broader audience.”*²²⁰
- (276) In conclusion, the Commission considers that the market for the wholesale supply and acquisition of TV channels in Germany should be further divided between FTA and pay TV channels, in line with previous decisions. Furthermore, any possible segmentation of the market by distribution technology in Germany will be analysed in the assessment of the wholesale market for the supply of TV signal transmission, considering that, as it will be explained in section VIII.C.2.11, in Germany the market for the wholesale supply and acquisition of TV channels and the market for the wholesale supply of TV signal transmission are closely interconnected and the infrastructure aspect of the relationship between TV broadcasters and TV retailers relates mainly to the carriage of the signal. Finally, with respect to further distinctions in Germany, the Commission considers that for the purposes of the present Decision it is not necessary to conclude on the exact product market definition, as no competition concerns would arise, irrespective of the product market definition.

²¹⁶ With regard to Romania, certain respondents to the market investigation indicated that the distinction between FTA and Pay TV is becoming less evident. They also stress that usually end-customers pay for TV services, therefore bringing the Pay-TV penetration rate in Romania to 99%, because of the absence of any meaningful free DTT offer. Nonetheless, the majority of respondents to the market investigation consider that the Commission’s precedent with regard to product market definition is still valid. See replies to questionnaire Q2, questions 9 and 9.1.

²¹⁷ FCO Case B7-66/11 Liberty/KBW, paragraph 263.

²¹⁸ Replies to questionnaire Q6, question 14; replies to questionnaire Q7, question 15; replies to questionnaire Q8, question 15.

²¹⁹ Kinowelt Television GmbH’s reply to questionnaire Q6, question 14.1 [ID 2388].

²²⁰ Mediengruppe RTL Deutschland GmbH’s reply to questionnaire Q6, question 14.1 [ID 2431].

18.2. Geographic market definition

- (277) Both in its initial submission and in its Response to the Article 6(1)(c) Decision, the Notifying Party considers that the relevant geographic markets are at least national in scope, but can be ultimately left open.
- (278) In previous decisions, the Commission found the geographic market for the wholesale supply of TV channels to be either national in scope,²²¹ or to comprise a broader (or narrower) linguistically homogeneous area.²²²
- (279) The results of the market investigation in this respect are mixed, with the majority of respondents pointing to a national dimension of the relevant market and some other to a larger linguistic area.²²³ In particular, all telecommunications operators and the major TV distributors pointed to a national dimension of the market, because of regulatory requirements, specific characteristics of demand, cultural barriers, and viewers' preferences.²²⁴ Moreover, the agreements between broadcasters and TV distributors would mainly be concluded on a national basis.²²⁵
- (280) For the purpose of this Decision, the Commission considers that the exact geographic scope of the market for the wholesale supply and acquisition of TV channels can be left open (that is to say national or covering a linguistically homogeneous area), as the Transaction does not raise competition concerns under any possible geographic market definition.
- (281) However, because the Target Business is only active in Czechia, Germany, Hungary, and Romania, and because Vodafone does not have any retail TV activities in any other German-speaking countries (namely, Austria, or Switzerland) or Czech-Slovak-speaking countries (namely, Slovakia), for the purpose of this Decision, the Commission will analyse the impact of the Transaction on the market for the wholesale supply and acquisition of TV channels at a national level.

19. WHOLESALE TV SIGNAL TRANSMISSION

- (282) In past decisions regarding the German TV sector and considering some specific characteristics of the main infrastructures, the Commission has identified a market for the wholesale transmission of TV signal.²²⁶ On the market for wholesale TV signal transmission, TV broadcasters, on the demand side, negotiate the terms and conditions of the transmission of the TV signal for their channels with the infrastructure operators, which are on the supply side. In other words, the market

²²¹ Commission decision of 7 April 2017 in case M.8354 – *Fox / Sky*; Commission decision of 21 December 2011 in case M.6369 *HBO/Ziggo/HBO Nederland*, paragraph 39; Commission decision of 15 April 2013 in case M.6880 *Liberty Global/Virgin Media*, paragraph 41; Commission decision of 30 May 2018 in case M.7000 *Liberty Global/Ziggo*, paragraph 121.

²²² Commission decision of 7 April 2017 in case M.8354 – *Fox / Sky*; Commission decision of 21 December 2010 in case M.5932 *News Corp/BskyB*, paragraph 86–88; *Commission decision of 24 February 2015 in case M.7194 Liberty Global / Corelio / W&W / De Vijver Media*, recitals 73-76; Commission decision of 15 April 2013 in case M.6880 *Liberty Global/Virgin Media*.

²²³ Replies to questionnaire Q6, question 15; replies to questionnaire Q7, question 16; replies to questionnaire Q8, question 16; replies to questionnaire Q2, question 4.1.

²²⁴ Replies to questionnaire Q8, question 16.

²²⁵ Replies to questionnaire Q6, question 15.3.

²²⁶ Commission decision of 20 September 2013 in case M.6990 – *Vodafone/Kabel Deutschland*, paragraphs 57-70 ; see also Commission decision of 25 October 2010 in case M.5734 – *Liberty Global Europe/Unitymedia*, paragraphs 27-30.

players on this market are the same as on the market for the wholesale supply of TV channels, but the demand and supply sides of the market are reversed.

- (283) In this market, Vodafone and Unitymedia are active as suppliers of wholesale TV signal in their respective cable footprint in Germany.

19.1. Product market definition

- (284) Both in its initial submission and in its Response to the Article 6(1)(c) Decision, the Notifying Party considers that there is one overall market for the wholesale TV signal transmission.
- (285) The Notifying Party does not consider it appropriate to further segment the market. In particular, the Notifying Party considers that the market should not be segmented by infrastructure, given that these are interchangeable from the perspective of TV broadcasters. In any event, the Notifying Party submits that the precise market definition can be left open.
- (286) In a past decision, the Commission considered whether cable, satellite, IPTV and DVB-T were substitutes or rather complements from the point of view of TV broadcasters in Germany, but ultimately left the definition open.²²⁷ In *Vodafone/Kabel Deutschland*, the Commission considered that from the perspective of TV broadcasters, cable and IPTV are complements rather than substitutes and concluded that the wholesale signal transmission via cable constitutes a separate product market from, at least, the wholesale signal transmission via IPTV.²²⁸
- (287) The FCO has maintained that the wholesale signal transmission market is limited to cable and does not include satellite, terrestrial or IPTV and has reiterated this view in its Referral Request.²²⁹
- (288) The Commission considers that the wholesale TV signal distribution via cable in Germany still constitutes a separate market. This finding is supported by the market investigation and by other evidence in the file.
- (289) Most respondents to the market investigation submitted that the different retail infrastructures (namely cable, satellite, IPTV and terrestrial) for the distribution of TV channels would not be substitutable from the point of view of TV broadcasters in Germany, considering that currently no infrastructure can reach all customers and that TV broadcasters need to reach a maximum number of viewers. The different infrastructures would be complementary rather than alternatives.²³⁰ Cable in particular would not be substitutable, especially for MDUs where the cable fee is part of the monthly rent to be paid by tenants to landlords, and where single satellite dishes are often not allowed by the regulation of the housing association. That would limit the possibility for those customers of substituting the cable connection with other transmission technologies²³¹
- (290) With specific respect to satellite, most respondents to the market investigation submitted that in terms of product characteristics (such as coverage, capacity,

²²⁷ Commission decision of 16 June 2011 in case COMP/M.5900 *LGI/KBW*, paragraphs 116 and 118.

²²⁸ Commission decision of 20 September 2013 in case M.6990, *Vodafone/Kabel Deutschland*, paragraph 65.

²²⁹ FCO Case B7-66/11 *Liberty/KBW*, paragraph 187; Referral Request, paragraph 66.

²³⁰ Replies to questionnaire Q10, questions 6, 11 and 16; replies to questionnaire Q11, questions 3, 5 and 7.

²³¹ Replies to questionnaire Q6, questions 12-13; replies to questionnaire Q7, questions 13-14; replies to questionnaire Q8, questions 13-14. One respondent in Q8 submitted that cable would be substitutable with IPTV.

additional services) satellite TV is comparable to cable TV only to some extent.²³² In particular, while the two products would be comparable in terms of coverage and capacity, cable TV would be superior in terms of additional services that request a backward channel (catch-up, instant restart, addressable TV), that satellite could offer only via an internet connection.²³³ Most respondents also submitted that the two products would not be comparable in terms of wholesale price, both because of different prices and of different structures of the remuneration, namely payment of technical transmission services for satellite, revenue-based payments for cable.²³⁴

- (291) With regard to IPTV, most respondents to the market investigation submitted that in terms of product characteristics IPTV is not comparable to cable TV, or comparable only to some extent.²³⁵ In particular, currently IPTV would not be comparable in terms of take-up, with only 8% of the households currently subscribing to IPTV against 45% for cable. Moreover, IPTV could present issues of bandwidth. However, in terms of pure product characteristics IPTV could be comparable to cable TV.²³⁶ Furthermore, most respondents maintain that the two products would not be comparable in terms of wholesale price, mainly because IPTV transmission does not require the payment of feed-in fees.²³⁷
- (292) With regard to DVB-T, most respondents to the market investigation submitted that in terms of product characteristics DVB-T is not comparable to cable TV.²³⁸ The two products would not be comparable either in terms of coverage or of additional services, as DVB-T would not offer interactive TV features.²³⁹ Furthermore, the two products would not be comparable in terms of wholesale price, as in general, payments for DVB-T is based on a fixed amount and considering the low penetration the average price would be higher than for cable TV.²⁴⁰
- (293) Finally, practically all TV broadcasters that took part in the market investigation submitted that, in case of a permanent price increase of 5–10% of the cable TV distribution prices whereas the prices for each of the other platforms remained unchanged, they would not consider changing their purchasing patterns or even switching only a certain percentage of their distribution to the other platform.²⁴¹
- (294) Unlike in case *Liberty Global/Ziggo*, the Commission found in this case that cable TV distribution is complementary, rather than substitutable to other means of TV distribution. In *Liberty Global/Ziggo*, the Commission found that cable, IPTV over DSL, fibre and possibly satellite belong to the same product market, mainly because

²³² Replies to questionnaire Q10, question 4; replies to questionnaire Q11, question 2.

²³³ Replies to questionnaire Q10, question 4.1; replies to questionnaire Q11, question 2.1.

²³⁴ Replies to questionnaire Q10, question 5.

²³⁵ Replies to questionnaire Q10, question 9; replies to questionnaire Q11, question 4.

²³⁶ Replies to questionnaire Q10, question 9.1; replies to questionnaire Q11, question 4.1.

²³⁷ Replies to questionnaire Q10, question 10. In Germany, both private and public FTA broadcasters are expected to pay feed-in fees for the transmission of their TV signal via cable, satellite and DVBT-2 (and not IPTV). Feed-in fees are calculated on a non-discriminatory basis. The introduction of this payment stream from broadcasters to network operators dates back to the early 1980 and the construction of the cable network by the former monopolist (Deutsche Post). The subject will be further assessed in section VIII.C.2.11.

²³⁸ Replies to questionnaire Q10, question 14; replies to questionnaire Q11, question 6.

²³⁹ Replies to questionnaire Q10, question 14.1; replies to questionnaire Q11, question 6.1.

²⁴⁰ Replies to questionnaire Q10, question 15.

²⁴¹ Replies to questionnaire Q10, questions 7, 12 and 17.

end customers in the Netherlands generally have access to all types of infrastructures, and they have the ability to freely switch between them.²⁴²

- (295) This would not be the case in Germany. In Germany, switching between cable and satellite is limited, in particular for MDU customers, also because in some cases housing regulations prohibit the installation of satellite dishes. Similarly, switching from cable to terrestrial TV is also uncommon, as coverage of terrestrial TV is limited. Furthermore, MDU customers generally do not have access to DVB-T, as providers of DVB-T services are excluded from MDU tenders because of their lack of additional services (for example, internet access).²⁴³ Finally, switching between cable and IPTV is possible only to a certain extent. If on the one hand IPTV is available almost at national level (mainly in areas where Deutsche Telekom's xDSL network is present), on the other hand IPTV via DSL is not available for the totality of cable customers (possibly in new buildings, where Deutsche Telekom considers that its regulatory obligations to roll out a copper infrastructure are not mandatory, given the presence of the already existing cable infrastructure²⁴⁴) and even when present, IPTV take-up is limited, because of the Nebenkostenprivileg model.
- (296) In this regard, the State Media Authority in Germany²⁴⁵ submitted that most households receive TV transmissions only through one TV infrastructure. This would be true for 94% of the cable-TV households and 92% of the satellite-TV households. Households that have access to both satellite and cable TV infrastructures only make up 2.9% of the total households in Germany. Moreover, only 1.7% of cable-TV households also use IPTV additionally, and 1.3% of them make use of DVB-T.
- (297) In its Response to the Statement of Objections, the Notifying Party has objected to this conclusion and has confirmed its view that the relevant product market should include all distribution methods, as these present alternative methods for broadcasters to reach viewers. According to the Notifying Party, some participants to the market investigation and some other elements gathered in the course of the investigation support this view. The Notifying Party noted in particular that OTT distribution should be considered as part of the market, as its usage is expanding very rapidly. It would be an attractive option for viewers and therefore an attractive route to market for broadcasters.²⁴⁶
- (298) In this regard, firstly the Commission notes that the majority of the respondents supported the Commission's conclusion that the product market definition should include only cable TV signal transmission, mainly because of different reach, coverage and product features. The same is true with respect to other elements of the investigations, explained in recitals (295)-(296), all pointing to a distinct market for the supply of TV signal transmission on the cable network. The Commission understands that all TV distribution technologies interact and that TV broadcasters take into account the entire infrastructural mix at their disposal in their distribution

²⁴² Commission decision of 30 May 2018 in case M.7000 *Liberty Global/Ziggo*, paragraphs 105 and 114.

²⁴³ Replies to questionnaire Q10, question 6.1.

²⁴⁴ See Form CO, paragraph 6.456, footnote 460.

²⁴⁵ Die Medienanstalten, submission of 1 February 2019, page 2 [ID 4156].

²⁴⁶ Response to the Statement of Objections, pages 163-164 and 182. In both IPTV and OTT streaming, the consumer requests and receives content via Internet Protocol. The primary difference between IPTV and OTT streaming is that OTT streamed content comes over the same open, unmanaged network as email and web browsing while IPTV uses a private, dedicated network to deliver more consistent service. With managed IPTV, a minimum bandwidth is ensured for the transmission of the television signal; as such, signals are transmitted in a manner similar to a digital cable network. However, internet television can also be transmitted via OTT, i. e. via the "open" Internet.

strategies. This interaction is particularly important in light of the rapid evolution of the media sector, linked also to the innovative TV/internet services now available. However, in light of the specificity of the German market and of a complete evaluation of the results of the market investigation, the Commission considers that the starting point of the analysis should focus on cable TV distribution as a distinct product market. This is because within this infrastructural mix of TV distribution technologies, the TV broadcasters still consider the cable TV signal as not substitutable by the other TV signals for the transmission of their TV services to final viewers.

- (299) Similarly, the Commission acknowledges the current importance of OTT distribution and even more its role in the near future, considering the rapid growth of this transmission technology, and agrees with the Notifying Party that in the medium term the diffusion of OTT TV services could represent a significant game-changer, also in terms of the countervailing buyer power of broadcasters. Moreover, OTT TV shares some commercial and technical characteristics with IPTV²⁴⁷ – in particular its availability to internet (cable) TV customers, – and this could render it attractive for TV broadcasters for the transmission of their TV signal to customers in cable networks. However, the Commission notes that currently the diffusion of OTT services as a total replacement of cable TV services is still limited.²⁴⁸ Therefore, the Commission does not consider it correct to include this distribution technology in the relevant product market. Nevertheless, in its assessment the Commission will take into account the rapid growth of this new distribution platform and its possible interaction with the evolution of the Parties' market power in the relevant market.
- (300) In conclusion, for the purposes of the present Decision, the Commission considers that the wholesale TV signal transmission market via cable constitutes a separate product market. However, for completeness the Commission would also consider a market including IPTV, considering that it has similar product features that could theoretically allow at least partial substitution.

19.2. Geographic market definition

- (301) Both in its initial submission and in its Response to the Article 6(1)(c) Decision, the Notifying Party considers that the relevant geographic market is at least national in scope, but can be ultimately left open. The Notifying Party notes that if the relevant product market were to be limited to transmission via cable infrastructure, the relevant geographic scope would be each Party's cable network.
- (302) While ultimately leaving open the exact scope of the geographic market, previous Commission decisions considered that in the event that the product market is limited to cable infrastructure, the geographic scope is the coverage area of the cable network. The scope would be national if other transmission modes available on a Germany-wide basis, and in particular IPTV, belonged to the relevant product

²⁴⁷ To be noted that in March 2019 Vodafone stopped marketing its IPTV offer to new customers and launched a new OTT TV offer to its customers (Giga TV OTT), that combines TV and VOD content and offers a similar channel line-up to the IPTV product (form CO, paragraphs 6.474 – 6.476).

²⁴⁸ According to Die Medienanstalten, at present only 0.5% of TV households receive TV-programmes via open internet only and only 12% of TV-households consider watching TV via OTT exclusively in future (submission of 1 February 2019, page 2 [ID 4156]).

market.²⁴⁹ In *Vodafone/Kabel Deutschland*, the Commission did not conclude on the exact scope of the geographic market.²⁵⁰

- (303) In its precedents, the FCO found that the market should be confined to the territory covered by each operator's cable network.²⁵¹
- (304) The results of the market investigation suggest a geographic market definition limited to the footprint of a cable network.²⁵² For example, one broadcaster that took part in the market investigation explained that “[an] *FTA broadcaster depends on feeding in its TV signal into the network of each network operator, since otherwise it could reach fewer viewers than their financing model requires. For this reason, the geographic scope is limited to the territory covered by each regional cable network operator. The same is true with respect to pay TV.*”²⁵³ Another broadcaster similarly submitted that “[t]he geographic scope [of the market] is restricted to the respective cable networks of the network provider (i.e. narrower than Germany-wide).”²⁵⁴
- (305) For the purposes of the present Decision, taking into account the results of the market investigation and in line with previous practice on this point, the Commission considers that the market for the wholesale TV signal transmission on cable is limited to the coverage area of each relevant cable network, as cable TV operators can provide their signal to TV broadcasters only in the coverage area of their network. However, the Commission will also assess the effects in the wholesale TV signal market at national level, in order to have a proper understanding of the market power of the merged entity vis-à-vis TV broadcasters that needs distribution on a national basis. Furthermore, after the present Transaction, only one nationwide cable operator would remain active in all German federal states and therefore it is important to consider the impact of the Transaction at national level. Finally, considering a possible product market comprising both cable TV and IPTV, the Commission would define the geographic scope of the market as national, as IPTV is generally available nationwide, irrespective of the coverage area of the cable TV network (assuming the availability of sufficient bandwidth). TV distributors could therefore offer their signal to TV broadcasters nationwide.

20. INTERMEDIARY TV SIGNAL DELIVERY IN GERMANY

- (306) The cable network in Germany is separated into a network level 3, which runs from the cable head-end at which the TV signals are fed into the network to the boundary of a given real estate property, and a network level 4, which runs within a real estate property. In past decisions, the Commission has defined as the intermediary signal delivery market the market on which the negotiations between the Level 4 operators, on the demand side, and the operators of the Level 3 network (“Level 3 operators”), on the supply side, takes place.²⁵⁵

²⁴⁹ Commission decision of 25 January 2010 in case COMP/M.5734 *Liberty Global Europe/Unitymedia*, paragraph 29, and Commission decision of 16 June 2011 in case COMP/M.5900 *LGI/KBW*, paragraphs 119 and following.

²⁵⁰ Commission decision of 20 September 2013 in case M.6990, *Vodafone/Kabel Deutschland*, paragraph 70.

²⁵¹ FCO case BT-168/01 *Liberty/Viola*, par. 87.

²⁵² See, more generally, replies to questionnaire Q8, question 16.

²⁵³ Mediengruppe RTL Deutschland GmbH’s reply to questionnaire Q6, question 15.3 [ID 2431].

²⁵⁴ QVC Handel S.á.r.l. & Co. KG’s reply to questionnaire Q6, question 15.3 [ID 2360].

²⁵⁵ Commission decision of 15 June 2004 in case COMP/M.3355 – *Apollo/JP Morgan/PrimaCom*, paragraph 7, Commission decision of 16 June 2011 in case COMP/M.5900 – *LGI/KBW*, paragraph 105;

- (307) Both Vodafone and the Target Business are active in Germany on the supply side as Level 3 network operators.

20.1. Product market definition

- (308) The Notifying Party submit that the intermediary TV signal delivery market should not distinguish between cable and non-cable TV signal delivery, as signal delivery can also be undertaken based on other non-cable infrastructure such as satellite and fibre. In any event, the exact definition of the product market can be left open.
- (309) In past decisions, the Commission considered that on the supply side, the market was limited to Level 3 operators, and did not include operators of non-cable infrastructures.²⁵⁶ In this context, the Commission noted the FCO's finding that for technical reasons, a Level 4 operator cannot receive signals through a "broadband telephone cable".²⁵⁷
- (310) Most respondents to the market investigation in this case stated that on the supply side, the market is limited to Level 3 operators and does not include satellite or IPTV solutions. Respondents explained that Level 4 operators rely on the intermediary TV signal delivery of Level 3 operators as the other stated solutions are not economically viable and not successful at retail level vis-à-vis MDU customers, which is also explained in section VII.5.1. with regard to retail TV signal transmission to MDU customers.^{258,259}
- (311) Fibre is also becoming an increasingly important transmission technology with increasing numbers of MDU customers requesting FTTB/H connections. As explained in more detail in section VII.5.1., cable TV in DVB-C standard can be transmitted via both cable and FTTB/H and there is no practical difference for Level 4 operators or MDU customers.
- (312) The substitutability of cable and FTTB/H is confirmed by several suppliers of intermediary TV signal as well as Level 4 operators.²⁶⁰ Both groups explain that they use cable and fibre FTTB/H for the retail supply of TV signal transmission to MDU customers. Moreover, there are concrete examples of intermediary TV signal delivery agreements between fibre-based operators and Level 4 operators.²⁶¹
- (313) On the basis of these elements, for the purposes of the present Decision, the Commission concludes that both cable and FTTB/H are part of the relevant product market definition.

20.2. Geographic market definition

- (314) The Notifying Party considers that the exact definition of the geographic market can be left open as the Transaction does not raise any competition concerns under any plausible definition.

²⁵⁶ Commission decision of 20 September 2013 in case M.6990 – *Vodafone/Kabel Deutschland*, paragraphs 73-75.

Commission decision of 15 June 2004 in case COMP/M.3355 – *Apollo/JP Morgan/PrimaCom*, paragraph 7, Commission decision of 16 June 2011 in case COMP/M.5900 – *LGI/KBW*, paragraph 105; Commission decision of 20 September 2013 in case M.6990 – *Vodafone/Kabel Deutschland*, paragraph 75.

²⁵⁷ FCO case B7-66/11 *Liberty/KBW*, paragraph 254 (Original text: breitbandiges Telefonkabel).

²⁵⁸ Replies to questionnaire Q7, question 27; replies to questionnaire Q8, question 48.

²⁵⁹ Level 4 operators primarily target MDU customers while they serve SDU customers on an occasional basis only if they happen to be in the vicinity of the MDU customers being served.

²⁶⁰ Replies to questionnaire Q11, question 37.1.

²⁶¹ See for example Deutsche Telekom's reply to RFI 20, question 8 [ID 4793].

- (315) In several past decisions, the Commission found that the intermediary market for signal delivery was regional in scope, comprising the network area of the relevant Level 3 operator.²⁶² In more recent decisions, it was, however left open whether the intermediary market for signal delivery is national or regional in scope.²⁶³
- (316) Most respondents to the market investigation consider that the intermediary market for signal delivery is regional in scope, limited to the network area of the relevant Level 3 operator.²⁶⁴ This is, because the demand of Level 4 operator is local and can only be satisfied by Level 3 operators active in its direct reach.
- (317) Therefore, and in line with previous decisions, for the purposes of the present Decision, the Commission considers that the market for the Intermediary TV signal delivery is regional in scope, limited to the area of the relevant Level 3 operator.

21. LICENSING AND ACQUISITION OF BROADCASTING RIGHTS FOR TV CONTENT

- (318) Audio-visual TV content comprises "entertainment products", such as films, sports, and TV programmes that can be broadcast via TV. The broadcasting rights generally belong to the creators of the content. These right holders, which constitute the supply side of this market, license broadcasting rights to broadcasters, which then incorporate them into linear TV channels, that is to say linear streams where programmes are broadcast at scheduled times or to content platform operators which retail the content to end users on a non-linear basis, that is to say PPV or VOD. Those broadcasters and content platform operators, together, comprise the demand side of this market.
- (319) Vodafone is active in this market as acquirer of TV broadcasting rights in Germany and Romania. The Target Business is active in this market as acquirer of TV broadcasting rights in Czechia, Germany, Hungary and Romania.

21.1. Product market definition

- (320) The Notifying Party considers that there is one overall market for the acquisition of TV content and does not consider it appropriate to segment the market, in particular according to the nature of rights acquired or the type of content. In any event, the Notifying Party submits that the precise market definition can be left open.
- (321) In previous decisions, the Commission has considered sub-dividing the market for the licensing and acquisition of individual content in the following manner: (i) Pay TV versus FTA TV,²⁶⁵ (ii) linear versus non-linear broadcast,²⁶⁶ (iii) by exhibition window, in other words Subscription VOD, Transactional VOD,²⁶⁷ PPV, first Pay

²⁶² Commission decision of 25 January 2010 in case COMP/M.5734 – *LGE/Unitymedia* paragraphs 33 to 34; Commission decision of 15 June 2004 in case COMP/M.3355 – *Apollo/JP Morgan/PrimaCom* paragraph 11.

²⁶³ Commission decision of 16 June 2011 in case COMP/M.5900 – *LGI/KBW*, paragraphs 106 to 109; Commission decision of 20 September 2013 in case M.6990 – *Vodafone/Kabel Deutschland*, paragraph 79.

²⁶⁴ Replies to questionnaire Q7, question 28; replies to questionnaire Q8, question 49.

²⁶⁵ Commission decision of 26 August 2008 in Case M.5121 - *News Corp/Premiere*, paragraph 35.

²⁶⁶ Commission decision of 18 July 2007 in Case M.4504 - *SFR/Télé 2 France*, paragraphs 27-36.

²⁶⁷ Subscription VOD designates a product where an end user obtains the right to watch multiple titles within a designated time frame (for example one month) through a single payment. Transactional VOD designates a product where an end user obtains the right to watch a single title within a designated time frame (for example 48 hours) through a single payment. PPV designates a product where an end user obtains the right to watch a single title during a specific time frame (for example Sunday between 2.00 pm and 3.45 pm) through a single payment.

TV window, second Pay TV window,²⁶⁸ and FTA; and (iv) by content type, in other words films, sports, and other TV content.

- (322) As regards content type, the Commission has further considered a distinction between: (i) exclusive rights to premium films, (ii) exclusive rights to football events that are played regularly throughout every year (for example national league matches, national cup, UEFA Europa League and UEFA Champions League), (iii) exclusive rights to football events that are played more intermittently, every four years (for example the FIFA World Cup and the UEFA European Football Championship) and (iv) exclusive rights to other sport events,²⁶⁹ and by type of supplier in respect of films: major Hollywood studios/smaller suppliers.²⁷⁰ Because none of the Parties offers exclusive content in any of Czechia²⁷¹, Germany²⁷², Hungary²⁷³, or Romania²⁷⁴, for the purposes of this Decision, the Commission will not consider this possible segmentation further.
- (323) With regards to Germany and Romania, the results of the market investigation are mixed. The majority of the TV content providers and TV distributors submitted that the market for the licensing and acquisition of audio visual content broadcasting rights should not be further subdivided with respect to (i) pay TV versus FTA TV, (ii) linear versus non-linear broadcast, and (iii) by exhibition window. On the contrary, TV broadcasters and telecommunications operators submitted that those distinctions are relevant for the purposes of the market definition. The same mixed replies were submitted with respect to the different contents (premium versus non premium; film, sport, other content).²⁷⁵
- (324) With regard to Czechia and Hungary, the results of the market investigation did not provide reasons to depart from the Commission's previous approach in this case, which did not conclude on an exact product market definition.
- (325) For the purpose of this Decision, the Commission considers that the question whether the market for the licensing and acquisition of audio visual content broadcasting rights should be further subdivided between (i) Pay TV or FTA, (ii) linear or non-linear broadcast, by (iii) exhibition window, or (iv) content type, can be left open, as the Transaction does not raise competition concerns under any possible product market definition.

21.2. Geographic market definition

- (326) The Notifying Party submits that the relevant geographic market is at least national and that the precise definition can be left open.

²⁶⁸ Audio-visual content is typically sold separately for usage in different retail services or points in time. These different offers are generally referred to as broadcast windows.

²⁶⁹ Commission decision of 13 November 2001 in Case M.2483 - *Group Canal+/RTL/GJCD/JV*, paragraph 21; Commission decision of 2 April 2003 in Case M.2876 - *Newscorp/Telepiù*, recitals 61, 69 and 71.

²⁷⁰ Commission decision of 21 December 2011 in Case M.6369 - *HBO/Ziggo/HBO Nederland*, paragraph 18.

²⁷¹ See Form CO, paragraph 6.175(ii).

²⁷² See Form CO, paragraph 6.896.

²⁷³ See replies to questionnaire Q3, question 65.1

²⁷⁴ See replies to questionnaire Q4, question 61.1

²⁷⁵ Questionnaire Q5, replies to questions 5-9; questionnaire Q6, replies to questions 5-9; questionnaire Q7, replies to questions 6-10; questionnaire Q8, replies to questions 6-10, questionnaire Q2, questions 3 and 3.1.

- (327) The Commission has previously considered that the market for the licensing/acquisition of broadcasting rights for audio-visual TV content is either national in scope or potentially comprises a broader linguistically homogeneous area.²⁷⁶
- (328) With regard to Germany and Romania, most respondents to the market investigation pointed to a national dimension of the contract for the acquisition of sports rights, while for film and other content the market would include a linguistic region (in particular German speaking countries).²⁷⁷
- (329) With regard to Czechia and Hungary, the results of the market investigation did not provide reasons to depart from the Commission's previous approach in this case, which did not conclude on an exact product market definition.
- (330) For the purpose of this Decision, the Commission considers that the exact geographic scope of the market for the licensing and acquisition of broadcasting rights for TV content can be left open (that is to say, national or covering a linguistically homogeneous area), as the Transaction does not raise competition concerns under any possible geographic market definition.
- (331) However, because the Target Business is only active in Czechia, Germany, Hungary, and Romania, and because Vodafone does not have any retail TV activities in any other German-speaking countries (namely, Austria, or Switzerland) or Czech-Slovak-speaking countries (namely, Slovakia), for the purpose of this Decision, the Commission will analyse the impact of the Transaction on the market for the licensing and acquisition of broadcasting rights for TV content at a national level.

VIII. COMPETITIVE ASSESSMENT

A. ANALYTICAL FRAMEWORK

- (332) Under Article 2(2) and (3) of the Merger Regulation, the Commission must assess whether a proposed concentration would significantly impede effective competition in the internal market or in a substantial part of it, in particular through the creation or strengthening of a dominant position.
- (333) In this respect, a merger may entail horizontal and/or non-horizontal (namely, vertical or conglomerate) effects. Horizontal effects are those deriving from a concentration where the undertakings concerned are actual or potential competitors of each other in one or more of the relevant markets concerned. Vertical effects are those deriving from a concentration where the undertakings concerned are active on different or multiple levels of the supply chain. Conglomerate effects are those deriving from a concentration where the undertakings concerned are in a relationship which is neither horizontal nor vertical. A concentration may involve all three types of effects. In such a case, the Commission will appraise horizontal and non-horizontal effects in accordance with the guidance set out in the relevant notices, that

²⁷⁶ Commission decision of 2 April 2003 in Case M.2876 - *Newscorp/Telepiù*, recital 62; Commission decision of 21 December 2010 in Case M.5932 - *News Corp/BSkyB*, paragraphs 73-75.

²⁷⁷ Questionnaire Q5, reply to question 11; questionnaire Q6, reply to question 11; questionnaire Q7, reply to question 12; questionnaire Q8, reply to question 12, for Romania : questionnaire Q2, questions 4 and 4.1.

is to say the Horizontal Merger Guidelines²⁷⁸ and the Non-Horizontal Merger Guidelines²⁷⁹.

- (334) In assessing the competitive effects of a merger, the Commission compares the competitive conditions that would result from the notified merger with the conditions that would have prevailed without the merger. In most cases the competitive conditions existing at the time of the merger constitute the relevant comparison for evaluating the effects of a merger. However, in some circumstances, the Commission may take into account future changes to the market that can reasonably be predicted.²⁸⁰

1. HORIZONTAL EFFECTS

1.1. Non-coordinated effects

- (335) A merger giving rise to significant impediment of effective competition may do so as a result of the creation or strengthening of a dominant position in the relevant markets. Moreover, mergers in oligopolistic markets involving the elimination of important constraints that the parties previously exerted on each other, together with a reduction of competitive pressure on the remaining competitors, may also result in a significant impediment to effective competition, even in the absence of dominance.²⁸¹
- (336) In fact, the Horizontal Merger Guidelines describe horizontal non-coordinated effects as follows: *“A merger may significantly impede effective competition in a market by removing important competitive constraints on one or more sellers who consequently have increased market power. The most direct effect of the merger will be the loss of competition between the merging firms. For example, if prior to the merger one of the merging firms had raised its price, it would have lost some sales to the other merging firm. The merger removes this particular constraint. Non-merging firms in the same market can also benefit from the reduction of competitive pressure that results from the merger, since the merging firms’ price increase may switch some demand to the rival firms, which, in turn, may find it profitable to increase their prices. The reduction in these competitive constraints could lead to significant price increases in the relevant market.”*²⁸²
- (337) The Horizontal Merger Guidelines list a number of factors which may influence whether or not significant horizontal non-coordinated effects are likely to result from a merger, such as the large market shares of the merging firms, the fact that the merging firms are close competitors, the limited possibilities for customers to switch suppliers, or the fact that the merger would eliminate an important competitive force.²⁸³ That list of factors applies equally regardless of whether a merger would create or strengthen a dominant position, or would otherwise significantly impede effective competition due to non-coordinated effects. Furthermore, not all of these

²⁷⁸ Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings ("Horizontal Merger Guidelines"), OJ C31, 5.2.2004, p. 5.

²⁷⁹ Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings ("Non-Horizontal Merger Guidelines"), OJ C 265, 18.10.2008.

²⁸⁰ Horizontal Merger Guidelines, paragraph 9; Non-Horizontal Merger Guidelines, paragraph 20.

²⁸¹ Horizontal Merger Guidelines, paragraph 25.

²⁸² Horizontal Merger Guidelines, paragraph 24.

²⁸³ Horizontal Merger Guidelines, paragraphs 27 and following.

factors need to be present to make significant non-coordinated effects likely and it is not an exhaustive list.²⁸⁴

- (338) Finally, the Horizontal Merger Guidelines describe a number of factors, which could counteract the harmful effects of the merger on competition, including the likelihood of buyer power, the entry of new competitors on the market, and efficiencies.

1.2. Coordinated effects

- (339) A merger in a concentrated market may also significantly impede effective competition due to horizontal coordinated effects where, through the creation or the strengthening of a collective dominant position, it increases the likelihood that firms are able to coordinate their behaviour and raise prices, even without entering into an agreement or resorting to a concerted practice within the meaning of Article 101 TFEU. A merger may also make coordination easier, more stable or more effective for firms that were already coordinating before the merger, either by making the coordination more robust or by permitting firms to coordinate on even higher prices.²⁸⁵
- (340) To assess whether a merger gives rise to horizontal coordinated effects, the Commission should examine, firstly, whether it would be possible to reach terms of coordination and, secondly, whether the coordination would be likely to be sustainable.
- (341) As regards the possibility of reaching terms of coordination, coordination is more likely to emerge in markets where it is relatively simple to reach a common understanding on the terms of coordination. Coordination may take various forms, including keeping prices above the competitive level, or dividing the market, for instance by customer characteristics or by allocating contracts in bidding markets.²⁸⁶
- (342) As regards the sustainability of coordination, three conditions are necessary for coordination to be sustainable. Firstly, the coordinating firms must be able to monitor to a sufficient degree whether the terms of coordination are being adhered to. Secondly, discipline requires that there is a credible deterrent mechanism that can be activated if deviation is detected. Thirdly, the reactions of outsiders, such as current and future competitors not participating in the coordination, as well as customers, should not be able to jeopardise the results expected from the coordination.
- (343) Moreover, in examining the possibility and sustainability of coordination, the Commission should specifically consider the changes that the Transaction brings about. The reduction in the number of firms in a market may in itself be a factor that facilitates coordination.

1.3. Effects on potential competition

- (344) Concentrations where an undertaking already active on a relevant market merges with a potential competitor in this market can have similar anti-competitive effects to mergers between two undertakings already active on the same relevant market and, thus, significantly impede effective competition, in particular through the creation or the strengthening of a dominant position.²⁸⁷ A merger with a potential competitor can generate horizontal anti-competitive effects, whether coordinated or non-coordinated,

²⁸⁴ Horizontal Merger Guidelines, paragraph 26.

²⁸⁵ Horizontal Merger Guidelines, paragraph 39.

²⁸⁶ Horizontal Merger Guidelines, paragraph 44.

²⁸⁷ Horizontal Merger Guidelines, paragraph 58.

if the potential competitor significantly constrains the behaviour of the firms active in the market.²⁸⁸

- (345) For a merger with a potential competitor to have significant anti-competitive effects, two basic conditions must be fulfilled. Firstly, the potential competitor must already exert a significant constraining influence or there must be a significant likelihood that it would grow into an effective competitive force. Secondly, there must not be a sufficient number of other potential competitors, which could maintain sufficient competitive pressure after the merger.²⁸⁹

2. VERTICAL EFFECTS

- (346) Vertical mergers are generally less likely to significantly impede effective competition than horizontal mergers. However, there are circumstances in which non-horizontal mergers may significantly impede effective competition. This is essentially because a non-horizontal merger may change the ability and incentive to compete of the merging companies and their competitors in ways that cause harm to consumers.²⁹⁰
- (347) One way in which vertical mergers may significantly impede effective competition is through non-coordinated effects, which may principally arise when mergers give rise to foreclosure. A merger is said to result in foreclosure where actual or potential rivals' access to supplies or markets is hampered or eliminated as a result of the merger, thereby reducing these companies' ability and/or incentive to compete.²⁹¹ Such foreclosure may discourage entry or expansion of rivals or encourage their exit. Such foreclosure is regarded as anti-competitive where the merging companies — and, possibly, some of its competitors as well — are as a result able to profitably increase the price charged to consumers.²⁹²
- (348) Two forms of foreclosure can be distinguished. The first is where the merger is likely to raise the costs of downstream rivals by restricting their access to an important input (input foreclosure). The second is where the merger is likely to result in foreclosure of upstream rivals by restricting their access to a sufficiently large customer base (customer foreclosure). The former is the type of foreclosure which is relevant for the assessment of the Transaction.
- (349) According to the Non-Horizontal Merger Guidelines, input foreclosure arises where, post-Transaction, the new entity would be likely to restrict access to the products or services that it would have otherwise supplied absent the merger, thereby raising its downstream rivals' costs by making it harder for them to obtain supplies of the input under similar prices and conditions as absent the merger.²⁹³ This may lead the merged entity to profitably increase the price charged to consumers, resulting in a significant impediment to effective competition. As stated above, for input foreclosure to lead to consumer harm, it is not necessary that the merged firm's rivals are forced to exit the market. The relevant benchmark is whether the increased input costs would lead to higher prices for consumers.²⁹⁴ Any efficiencies resulting from

²⁸⁸ Horizontal Merger Guidelines, paragraph 59.

²⁸⁹ Horizontal Merger Guidelines, paragraph 60.

²⁹⁰ Non-horizontal Merger Guidelines, Section II.

²⁹¹ Non-horizontal Merger Guidelines, paragraph 29.

²⁹² Non-Horizontal Merger Guidelines, paragraph 29.

²⁹³ Non-Horizontal Merger Guidelines, paragraph 31.

²⁹⁴ Non-Horizontal Merger Guidelines, paragraph 31.

the merger may, however, lead the merged entity to reduce price, so that the overall likely impact on consumers is neutral or positive.²⁹⁵

- (350) In assessing the likelihood of an anticompetitive input foreclosure scenario, the Commission examines, firstly, whether the merged entity would have, post-Transaction, the ability to substantially foreclose access to inputs, secondly, whether it would have the incentive to do so, and thirdly, whether a foreclosure strategy would have a significant detrimental effect on competition downstream.²⁹⁶ In practice, these factors are often examined together since they are closely intertwined.²⁹⁷

3. CONGLOMERATE EFFECTS

- (351) In the majority of circumstances, conglomerate mergers do not lead to any competition problems but in certain specific cases there may be harm to competition. The main concern in the context of conglomerate effects is that of foreclosure. Conglomerate mergers may allow the merged entity to combine products in related markets and this may confer on the merged entity the ability and incentive to leverage a strong market position from one market to another by means of tying or bundling, or other exclusionary practices.
- (352) In assessing the likelihood of conglomerate effects, the Commission examines, firstly, whether the merged firm would have the ability to foreclose its rivals, secondly, whether it would have the economic incentive to do so and, thirdly, whether a foreclosure strategy would have a significant detrimental effect on competition, thus causing harm to consumers. In practice, these factors are often examined together as they are closely intertwined.

B. OUTLINE OF THE COMPETITIVE ASSESSMENT

- (353) In the following sections the Commission assesses the effects of the Transaction in the relevant markets defined in section VII within the analytical framework set out in section VIII.A. The analysis is conducted, firstly, in relation to the relevant markets having geographic scope corresponding to the territory of Germany (section VIII.C). Secondly, in turn the Commission assesses the effects of the Transaction in the relevant markets whose geographic scope corresponds to Czechia (section VIII.D), Hungary (section VIII.E), Romania (section VIII.F). Finally, the Commission will assess the effects of the Transaction in international markets (section VIII.G).
- (354) In each national section the Commission, firstly, identifies the affected markets or the markets in which the Transaction may have a significant impact due to effects on potential competition or conglomerate effects. Secondly, the Commission assesses the possible existence of horizontal effects, vertical effects and/or conglomerate effects in respect of each of those markets.

²⁹⁵ Non-Horizontal Merger Guidelines, paragraph 31.

²⁹⁶ Non-Horizontal Merger Guidelines, paragraph 32.

²⁹⁷ Non-Horizontal Merger Guidelines, paragraph 32.

C. GERMANY

1. AFFECTED MARKETS

1.1. Horizontally affected markets

(355) The Transaction gives rise to the following horizontally affected markets in Germany:

- (a) The retail supply of fixed telephony services;
- (b) The retail supply of fixed internet access services;
- (c) The retail supply of mobile telecommunications services;
- (d) The retail supply of TV signal transmission to MDU customers;
- (e) The retail supply of TV signal transmission to SDU customers;
- (f) The retail supply of TV services;
- (g) The retail supply of multiple play 2P bundles including fixed telephony services and fixed internet access services;
- (h) The retail supply of multiple play 3P bundles including fixed telephony services, fixed internet access services and mobile telecommunications services;
- (i) The retail supply of multiple play 3P bundles including fixed telephony services, fixed internet access services and TV services;
- (j) The retail supply of multiple play 4P bundles including fixed telephony services, fixed internet access services, mobile telecommunications services and TV services;
- (k) The wholesale supply and acquisition of TV channels;
- (l) The wholesale supply of TV signal transmission.

1.2. Vertically affected market

(356) The Transaction gives rise to the following vertically affected markets in relation to the links between the following markets Germany:

- (a) The upstream market for the wholesale provision of call termination services on fixed networks and the downstream market for the retail provision of fixed telephony services;
- (b) The upstream market for the wholesale provision of call termination services on fixed networks and the downstream market for the retail provision of mobile telecommunications services;
- (c) The upstream market for wholesale access and call origination services on mobile networks and the downstream market for the retail supply of mobile telecommunications services;
- (d) The upstream market for wholesale access and call origination services on mobile networks and the downstream markets for the retail supply of multiple play 3P bundles including fixed telephony services, fixed internet access services and mobile telecommunications services;
- (e) The upstream market for wholesale access and call origination services on mobile networks and the downstream markets for the retail supply of multiple

play 4P bundles including fixed telephony services, fixed internet access services, mobile telecommunications services and TV services;

- (f) The upstream market for the wholesale provision of call termination services on mobile networks and the downstream market for the retail provision of fixed telephony services;
 - (g) The upstream market for the wholesale provision of call termination services on mobile networks and the downstream market for the retail provision of mobile telecommunications services;
 - (h) The upstream market for the wholesale provision of leased lines and the downstream market for the retail provision of mobile telecommunications services;
 - (i) The upstream market for wholesale intermediary TV signal delivery services and the downstream markets for the retail supply of TV signal transmission to MDU customers.
- (357) The Commission considers that the Transaction will not lead to any anticompetitive effects in the downstream markets to the wholesale provision of call termination services on mobile networks and to the wholesale provision of call termination services on fixed networks, for the following reasons.
- (358) As regards the market for wholesale provision of call termination services on fixed networks, each of the Parties has by definition 100%. The market shares of the Parties in the downstream market for the retail supply of fixed telephony services are presented in section VIII.C.2.12. Similarly, Vodafone has by definition 100% market share in the market for the wholesale provision of call termination services on mobile networks, while the market shares of the Parties in the downstream market for the retail mobile telecommunications services are presented in section VIII.C.2.3.2.
- (359) Nonetheless, the Commission notes that both the wholesale provision of call termination services on mobile networks and the wholesale provision of call termination services on fixed networks are regulated in Germany by BNetzA's decisions. Therefore, the Commission finds that the merged entity will not have the ability to foreclose competing providers of retail fixed telephony or mobile telecommunications services in Germany, because of ex ante regulation.²⁹⁸

1.3. Other markets in which the Transaction may have a significant impact

- (360) The Transaction may have a significant impact within the meaning of Section 6.4 of the Form CO in relation to:
- (a) The retail supply of fixed telephony services, which is a neighbouring market closely related to the supply of retail TV services;

²⁹⁸ The Commission also notes that a vertical relationship exists between Vodafone's activities in the wholesale supply of international roaming services in all countries where it is active as a mobile network operator, on the one hand, and Unitymedia's retail supply of mobile telecommunications services in Germany, on the other hand. Considering the negligible increment on the latter market brought about by the Transaction and the European Regulation on roaming which bound the activities of operators in the wholesale supply of international roaming services in the EEA (Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union (OJ L 172, 30.6.2012, p. 10–35), the Commission considers that the Transaction will not have any impact in such markets.

- (b) The retail supply of fixed internet access services, which is a neighbouring market closely related to the supply of retail TV services; and
- (c) The retail supply of mobile telecommunications services, which is a neighbouring market closely related to the supply of retail TV services.²⁹⁹

2. HORIZONTAL NON-COORDINATED EFFECTS

2.1. Horizontal non-coordinated effects in the retail supply of fixed telephony services in Germany

2.1.1. *The Notifying Party's view*

- (361) According to the Notifying Party, the Transaction does not give rise to a significant impediment of effective competition in the market for the retail supply of fixed voice telephony services, since the Parties do not overlap in cable and there is only a small overlap and limited competition between the Parties on the basis of DSL-to-cable in Unitymedia's footprint. Within the Unitymedia footprint, there are a number of competitors who will continue to compete post-Transaction, most notably Deutsche Telekom whose strength in fixed voice in particular is apparent from the market share data and the porting data³⁰⁰.

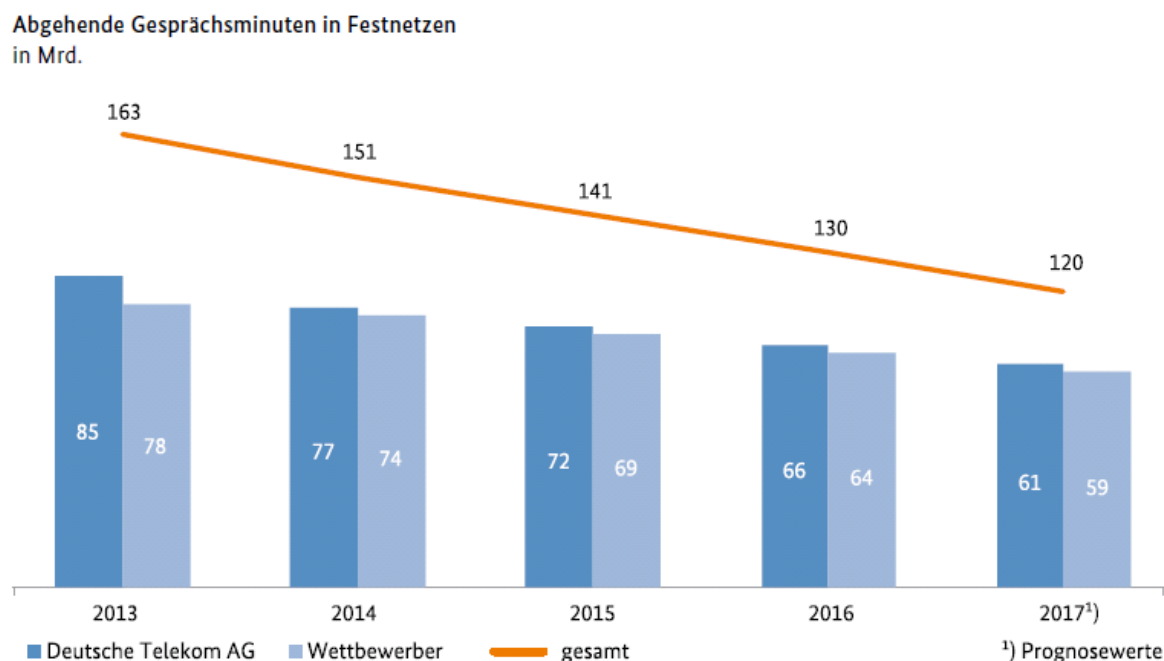
2.1.2. *The Commission's assessment*

- (362) Based on the data compiled by BNetzA, it appears that volumes and revenues from fixed telephony services have been declining in Germany for several years. The BNetzA's 2017 annual report notes that outgoing call minutes from fixed networks declined from 163 billion minutes in 2013 to 120 billion minutes in 2017, as shown in Figure 1 below.

²⁹⁹ In the course of the market investigation, complaints have been made as regards the loss of the potential competitive threat exerted by Parties over each other's cable business in relation to the supply of retail fixed internet access services and retail TV signal transmission to MDU customers (and in consequence in any other fixed telecommunications and TV markets). Based on the market definition set out in Section VII, these complaints would technically only be relevant in relation to the hypothetical regional markets for the retail supply of TV signal transmission to MDU customers and SDU customers (for which the geographic market definition was left open), given that the other markets in relation to which the complaints were made are national and thus an actual overlap exist between the Parties' activities. Nonetheless, as further explained in section VIII.C.2.4.2, the Commission has not identified any evidence that would suggest that the Parties had any plans of expansion into the other Party's footprint, or have developed or pursued such plant in the past three years pursuant to section 6.4 of Annex I to the Implementing Regulation. Thus, the hypothetical regional markets for the retail supply of TV signal transmission to MDU customers are not listed above. Nonetheless, the Commission will assess the potential competitive threat exerted by Parties over each other's cable business in relation to the supply of retail fixed internet access services and retail TV signal transmission to MDU customers in sections VIII.C.2.2.2. and VIII.C.2.4.2.

³⁰⁰ As regards porting data, see section VIII.C.2.2.2.3.(iii)(b) Quantitative evidence .

Figure 1: Volume of call minutes in Germany (2013-17)



Source: BNetzA Annual Report 2017, page 56, Annex 6.C.V.1. to the Form CO.

- (363) In the declining market for the supply of fixed telephony services, based on the data submitted by the Parties, their combined market shares³⁰¹ would be, by subscribers, less than [0-5]% above the 25% market share threshold set out in recital (32) of the Merger Regulation to identify concentrations which, by reason of the limited market share of the undertakings concerned, are not liable to impede effective competition may be presumed to be compatible with the common market. By revenues, the Parties' combined market share would be even more limited, less than [0-5]% above [20-30]%, and therefore, below the threshold set out in recital (32) of the Merger Regulation. The increment brought about by the Transaction would be around [5-10]% by subscribers and [5-10]% by revenues.
- (364) Post-Transaction the market leader will continue to be Deutsche Telekom, with market share by both subscribers and revenues at about [50-60]%. The third largest player in the market, after the merged entity, would be United Internet, with a share just above [10-20]% both by subscribers and by revenues. The remaining players, including Telefónica, United Internet, NetCologne and the other small players, will all have shares around or below 5%.
- (365) In this context, despite the high concentration levels (above [3000-4000]) and change in such levels ([0-500]) post-Transaction, the Commission considers that the Transaction is unlikely to significantly impede effective competition in the relevant market.

³⁰¹

The market share data provided for in this Section relates to the financial year 2017/2018. In this respect, see also section VIII.C.2.2.2.2, on the methodology used by the Parties for the computation of the market shares. In particular, the data underlying the market share computation includes both sales of fixed telephony services and in a bundle with one or more other telecommunications products. The Parties were not able to provide separate market shares for residential and non-residential customers of retail fixed telephony services. The Commission has no reason to believe that their shares would be different to those reported in recital (362) under any customer segmentation.

- (366) Firstly, as explained, Deutsche Telekom will remain the market leader post-Transaction with a market share [...] that of the merged entity.
- (367) Secondly, the supply of fixed telephony services on a standalone basis, that is to say, not in a bundle with fixed broadband services, by both Vodafone and Unitymedia is negligible part of their respective business. Indeed, Vodafone has only approximately [...] fixed telephony -only customers, which corresponds to about [...] of all its telephony customers, while only [...] of Unitymedia's customers with a telephony product purchase only fixed telephony services.
- (368) Thirdly, as explained at recital (362), the volumes and revenues from fixed telephony services have been declining in Germany for several years. Furthermore, as explained in section VII.6, 60% of fixed telephony customers in Germany purchase fixed telephony services in a bundle with fixed broadband internet access services and in such bundles the product driving the competitive dynamic is fixed broadband internet access services.
- (369) Finally, the Commission notes that no concerns have been raised in the market investigation as regards to the effects of the Transaction in the supply of fixed telephony services as a standalone product.

2.1.3. *Conclusion*

- (370) In light of the foregoing, on balance, the Commission concludes that the Transaction would not significantly impede effective competition in the market for the retail supply of fixed telephony services in Germany as a result of horizontal non-coordinated effects.
- (371) This is without prejudice to the assessment of the effects of the Transaction in the retail supply of multiple play 2P bundles including fixed telephony services and fixed internet access services in Germany, where, as explained in section VII.6, the main driver of product differentiation and customers' choice, and thus the main element influencing the competitive dynamics, are the fixed internet access services.

2.2. **Horizontal non-coordinated effects in the retail supply of fixed internet access services in Germany**

2.2.1. *The Notifying Party's view*

- (372) The Notifying Party submits that the Transaction is unlikely to lead to competition concerns in the market for the retail supply of fixed internet access services in Germany. Indeed, while there is a small overlap in the Unitymedia footprint, the Transaction does not create a new market leader and other competitors such as Deutsche Telekom, United Internet, Telefónica and city carriers³⁰² will remain an important constraint post-Transaction. Moreover, Unitymedia and Vodafone are not particularly close competitors with regard to price or speed according to the Notifying Party.
- (373) In addition, the Notifying Party argues that Vodafone's DSL offer is not a strong competitive constraint over the Target Business; does not materially influence competition in the Unitymedia footprint; and is [DETAILS OF COMMERCIAL ACTIVITIES AND CAPABILITIES]. [...] of Vodafone's customers in the Unitymedia footprint use of Asymmetric Digital Subscriber Line ("ADSL") technology which is a legacy product [DETAILS OF COMMERCIAL ACTIVITIES

³⁰²

For a definition see footnote 120.

AND CAPABILITIES]. Vodafone has previously been able to offer an [DETAILS OF BUSINESS ACTIVITIES]. Therefore, Vodafone will have to move to bitstream-based VDSL. Moreover, the Notifying Party considers that it would be inconsistent for the Commission to claim that Vodafone's DSL business exerted an important competitive constraint and at the same time to disregard the role of Telefónica (which, similarly to Vodafone, operates a DSL fixed business based on access to Deutsche Telekom's network) in the market.

- (374) Furthermore, the Notifying Party submits that its view that the Transaction is unlikely to lead to price increases is supported by: (i) a comparison to the 2014 *Vodafone/Kabel Deutschland* merger; and (ii) a price pressure analysis. The Notifying Party explains that the alignment of Vodafone's cable and national DSL prices [DETAILS OF BUSINESS STRATEGY] means there is even less incentive than would otherwise be the case for Vodafone to raise prices in the Unitymedia footprint post-Transaction. The Notifying Party submits that it is highly unlikely that it will depart from its national pricing policy.
- (375) Moreover, the Notifying Party submits that the Transaction would not have any substantial negative effect on the retail market for the supply of fixed internet services at a national level, considering that the Parties' cable networks do not geographically overlap and there would not be any indirect cable-to-cable competition pre-Transaction. In particular, the Notifying Party submits that:
- (a) The Parties do not benchmark their pricing against each other in such a way as to give rise to any significant competitive pressure. The evidence put forward by the Commission on the important competitive constraint exerted by the Parties' cable businesses on each other at the national level, does not go beyond "simple commercial benchmarking" and thus no competition concerns can be identified on this basis;
 - (b) There is no evidence of consistent sequential pricing whereby one Party's competitive action is transmitted to the other Party indirectly through the competitive response of a national competitor;
 - (c) There would be no adverse effects on nationwide investment and innovation.
- (376) Finally, the Notifying Party submits that the Transaction would not lead to a reduction in incentives to invest or innovate due to the elimination of Unitymedia as a "leader" in innovation and investment. In particular, the Notifying Party submits that:
- (a) The roll out of cable upgrades and investment in Germany are primarily driven by factors unaffected by the Transaction, such as the growth of network traffic and corresponding capacity requirements;
 - (b) Because the Parties' cable networks do not overlap, the Parties do not compete in terms of innovation and investment and there can be no reduction in incentives to innovate or invest post-Transaction. On the contrary, there will be an incentive for the incumbent, Deutsche Telekom, to accelerate investment post-Transaction in the face of a new nationwide challenger;
 - (c) In any event, there are no significant differences between the Parties with regards to innovation and investment and the Statement of Objections misconstrues the evidence that allegedly shows Unitymedia is a leader in innovation and investment.
- (377) With regard to efficiencies, the Notifying Party claims that there will be significant variable cost reductions resulting from its [DETAILS OF BUSINESS STRATEGY].

Moreover, the Notifying Party submits that there are efficiencies resulting from the acceleration of infrastructure development and the sharing of backhaul infrastructure. Further details on the Notifying Party's efficiency claims are provided in section VIII.C.2.2.2.7.

2.2.2. *The Commission's assessment*

(378) In this section the Commission assesses the likelihood of anticompetitive horizontal non-coordinated effects in the market for retail fixed internet access services in Germany. To this end, section VIII.C.2.2.2.1. provides background information in relation to the network infrastructure in Germany and describes the regulatory framework applicable to the German market for the retail supply of internet access services as well as and the relevant parameters of competition. Section VIII.C.2.2.2.2. presents the market shares of the Parties and their main competitors as well as concentration levels in the market. Section VIII.C.2.2.2.3. assesses the competitive constraints exerted by the Parties on each other and on their competitors, which will be removed by the Transaction, as well as their likely evolution absent the Transaction. Section VIII.C.2.2.2.4. assesses the other competitive constraints which will remain post-Transaction, and the likelihood that they offset the anticompetitive effects of the Transaction. Section VIII.C.2.2.2.5. contains an overall assessment of the likely effects of the Transaction, based both on the qualitative evidence presented in the previous sections and on a quantitative analysis of the likely price effects of the Transaction. Sections VIII.C.2.2.2.6. and VIII.C.2.2.2.7. discusses whether the likely effects of the Transaction could be off-set by the countervailing factors, that is, respectively, entry, buyer power and efficiencies. Finally, section VIII.C.2.2.2.8. draws conclusions.

2.2.2.1. The German market for retail fixed internet access services

(i) Network infrastructure

(379) Currently there are three main networks for the supply of fixed internet access services in Germany, Deutsche Telekom's copper network and the Parties' cable networks:

- (a) Deutsche Telekom's network is the historical copper network which was originally set up for voice transmission. As a broadband network it provides via DSL broadband services mainly in the form of ADSL with speeds up to 16 Mbit/s download per subscriber and VDSL with speeds up to 50 Mbit/s download. In the past years, Deutsche Telekom has started to target higher speeds with the use of the vectoring technology which allows for up to 100 Mbit/s download at least for those homes closest to the cabinets. Most recently, Deutsche Telekom has started to deploy super-vectoring which offers up to 250 Mbit/s.³⁰³ Approximately 74% of all broadband connections or 24,7 million connections are DSL-based (offered by Deutsche Telekom or providing such services via regulated wholesale access to Deutsche Telekom's network).³⁰⁴

³⁰³ See report Fraunhofer: Netzinfrastrukturen für die Gigabitgesellschaft (Network infrastructures for the Gigabit society), 2016, page 86 and following as well as Annex II https://www.fokus.fraunhofer.de/de/FOKUS/Gigabit_Studie [ID 4949].

³⁰⁴ See annual report of BNetzA 2017, page 50, https://www.bundesnetzagentur.de/SharedDocs/Downloads/DE/Allgemeines/Bundesnetzagentur/Publikationen/Berichte/2018/JB2017.pdf?__blob=publicationFile&v=2 [ID 4667].

- (b) The coax cable networks originally only allowed for the transmission of TV-signals. Since the introduction of bi-directional functionalities, cable TV-networks can also be used for broadband services offering up to 400 Mbit/s download per subscriber under the DOCSIS 3.0 standard and going up to 1 Gbps download under the new DOCSIS 3.1 standard.³⁰⁵ Cable operators increasingly upgrade their cable networks by fibre (hybrid fibre coax networks or “HFC”). The real speeds provided depend also on an appropriate network segmentation. Approximately, 7.7 million connections in Germany are based on cable networks (23%).³⁰⁶
- (380) Whilst Deutsche Telekom's DSL network is available nationwide, the cable networks of the Parties have a regional dimension and do not overlap. More precisely, Unitymedia's network is only present in the three Federal States of North Rhine-Westphalia, Hesse and Baden-Wuerttemberg, covering approximately [...] of households in those Federal States.³⁰⁷ Vodafone's network is located in the other 13 of the 16 Federal States of Germany and covers approximately [...] of households in these Federal States.³⁰⁸ Over 40% of German households are located in North Rhine-Westphalia, Hesse and Baden-Wuerttemberg.³⁰⁹
- (381) Next to the Parties and Deutsche Telekom's network, in Germany there are a number of other small regional or local cable operators, such as EWE in the north of Germany, M-Net in the Munich area, Tele Columbus in the east of Germany, or NetCologne in the geographic area around Cologne and Aachen.
- (382) Fibre infrastructure is currently very limited in Germany. Fibre networks understood as “fibre to the home” (FTTH) or “fibre to the building” (FTTB) are the most performing fixed broadband networks offering very high symmetric speeds of 1 Gbps (or even more) per subscriber.³¹⁰ In 2017, approximately 800,000 customers had a FTTH/B connection (out of a total of 33.2 million broadband connections in Germany) – representing a share of only 2%.³¹¹
- (ii) Regulatory regime**
- (383) Providers of retail fixed internet access services in Germany currently operate either on the basis of their own network or via wholesale fixed broadband access.

³⁰⁵ See report Fraunhofer: Netzinfrastrukturen für die Gigabitgesellschaft (Network infrastructures for the Gigabit society), 2016, page 86 and following as well as Annex II https://www.fokus.fraunhofer.de/de/FOKUS/Gigabit_Studie [ID 4949].

³⁰⁶ See annual report of BNetzA 2017, page 50, https://www.bundesnetzagentur.de/SharedDocs/Downloads/DE/Allgemeines/Bundesnetzagentur/Publikationen/Berichte/2018/JB2017.pdf?__blob=publicationFile&v=2 [ID 4667].

³⁰⁷ See Form CO, para 6.319.

³⁰⁸ Bavaria, Berlin, Brandenburg, Bremen, Hamburg, Mecklenburg-Vorpommern, Lower Saxony, Rhineland-Palatinate, Saarland, Saxony, Saxony-Anhalt, Schleswig Holstein and Thuringia. See Form CO, para 6.319.

³⁰⁹ Statistisches Bundesamt (Destatis), 2019 [ID 4866].

³¹⁰ See report Fraunhofer: Netzinfrastrukturen für die Gigabitgesellschaft (Network infrastructures for the Gigabit society), 2016, page 86 and following as well as Annex II https://www.fokus.fraunhofer.de/de/FOKUS/Gigabit_Studie [ID 4949].

³¹¹ See annual report of BNetzA 2017, page 50, https://www.bundesnetzagentur.de/SharedDocs/Downloads/DE/Allgemeines/Bundesnetzagentur/Publikationen/Berichte/2018/JB2017.pdf?__blob=publicationFile&v=2 [ID 4667].

- (384) In relation to the latter, Deutsche Telekom's wholesale fixed internet products, corresponding to markets 3(a) and 3(b)³¹² identified in the Commission Recommendation 2014/710/EU³¹³, are currently regulated, on the basis that Deutsche Telekom has significant market power. More precisely, Deutsche Telekom is required by regulation to provide wholesale access to the DSL infrastructure to access seekers at regulated prices.³¹⁴
- (385) Deutsche Telekom currently offers the following DSL access products to access seekers:
- (a) In relation to ADSL, access seekers may use LLU or bitstream access;
 - (b) In relation to VDSL, access seekers may use SLU or bitstream access. However, in case vectoring is deployed within the near-shore area of a local exchange ("Hauptverteiler", HVt), VDSL LLU will no longer be available (only ADSL LLU will be possible). In that case, Deutsche Telekom is obliged to provide an alternative virtual access product for the loss of physical access (VDSL LLU) which is – depending on the choice of the access seeker – either a virtual unbundled local access at the street cabinet or a Broadband Network Gateway Layer 2 bitstream access product.
- (386) In relation to bitstream access, there is a distinction in Germany between Layer 2 wholesale access products, which provide a network transport via Ethernet technology, and Layer 3 wholesale access products, where the bitstream access is provided on the basis of the internet protocol (IP). Layer 2 offers access seekers a greater degree of product flexibility than Layer 3 access, because its technology allows access seekers to take over their data traffic transported by Deutsche Telekom in a largely unchanged format giving the possibility to design own retail products. BNetzA introduced the current Layer 2 bitstream access product ("L2-BSA") with the aim of providing a functional substitute to the loss of physical unbundling due to vectoring. In 2016, in a decision pursuant to Article 7(3) of Directive 2002/21/EC³¹⁵, the Commission commented on the need for a number of improvements to the technical parameters of the L2-BSA product, in particular in relation to the maximum transmission unit, the level of control of the access seekers over the quality of service levels and DSL profiles, the overall End-to-End line availability, the transmission capacity, the technical solutions for multicast replication and the fault management conditions. On this basis, L2-BSA provides wholesale access seekers with significantly enhanced functionalities and accordingly more possibilities to effectively compete on the market than Layer 3 wholesale access. Layer 2 access requires additional set-up investment by the access seeker, as it requires to build connections to a much higher number of handover points (900 as opposed to 73 for Layer 3 wholesale access products). Monthly fees for Layer 3 products are, however, as a tendency higher than Layer 2 products. In Germany, Layer 3 access to Deutsche

³¹² Market 3a relates to the wholesale local access provided at a fixed location, while market 3b relates to wholesale central access provided at a fixed location for mass-market products.

³¹³ 2014/710/EU: Commission Recommendation of 9 October 2014 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services Text with EEA relevance. OJ L 295, 11.10.2014, p. 79–84.

³¹⁴ See Form CO, paragraph 6.351 and following.

³¹⁵ Commission's decision of 19 July 2016 in Case DE/2016/1876, wholesale local access provided at a fixed location in Germany.

Telekom's VDSL network has been available since 2010, while Layer 2 access became available, (in certain regions, only in 2016.

- (387) Deutsche Telekom offers for Layer 2 and Layer 3 VDSL bitstream access a so-called "Kontingentmodell" pricing structure. Under this pricing structure, in return for an upfront payment and a volume commitment, the monthly access cost is reduced.
- (388) The current regulation of these types of access has been in place since 2015. BNetzA is currently conducting a market analysis to determine the appropriate market definition for markets 3a, that is wholesale local access provided at a fixed location, and 3b, that is wholesale central access provided at a fixed location for mass-market products, including whether this has changed since its last review, and thus whether any change in the regulatory obligations will be needed. A consultation document has been published by BNetzA on 27 May 2019 in relation to market 3a.³¹⁶ In that document BNetzA envisages maintaining regulatory access obligations on Deutsche Telekom in relation to its existing copper network.
- (389) At the moment there is no indication as to when BNetzA would conclude its review or in relation to the possible outcome of such review. Nonetheless, the Notifying Party does not expect that the regulatory regime will change materially in relation to access to Deutsche Telekom's copper network. Therefore, in line with the Notifying Party's view, for the purposes of this Decision the Commission considers that the current copper regulation will remain in force both in a post-Transaction scenario and in a scenario where the Transaction would not take place.
- (390) As regards access to fibre networks, the future regulatory framework is not yet settled.³¹⁷ BNetzA has commenced a consultation process in this respect in 2017. In the consultation document published on 27 May 2019, BNetzA envisages that the existing regulation over Deutsche Telekom's copper network cannot be transposed directly to its fibre network. BNetzA expects requiring only non-discriminatory access for other service providers on the fibre network. The stated aim is to encourage the development of the fibre market, as investors can negotiate their own price agreements and cooperation.³¹⁸ Nonetheless, at the time of the adoption of this Decision the outcome of the market review on fibre by BNetzA and the shape of any regulation it could potentially adopt is too uncertain to be taken into consideration by the Commission.

(iii) Competitive parameters

- (391) The Commission has investigated the relative importance of different parameters of competition in the retail market for fixed internet access services in Germany. On the basis of the market investigation, the Commission considers that price is the most important parameter of competition in relation to the provision of retail fixed internet access services in Germany.
- (392) According to the Parties' competitors responding to the market investigation, the most important parameter of competition is price, followed by average and peak download speeds as well as network quality and reliability. In the view of

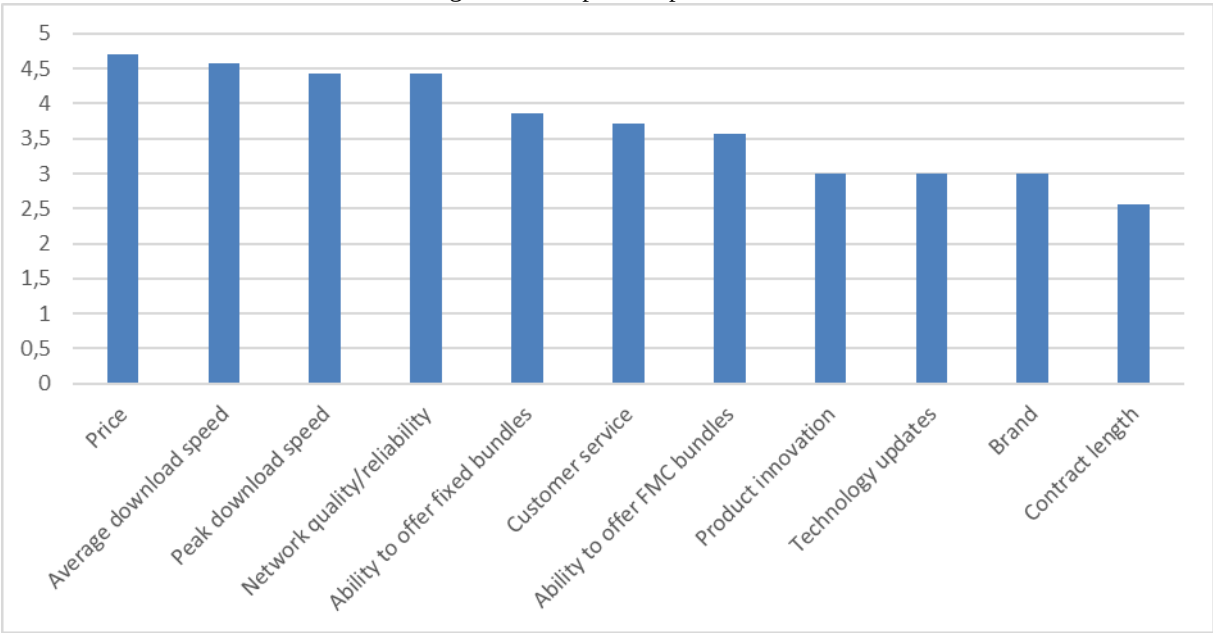
³¹⁶ BNetzA's consultation BK1-19-001, available at https://www.bundesnetzagentur.de/DE/Service-Funktionen/Beschlusskammern/1_GZ/BK1-GZ/2019/2019_0001bis0999/BK1-19-0001/BK1-19-0001_Konsultationsentwurf_bf.pdf?__blob=publicationFile&v=3.

³¹⁷ See Parties' reply to RFI 11, question 5.

³¹⁸ BNetzA's consultation BK1-19-001, available at https://www.bundesnetzagentur.de/DE/Service-Funktionen/Beschlusskammern/1_GZ/BK1-GZ/2019/2019_0001bis0999/BK1-19-0001/BK1-19-0001_Konsultationsentwurf_bf.pdf?__blob=publicationFile&v=3.

competitors, the ability to provide fixed bundles and customer service are more important than the ability to offer fixed-mobile convergence bundles. Similarly, product innovation and technology updates play a less prominent role, while brand and contract length are the least important parameter of competition.³¹⁹

Figure 2: Competitive parameters



Source: Replies to questionnaire Q11, question 78.

- (393) The respondents to the market investigation explained that from a customer’s perspective price is the most important factor in choosing an internet supplier.³²⁰ In this respect, while some customers only focus on the nominal price, other also take into account the value for many in terms of bandwidth. One respondent explains that internet access products are largely homogenous for consumers and that consumers differentiate them according to price and speed only.³²¹
- (394) The importance of price and speed is confirmed by third parties reports. For example, a 2017 report made by Exane contains the result of a survey on what are the main reasons behind German consumers choice of broadband providers. According to the survey, price is clearly the primary factor driving consumer choice, followed by speed/quality, as illustrated in the Figure 3.

Figure 3: [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]
[REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]

Source: [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].

2.2.2.2. Market shares and concentration levels

(i) Introduction

- (395) According to the Horizontal Merger Guidelines, market shares constitute useful first indications of the market structure and of the competitive importance of the market players.³²² The Horizontal Merger Guidelines explain that the larger the market share, the more likely a firm is to possess market power. Furthermore, the larger the

³¹⁹ Replies to questionnaire Q11, question 78

³²⁰ Replies to questionnaire Q11, question 78.13.

³²¹ United Internet’s reply to questionnaire Q11, question 78.13 [ID 4041].

³²² Horizontal Merger Guidelines, paragraphs 14 and 16.

addition of market share (or "increment") brought by the transaction, the more likely it is that a merger will lead to a significant increase in market power. Post-Transaction market shares are calculated on the assumption that the post-Transaction combined market share of the parties is the sum of their pre-Transaction market shares.³²³

- (396) In the telecommunications sector, market shares based on existing subscribers only capture the competitive strength of market participants to a certain degree, in particular because recent trends may not be properly reflected. This is because customers may be bound to long-term contracts, which means that, at any given time, competition occurs only in respect of those contestable customers and entirely new customers, those who are not yet subscribers of mobile telecommunications services at all. Consequently, it may take some time before trends in winning new business are reflected in the market shares. Accordingly, shares of contestable customers are an informative element in order to form a view on the likely dynamics in the market for the years following the Transaction.
- (397) In line with its precedents, the Commission considers that market shares based on gross additions ("gross adds") provide a reasonable measure that captures the current competitive strength of market participants.³²⁴ Market shares based on gross adds are generally used in the telecommunications industry and are calculated on the basis of the respective number of new subscribers acquired in a year by each operator without deduction of the subscribers who leave.
- (398) Gross add shares are not necessarily identical to shares based on contestable customers as the set of contestable customers includes not only customers that decide to switch operator and which are usually reported as gross adds, but also those customers that actively decide to either stay in their existing contract or who switch to another tariff but stay with the same operator. However, figures on the latter set of customers are difficult to obtain and shares based on gross-adds are likely to be reasonably close to shares based on contestable customers.
- (399) Another metric which could be used to assess the current competitive strength of market participants is net additions ("net adds"). Net adds are the number of new subscribers net of the lost subscribers and can be used as a relevant measure of an operator's competitive strength as they focus on the current competitive dynamics with regard to contestable customers.
- (400) In this Decision the Commission presents market shares based on subscribers, gross adds, net adds and revenues in section VIII.C.2.2.2.2(ii). Such shares (at national level) are based on the submission of the Notifying Party in the notification. The Notifying Party has used the following methodology to calculate the below nationwide subscriber and revenue market shares. Firstly, subscriber and revenue figures for Vodafone (split between DSL and cable) and for Unitymedia are based on the Parties' internal data. Secondly, subscriber and revenue figures for Deutsche Telekom, Telefónica, United Internet and Tele Columbus are based on information from annual and quarterly results. Thirdly, subscriber data for further third-party

³²³ Horizontal Merger Guidelines, paragraph 27.

³²⁴ Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*, recital 246; Commission decision of 12 December 2012 in case M.6497 – *Hutchison 3G Austria/Orange Austria*, recital 170; Commission decision of 1 September 2016 in case M.7758 – *Hutchison 3G Italy/WIND/JV*, recitals 366-386; and Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefónica UK*, recitals 379-382.

providers are based on a combination of publicly reported data, industry surveys, websites and estimates by the Notifying Party. Fourth, as regards subscribers, the total market size is based on data reported by Deutsche Telekom in its results presentations. As regards revenues, the figures for the category “Others” are based on external surveys and the market size is recalculated by aggregating revenues for the Parties and third-party competitors. Finally, subscriber and revenue market shares are calculated using those figures. Gross adds market shares are based on internal data of the Parties and for all other providers, annual losses have been estimated using assumptions about the churn rate for each provider. These estimated annual losses have then been added to net adds to estimate gross adds.³²⁵

- (401) In addition, section VIII.C.2.2.2.2(iii) presents more granular shares at footprint level. These shares at a geographic level narrower than national are considered in the Decision to more accurately capture the regional specificities of the competitive interaction between the Parties, due to the fact that the Parties' cable network footprints do not overlap and Unitymedia is only active in the supply of fixed internet access services on the basis of its own network. The subscriber shares at footprint level presented in section VIII.C.2.2.2.2(iii) are based on an internal model produced by the Notifying Party according to the following methodology. Firstly, the total market size has been estimated by multiplying the total number of marketable homes/households in each footprint by the broadband penetration rate. Secondly, the number of subscribers for Vodafone and Unitymedia has been subtracted from the total broadband market size. Finally, the total number of remaining subscribers has been distributed between all remaining providers in line with their residual market shares at national level. In order to calculate revenue market shares at footprint level, the subscriber split between footprints for each provider has been applied to the national revenues.³²⁶
- (402) The data provided by the Notifying Party refers to financial years. Vodafone's financial year runs from 1 April to the following 31 March.
- (403) The Commission has verified the market share data provided by the Parties and conducted a reconstruction of subscriber³²⁷ shares for the financial years 2016/17, 2017/18 and 2018 Q2 at different geographical levels, that is at national and Unitymedia footprint levels, as well as at federal state and district levels within Unitymedia's footprint³²⁸, according to the following methodology. The Commission has collected subscriber data for fixed broadband services at national level and, within the Unitymedia's footprint, at postal code level from the Parties³²⁹, Deutsche

³²⁵ See Form CO, Annex 6.C.IV.25.

³²⁶ See Form CO, Annex 6.C.IV.25.

³²⁷ The Commission's market reconstruction is limited to subscriber market shares due to limited availability of revenue and gross add data from third parties that rely on wholesale services. Subscriber data includes also fixed internet access subscriptions included in multiple play bundles.

³²⁸ In the Response to the Statement of Objections, the Notifying Party questions the evidential value of shares at so geographically disaggregated level, as they ignore the constraints that are relevant to the pricing decisions of Vodafone and other operators, given that the market is found to be national. The Commission acknowledges that the market is national also in view of the national dimension of pricing strategies applied by operators with national operations, including Vodafone. Nonetheless, the Commission considers that a reconstruction of the market also at such narrower geographical level is important for it to assess whether the constraint exerted by the Parties on each other in Unitymedia's footprint is homogeneous across the whole area or circumscribed to very specific clusters.

³²⁹ Vodafone, reply to data RFIs 7, 8, 15, 17, 21 and RFI 24. Unitymedia, reply to data RFIs 7, 8, 16 and 18. [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] and thus its data contains also subscribers of fixed voice only products. However, according Vodafone's subscriber data by product

Telekom³³⁰, NetCologne³³¹ and EWE³³². Deutsche Telekom provided data for both its retail and wholesale business.³³³ The subscriber data for wholesale customers relying on Deutsche Telekom's access products excludes Vodafone. In addition, Vodafone provided data on wholesale lines [DETAILS OF COMMERCIAL ACTIVITIES AND CUSTOMERS].³³⁴ The total market size is then calculated by aggregating the subscriber data of the Parties and third-party competitors, including [DETAILS OF COMMERCIAL ACTIVITIES AND CUSTOMERS] and Deutsche Telekom's wholesale business (excluding Vodafone). Specifically, to compute the total market size at district, federal state, Unitymedia footprint levels, the Commission aggregated postal code data.³³⁵ Postal code data does not always accurately correspond to the Unitymedia cable footprint. This is driven by the fact that within a postal code (or district), there may be some homes that are not passed by Unitymedia's network. Thus, Unitymedia may have only partial coverage within a postal code (or district). Therefore, Unitymedia's share at Unitymedia footprint, federal state and district levels is likely to be underestimated in the Commission's reconstruction. In addition to market shares, the Commission has calculated the number of households based on Deutsche Telekom data³³⁶ and Unitymedia's network coverage (homes passed)³³⁷ for the different geographical levels. For the district level analysis, the Commission's market reconstruction focuses on cities with more than 100 000 households, while the remaining districts are aggregated to a residual by Federal States.

- (404) The main findings of the Commission's market reconstruction are presented in this section, while more detailed results³³⁸ are included in confidential Annex I.

(ii) National market shares

- (405) The market shares of the Parties and their largest competitors in the market for the retail supply of fixed internet access services in Germany are illustrated in Table 2 below in terms of subscribers and revenues for the period 2015-2018.

bundles at national and footprint level, fixed voice only subscribers account for a [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] share of subscribers (Vodafone, reply to data RFI 7 and 17).

³³⁰ Deutsche Telekom's reply to data RFI 1, access to which has been provided according to the data room procedure.

³³¹ NetCologne's reply to data RFI 3 and 25, access to which has been provided according to the data room procedure.

³³² EWE's reply to data RFI 23, access to which has been provided according to the data room procedure.

³³³ Deutsche Telekom's wholesale data might include fixed voice only products offered by access seekers. However, these products are of low relevance for access seekers and most of the offer fixed voice only in a product bundle with fixed broadband.

³³⁴ [DETAILS OF COMMERCIAL ACTIVITIES AND CUSTOMERS]. The Commission found small discrepancies in the total lines rented by Vodafone from Deutsche Telekom.

³³⁵ The analysis at district, footprint and federal state level, include only districts that are covered by Unitymedia's cable network in Baden-Württemberg, Hessen and Nordrhein-Westfalen.

³³⁶ Deutsche Telekom's reply to data RFI 1, access to which has been provided according to the data room procedure.

³³⁷ Unitymedia's reply to data RFI 18.

³³⁸ Access to which has been provided according to the data room procedure.

Table 2: Market shares for the retail supply of fixed internet services
(2015-2018)

Nationwide	2015/2016		2016/2017		2017/2018	
	'000	%	'000	%	'000	%
Subscribers						
Vodafone	[...]	[10-20]%	[...]	[20-30]%	[...]	[20-30]%
of which only DSL	[...]	[5-10]%	[...]	[5-10]%	[...]	[5-10]%
of which only cable	[...]	[10-20]%	[...]	[10-20]%	[...]	[10-20]%
Unitymedia	[...]	[10-20]%	[...]	[10-20]%	[...]	[10-20]%
Combined	[...]	[30-40]%	[...]	[30-40]%	[...]	[30-40]%
Deutsche Telekom	[...]	[30-40]%	[...]	[30-40]%	[...]	[30-40]%
United Internet	[...]	[10-20]%	[...]	[10-20]%	[...]	[10-20]%
Telefónica	[...]	[5-10]%	[...]	[5-10]%	[...]	[5-10]%
EWE Tel	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%
Tele Columbus	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%
M-Net	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%
Net Cologne	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%
Deutsche Glasfaser	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%
Others	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%
Total	[...]	100%	[...]	100%	[...]	100%
Revenues						
Vodafone	[...]	[10-20]%	[...]	[10-20]%	[...]	[10-20]%
of which only DSL	[...]	[5-10]%	[...]	[5-10]%	[...]	[5-10]%
of which only cable	[...]	[5-10]%	[...]	[5-10]%	[...]	[5-10]%
Unitymedia	[...]	[5-10]%	[...]	[5-10]%	[...]	[5-10]%
Combined	[...]	[20-30]%	[...]	[20-30]%	[...]	[20-30]%
Deutsche Telekom	[...]	[40-50]%	[...]	[40-50]%	[...]	[40-50]%
United Internet	[...]	[10-20]%	[...]	[10-20]%	[...]	[10-20]%
Telefónica	[...]	[5-10]%	[...]	[5-10]%	[...]	[5-10]%
Others	[...]	[10-20]%	[...]	[10-20]%	[...]	[10-20]%
Total	[...]	100%	[...]	100%	[...]	100%

Source: Form CO.

- (406) Table 2 shows that pre-Transaction the Parties are number two and [...] providers of retail fixed internet access services in Germany.
- (407) Based on the subscriber data presented in Table 2, post-Transaction the merged entity would have a market share over [30-40]% ([30-40]% in 2017/2018) with an increment of about [10-20]%. Post-Transaction, the merged entity would be the second larger provider of retail internet access services in Germany behind Deutsche Telekom ([30-40]% by subscribers). The next largest competitors are United Internet ([10-20]% by subscribers), Telefónica ([5-10]% by subscribers) and regionally operating city carrier EWE Tel ([0-5]% by subscribers). The market share data by

subscribers provided by the Notifying Party is confirmed by the Commission's market reconstruction exercise.³³⁹

(408) Based on revenues, the market positioning of the Parties and their competitors would be equivalent, albeit the combined shares of the Parties are lower. Nonetheless, considering the high discrepancy between the subscriber and revenue data, the Commission considers that the subscriber figures (verified in the market reconstruction) are likely to more accurately reflect the competitive constraints exerted by the Parties in the relevant market. The lower revenue figures may be the result of wrong assumptions made by the Parties in their methodology (which the Commission could not verify in the market reconstruction for lack of data) or may evidence a more aggressive pricing behaviour of the Parties.

(409) Table 3 shows operators' gross adds shares between 2015 to 2018.

Table 3: Gross adds market shares for the retail supply of fixed internet services

Nationwide	2015/2016		2016/2017		2017/2018	
	'000	%	'000	%	'000	%
Vodafone	[...]	[20-30]%	[...]	[20-30]%	[...]	[20-30]%
of which only DSL	[...]	[10-20]%	[...]	[10-20]%	[...]	[10-20]%
of which only cable	[...]	[10-20]%	[...]	[10-20]%	[...]	[10-20]%
Unitymedia	[...]	[10-20]%	[...]	[10-20]%	[...]	[10-20]%
Combined	[...]	[30-40]%	[...]	[30-40]%	[...]	[30-40]%
Deutsche Telekom	[...]	[20-30]%	[...]	[20-30]%	[...]	[30-40]%
United Internet	[...]	[10-20]%	[...]	[10-20]%	[...]	[10-20]%
Telefónica	[...]	[5-10]%	[...]	[5-10]%	[...]	[5-10]%
Others	[...]	[10-20]%	[...]	[10-20]%	[...]	[10-20]%
Total	[...]	100%	[...]	100%	[...]	100%

Source: Form CO.

(410) Table 3 shows that pre-Transaction the Parties are number two and [...] providers of retail fixed internet access services in Germany also based on gross adds. Post-Transaction the merged entity would become the market leader ahead of Deutsche Telekom with a gross add share of [30-40]% based on the figures of the last business year. [ASSESSMENT OF MARKET POSITION].

(411) Table 4 shows operators' net adds, net add shares as well as annual growth rates between 2015 to 2018.

Table 4: Net adds and annual growth rates for the retail supply of fixed internet services

Nationwide	2016/2017			2017/2018		
	'000	Grow rate %	Share %	'000	Grow rate %	Share %
Vodafone	[...]	[5-10]%	[30-40]%	[...]	[5-10]%	[30-40]%
of which only DSL	[...]	[0-5]%	[5-10]%	[...]	[0-5]%	[5-10]%
of which only cable	[...]	[5-10]%	[20-30]%	[...]	[5-10]%	[20-30]%
Unitymedia	[...]	[5-10]%	[10-20]%	[...]	[0-5]%	[10-20]%
Combined	[...]	[5-10]%	[50-60]%	[...]	[0-5]%	[40-50]%
Deutsche Telekom	[...]	[0-5]%	[20-30]%	[...]	[0-5]%	[30-40]%

³³⁹

The Commission's market reconstruction is presented in Annex I.

Nationwide	2016/2017			2017/2018		
	'000	Grow rate %	Share %	'000	Grow rate %	Share %
United Internet	[...]	[0-5]%	[5-10]%	[...]	[0-5]%	[5-10]%
Telefónica	[...]	[-0-5]%	[0-5]%	[...]	[-0-5]%	[-0-5]%
Others	[...]	[5-10]%	[20-30]%	[...]	[5-10]%	[20-30]%
Market average	[...]	[0-5]%	100%	[...]	[0-5]%	100%

Source: Form CO.

- (412) Table 4 shows that the Parties also perform well in terms of net adds. In fact pre-Transaction, the Parties [ASSESSMENT OF MARKET POSITION]. Their combined share of net adds covers about [...] of the market net additions. The other main competitors, Deutsche Telekom and United Internet, have grown more slowly than the Parties and than the market average, while Telefónica even experienced a slight decrease in its number of subscribers and has negative net add share. Together, regionally operating players have a number of net adds comparable to the one of Vodafone's DSL product and have grown significantly; however, they represent a heterogeneous collection of more than six small players³⁴⁰ active in distinct regional areas only. While Vodafone's DSL product has grown below the market average and its share of net adds is slightly below its market share, its annual growth rate is [ASSESSMENT OF MARKET POSITION] percentage points below the market average and it is still greater than the growth rate of any other DSL-based provider, including Deutsche Telekom and United Internet.

(iii) Shares in cable footprints

- (413) Table 5 sets out the shares of the Parties and their main competitors in the supply of retail internet access services in, respectively, Vodafone's and Unitymedia's cable footprints, in the business year 2017-2018.

Table 5: Shares for the retail supply of fixed internet services
(subscribers and revenues 2017/2018)

Footprint	Vodafone footprint		Unitymedia footprint	
	'000	%	'000	%
Subscribers				
Vodafone	[...]	[30-40]%	[...]	[5-10]%
of which only DSL	[...]	[0-5]%	[...]	[5-10]%
of which only cable	[...]	[30-40]%	[...]	[0-5]%
Unitymedia	[...]	[0-5]%	[...]	[30-40]%
Combined	[...]	[30-40]%	[...]	[40-50]%
Deutsche Telekom	[...]	[30-40]%	[...]	[20-30]%
United Internet	[...]	[10-20]%	[...]	[10-20]%
Telefónica	[...]	[5-10]%	[...]	[5-10]%
Others	[...]	[10-20]%	[...]	[5-10]%
Total	[...]	100%	[...]	100%

³⁴⁰ EWE Tel, Tele Columbus, M-Net, Net Cologne, Deutsche Glasfaser and others; see Form CO, Table 6.46.

Footprint	Vodafone footprint		Unitymedia footprint	
	'000	%	'000	%
Revenues				
Vodafone	[...]	[20-30]%	[...]	[5-10]%
of which only DSL	[...]	[0-5]%	[...]	[5-10]%
of which only cable	[...]	[20-30]%	[...]	[0-5]%
Unitymedia	[...]	[0-5]%	[...]	[30-40]%
Combined	[...]	[20-30]%	[...]	[30-40]%
Deutsche Telekom	[...]	[30-40]%	[...]	[30-40]%
United Internet	[...]	[20-30]%	[...]	[10-20]%
Telefónica	[...]	[10-20]%	[...]	[5-10]%
Others	[...]	[10-20]%	[...]	[10-20]%
Total	[...]	100%	[...]	100%

Source: Form CO.

- (414) In Vodafone's footprint, there is no actual overlap between the Parties as Unitymedia is not active.
- (415) Based on the subscriber data presented in Table 5, in Unitymedia's footprint, Vodafone is active on the basis of DSL. The Parties have a high combined share of [40-50]% in 2017/2018. Moreover, the increment brought about by the Transaction is substantial as Vodafone's market share lies at about [5-10]%. The merged entity's combined market share of [40-50]% would be significantly larger than the next largest player Deutsche Telekom with a market share of [20-30]%. The Transaction would strengthen Unitymedia's position as market leader. The subscriber share data provided by the Notifying Party are confirmed by the Commission's market reconstruction exercise.³⁴¹
- (416) Based on revenues, the positioning of the Parties and their competitors would be equivalent, albeit the combined shares of the Parties are lower. Nonetheless, considering the high discrepancy between the subscriber and revenue data, the Commission considers that the subscriber figures (verified in the market reconstruction provided in Annex I) are likely to more accurately reflect the competitive constraints exerted by the Parties. The lower revenue figures may be the result of wrong assumptions made by the Parties in their methodology (which the Commission could not verify in the market reconstruction for lack of data) or may evidence a more aggressive pricing behaviour of the Parties.
- (417) Both Parties have been able to grow their subscriber numbers and share from business year 2015/2016 to 2017/2018.

³⁴¹

At footprint level the shares reconstructed by the Commission are somewhat lower than the market shares calculated by the Notifying Party due to different methodologies applied to define the Unitymedia footprint. As explained in section VIII.C.2.2.2.2.(i), the Notifying Party uses marketable households as market size, while the Commission defines a wider market that includes all households in a given district, even if there is only partial network coverage in the respective region (this is also the reason why the footprint size (measured in homes/household) differs between the Commission's analysis and the Notifying Party's calculations). Thus the Commission considers the Notifying Party's shares at footprint level are reliable. The Commission's market reconstruction is provided in Annex I.

(iv) Shares at federal state and district level

- (418) Based on its market reconstruction provided in Annex I, the Commission notes that the combined subscriber shares of the Parties differ significantly between the Federal States of Unitymedia's footprint.
- (419) Similarly, in several large cities (that is, over 100 000 households) within Unitymedia's footprint, the combined shares of the Parties is higher than at national, footprint and federal state level.
- (420) Furthermore, the Commission's analysis shows that Unitymedia's network has high coverage in large cities. On the other hand, the network coverage is lower in the residual districts that include also rural areas. In line with this observation, the combined share of the Parties is lower in the residual districts.
- (421) The combined market share of the Parties has grown over time at each geographical level.
- (422) Nonetheless, the Commission also notes that the extent to which the Parties exert a competitive constraint on each other, measured in terms of increment brought about by the Transaction at the various geographic levels within the Unitymedia's footprint, is homogenous, in the sense that it is not limited to any specific cluster within the Unitymedia's footprint.

(v) Concentration levels

- (423) The Horizontal Merger Guidelines explain that, while the absolute level of the Herfindahl-Hirschman Index (the "HHI") can give an initial indication of the competitive pressure in the market post-Transaction, the change in the HHI (known as the "delta") is a useful proxy for the change in concentration directly brought about by the merger.³⁴² According to the Horizontal Merger Guidelines, the Commission is unlikely to identify horizontal competition concerns in a market with a post-Transaction HHI below 1000, with a post-Transaction HHI between 1000 and 2000 and a delta below 250, or a merger with a post-Transaction HHI above 2000 and a delta below 150.³⁴³
- (424) Table 6 sets out the level of HHI pre-transaction, post-Transaction and the change in HHI, based on the market shares and shares in cable footprint in the business years 2017-2018, as shown in Tables 2 and 5.

Table 6: HHI (2017-2018)

	Pre-Transaction	Post-Transaction	Change in HHI
Subscribers			
Nationwide	[2000-3000]	[2000-3000]	[0-500]
Vodafone footprint	[2000-3000]	[2000-3000]	0
Unitymedia footprint	[5000-6000]	[6000-7000]	[500-1000]
Revenues (incl. Others)			
Nationwide	[2000-3000]	[2000-3000]	[0-500]
Vodafone footprint	[3000-4000]	[3000-4000]	0
Unitymedia footprint	[2000-3000]	[2000-3000]	[0-500]
Revenues (excl. Others)³⁴⁴			

³⁴² Horizontal Merger Guidelines, paragraph 16.

³⁴³ Horizontal Merger Guidelines, paragraphs 19 and 20.

³⁴⁴ Since the category "Others" for revenues market shares is above 5%, the Commission has calculated HHI levels including and excluding such category.

	Pre-Transaction	Post-Transaction	Change in HHI
Nationwide	[2000-3000]	[2000-3000]	[0-500]
Vodafone footprint	[3000-4000]	[3000-4000]	0
Unitymedia footprint	[2000-3000]	[2000-3000]	[0-500]

Source: Commission's computation.

- (425) Pre-Transaction the retail market for the supply of fixed internet access services is very concentrated, with concentration levels above 2000 both at national level and in each of the cable footprints of the Parties. Concentrations levels are particularly high in the Unitymedia footprint, where they are above [5000-6000] based on subscriber data.
- (426) Post-Transaction, whilst no change will occur in terms of concentration in the Vodafone footprint, concentration levels will increase considerably both at national level and in the Unitymedia footprint, with change in HHI in both cases above [0-500] based on subscriber data (above [0-500] based on revenue data³⁴⁵). In particular, in the Unitymedia footprint concentration levels will exceed [6000-7000] based on subscriber data.

(vi) Conclusion

- (427) Based on the above, the Commission observes that, while the overlap between the Parties is limited to the Unitymedia footprint, shares, increment and change in concentration levels are high in the Unitymedia footprint, even higher in certain urban centres within that footprint and substantial also at national level. Notably, the size and evolution of the market shares of the Parties in the relevant market provide a first indication of the important competitive constraints exerted by the Parties in the highly concentrated retail market for the supply of internet fixed services in Germany. As a result of the Transaction, such constraints will be partly removed and the market would become even more concentrated.

2.2.2.3. Competitive constraint exerted by the Parties

- (428) In this section, the Commission assesses in detailed the competitive constraints exerted by the Parties, which will be removed by the Transaction, as well as their likely evolution absent the Transaction.
- (429) The assessment is undertaken, firstly, in relation to the constraints that each of the Parties has played, and it is likely to play absent the Transaction, in the market for the retail supply of fixed internet access in Germany (sections VIII.C.2.2.2.3.(i) and (ii)), and secondly, in relation to the constraint that the Parties have exerted on each other and the degree to which they are close competitors (section VIII.C.2.2.2.3.(iii)).

(i) Unitymedia

- (430) The Commission considers that Unitymedia has exerted an important competitive constraint in the German retail market for internet access services. This assessment is based on (i) its shares, illustrated in section VIII.C.2.2.2.2., (ii) its market performance with respect to the most important parameters of competition as well as (iii) its network infrastructure and investment to further developed it.
- (431) Firstly, as illustrated in section VIII.C.2.2.2.2., Unitymedia is the [ASSESSMENT OF MARKET POSITION] largest provider of retail fixed internet access services in

³⁴⁵ For the reasons explained in section VIII.C.2.2.2.2.(i), the Commission considers the subscriber figures provided by the Notifying Party (as verified in the market investigation) more reliable than the revenue ones.

Germany and the market leader in the area covered by its cable network. This is true based on all types of share metrics (subscribers, revenues and gross adds) to the extent they were available to the Commission. Based on net adds, Unitymedia is also the [ASSESSMENT OF MARKET POSITION] largest provider at national level. Finally, Unitymedia [ASSESSMENT OF MARKET POSITION].

- (432) Secondly, as regards performance with respect to the main parameters of competition identified in section VIII.C.2.2.2.1.(iii), the Commission notes the following:
- (a) With regard to price, as further discussed in section VIII.C.2.2.2.3.(iii), the Commission's pricing analysis indicates that Unitymedia offers the best value for money in its footprint. Unitymedia offers the cheapest prices and/or more bandwidth at similar prices than its competitors. Unitymedia also offers cable services under its lower tier "Eazy" brand which offers lower price points for more price-sensitive customers.
 - (b) With respect to download speed, based on its cable network, Unitymedia offers speeds of 30, 150 and 400 Mbit/s as well as 1,000 Mbit/s in some instances (currently in parts of Bochum). With this product portfolio, Unitymedia offers the highest speeds available from large players within its footprint, while DSL-based competitors can only offer up to 250 Mbit/s.
- (433) Thirdly, as explained in section VIII.C.2.2.2.1.(i), Unitymedia is one of the three main infrastructure-based competitors besides Vodafone and Deutsche Telekom. Unitymedia's cable network covers approximately [...] of the households in the three Federal States North Rhine-Westphalia, Baden-Württemberg and Hesse, which are the most populated Federal States of Germany.
- (434) Unitymedia has been active in making investment in its fixed infrastructure. In this respect, the Commission notes that Unitymedia was the first cable operator to invest in feedback channel coverage (Hybrid Fibre Coax ("HFC"); "Rückkanal-Abdeckung"). Also, in 2009, Unitymedia was the first cable operator to implement the DOCSIS 3.0 standard. Shortly after, Kabel Deutschland followed Unitymedia and also rolled out a DOCSIS 3.0 network. In 2011, Unitymedia was the first cable provider to breach the 100 Mbit threshold.³⁴⁶ In 2017, after the shutdown of analogue TV broadcasting, Unitymedia was the first cable operator to roll out the new cable standard DOCSIS 3.1.³⁴⁷
- (435) Absent the Transaction, [DETAILS OF BUSINESS STRATEGY].³⁴⁸ Unitymedia's strategic planning with regard to DOCSIS 3.1 is currently on hold in light of the acquisition by Vodafone.³⁴⁹ [DETAILS OF BUSINESS STRATEGY].³⁵⁰ Furthermore, Winni Rapp, the current CEO of Unitymedia, was quoted after the

³⁴⁶ See "EuroDOCSIS 3.0: Kabelnetz-Ausbau kommt voran", 21 August 2011, available at: https://www.onlinekosten.de/news/eurodocsis-3-0-kabelnetz-ausbau-kommt-voran_183329.html [ID 4948].

³⁴⁷ See DSLWEB Breitband Report Deutschland Q3 2017, available at: <https://www.dslweb.de/breitband-report-deutschland-q3-2017.php> [ID 4959].

³⁴⁸ See Form CO, paragraph 6.371.

³⁴⁹ *The former Unitymedia CEO Lutz Schüler had said in July 2018 that due to the upcoming acquisition of Unitymedia by Vodafone no further gigabit cities would be announced.* See <https://www.golem.de/news/docsis-3-1-unitymedia-schafft-weitere-gigabit-staedte-1902-139715.html>. [ID 4963] Original German version of the statement: "Der frühere Unitymedia-Chef Lutz Schüler hatte im Juli 2018 gesagt, dass wegen der anstehenden Übernahme von Unitymedia durch Vodafone keine weiteren Gigabit-Städte angekündigt würden."

³⁵⁰ See RFI 25 to the Parties, question 7.

announcement of Mannheim and Heilbronn as follows: “*Rapp did not yet want to say how the Gigabit expansion will continue in 2019. A decision on the planned acquisition of Unitymedia by Vodafone is expected in mid-2019.*”³⁵¹

- (436) Unitymedia has also been active in network expansion, constantly increasing its number of covered households.³⁵² Based on the information provided by the Notifying Party, depicted in Table 7, Unitymedia has increased the number of homes passed [...]. In the period from 2014 to 2018, in total, Unitymedia has increased the number of homes passed by [...] whereas [...] in the same period.

Table 7: Homes passed by Parties’ networks
[DETAILS OF NETWORK COVERAGE]

Source: Vodafone: Annex C.V.1 of Response to the Article 6(1)(c) Decision and Unitymedia’ reply to RFI 22, question 9.

- (437) The Parties themselves in their submissions confirmed that Unitymedia has been very active as part of this [DETAILS OF COMMERCIAL ACTIVITIES AND BUSINESS STRATEGY].³⁵³ The majority of this initiative [DETAILS OF COMMERCIAL ACTIVITIES AND BUSINESS STRATEGY], but also the [DETAILS OF COMMERCIAL ACTIVITIES AND BUSINESS STRATEGY]. Some households [DETAILS OF COMMERCIAL ACTIVITIES AND BUSINESS STRATEGY].³⁵⁴
- (438) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]. According to Unitymedia’s latest strategy documents, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].³⁵⁵ [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] reflected in public statements made by Unitymedia: “*Meanwhile network expansion continues. Since the start of the GigaBuild initiative in 2015, Unitymedia has connected more than half a million new households to its cable network. In Q3 2018 alone, 34,000 households were added. Rapp [CEO of Unitymedia] stressed that the footprint would be continuously extended.*”³⁵⁶
- (439) In the Statement of Objections, based on the elements described in recitals (434) to (438), the Commission preliminarily considered that Unitymedia was an investment/innovation leader, which had played a key role, in recent years, in driving investments and innovation in fixed infrastructure in Germany. That view was supported by some respondents to the market investigation. In particular, Telefónica describes Unitymedia’s role in the market as follows: “*price and infrastructure/innovation competition is expected to grow, driven to a significant extent by Unitymedia. Indeed, Unitymedia is a strong infrastructure-based supplier and a pure cable operator with both the ability as well as the incentive to compete on prices and to continue to invest in its cable network. Absent the Proposed Transaction, Unitymedia would likely continue to constrain Vodafone and Deutsche Telekom’s competitive behaviour, to invest in rolling out DOCSIS 3.1, and to strengthen its position as a supplier of fixed and mobile telecommunications and TV [...].*”³⁵⁷

³⁵¹ See <https://www.broadbandtvnews.com/2018/11/08/unitymedia-continues-docsis-3-1-rollout/> [ID 5097]

³⁵² See Telefónica, Memorandum Theories of Harm, p. 36 [ID 3228].

³⁵³ See Parties’ reply to RFI 11, question 1.

³⁵⁴ See Form CO, paragraph 6.618.

³⁵⁵ See [REFERENCE TO INTERNAL DOCUMENT], Annex 28.5 to Parties’ reply to RFI 22.

³⁵⁶ See <https://www.broadbandtvnews.com/2018/11/08/unitymedia-continues-docsis-3-1-rollout/> [ID 5079].

³⁵⁷ Telefónica, submission of 26 October 2018, Memorandum Theories of Harm, page 3 [ID 3228].

- (440) In the Response to the Statement of Objections, the Parties point to documentary evidence showing that [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].³⁵⁸ Furthermore, they explain that network [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].³⁵⁹ Therefore, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].³⁶⁰
- (441) Based on the review of Unitymedia's internal documents, in light of the further information provided by the Parties in the Response to the Statement of Objections, the Commission considers that Unitymedia constitutes an important competitive constraint also in light of its continuous effort in keeping up with technological developments to support the delivery of good quality services to its customers and prevent capacity constraint issues, regardless of whether it may be considered an important innovation driver in Germany. In addition, as further explained in section VIII.C.2.2.2.3.(iii)(a), the Commission notes that Unitymedia's network investment and innovation activities have not had a direct competitive impact on Vodafone's network investment and innovation strategy and that the monitoring of Unitymedia's activities in that respect by Vodafone has not gone beyond "*simple commercial benchmarking aimed at monitoring and possibly imitating best practices in the industry*".³⁶¹
- (442) In the market investigation, respondents have pointed to the possibility that Unitymedia would expand its network into Vodafone's footprint and thus that pre-Transaction, as well as absent the Transaction, Unitymedia constitutes a potential competitive threat over Vodafone's cable business that would be removed by the Transaction. The Commission considers that, if Unitymedia were to pursue such a strategy, the expansion would also relate to building cable/fibre for the supply of TV signal transmission to MDU customers, due to the larger number of customers that the investment would allow to serve. Nonetheless, as further explained in section VIII.C.2.4.2.3.(ii), the Commission has not identified sufficient evidence that would suggest that Unitymedia's expansion into Vodafone's footprint would be likely or reasonably predictable absent the Transaction. To the contrary, the evidence on file does not support third parties' claims on the loss of the potential competitive threat exerted by Unitymedia over Vodafone's cable business.
- (443) In the light of the above, as well as the evidence presented in section VIII.C.2.2.2.3.(iii) on competitive constraint exerted by the Parties on each other, the Commission considers that Unitymedia exerts an important competitive constraint in the retail market for the supply of fixed internet access services in Germany.
- (444) No evidence in the Commission's file suggests that, absent the Transaction, the competitive constraint exerted by Unitymedia is likely to deteriorate.

(ii) Vodafone

- (445) The Commission considers that Vodafone has exerted an important competitive constraint in the German retail market for internet access services. This assessment is based on (i) its shares, illustrated in section VIII.C.2.2.2.2., (ii) its market performance with respect to the most important parameters of competition, (iii) its

³⁵⁸ For example, [REFERENCE TO INTERNAL DOCUMENT], cited in the Response to the Statement of Objections.

³⁵⁹ [REFERENCE TO INTERNAL DOCUMENT].

³⁶⁰ [REFERENCE TO INTERNAL DOCUMENT].

³⁶¹ Commission decision of 30 May 2018 in Case M.7000 – *Liberty Global/Ziggo*, paragraphs 667 and 694 to 695.

network infrastructure and investment to further developed it as well as (iv) its unique characteristics which make it a strong competitor even when it sells DSL products.

- (446) Firstly, as illustrated in section VIII.C.2.2.2.2., Vodafone is the second largest supplier of retail fixed internet access services in Germany and the [ASSESSMENT OF MARKET POSITION] largest provider in the area covered by Unitymedia's cable network. This is true based on all types of share metrics (subscribers, revenues, gross adds) to the extent they were available to the Commission. Finally, Vodafone [ASSESSMENT OF MARKET POSITION] annual growth rate in the market overall, considering both its cable and DSL business. While Vodafone's DSL product [ASSESSMENT OF MARKET POSITION], its annual growth rate is [ASSESSMENT OF MARKET POSITION] percentage points below the market average and [ASSESSMENT OF MARKET POSITION].
- (447) Secondly, as regards **performance** with respect to the main parameters of competition identified in section VIII.C.2.2.2.1.(iii), the Commission notes the following.
- (448) With regard to price, as further discussed in section VIII.C.2.2.2.3.(iii), the Commission's pricing analysis indicates that Vodafone's prices are very competitive and in particular that its cable prices are even more favourable than Unitymedia's ones.
- (449) Respondents to the market investigation see Vodafone as an aggressive player, even when it sells DSL, in particular compared to the pricing of other DSL-based competitors. For instance, one respondent points to the fact that Vodafone was the first operator to introduce a headline price³⁶² of below EUR 20.³⁶³ Moreover, Vodafone often makes available special offers (including online discounts) and promotions on hardware (for example, offering fritz box partly for free) as discussed in section VIII.C.2.2.2.3.(iii).³⁶⁴ One respondent highlights Vodafone's particular focus on aggressive marketing campaigns: *"Due to the high density of shops, Vodafone in particular has ensured low entry prices with aggressive pricing on shop windows and posters. This was usually followed relatively quickly by the United Internet (1&1) and O2 DSL."*³⁶⁵
- (450) With respect to download speed, based on its cable network, Vodafone offers speeds of 50, 100, 200, 400 and 500 Mbit/s. With this product portfolio, Vodafone offers the second highest speeds available in Germany among large suppliers and it is second only to Unitymedia, while DSL-based competitors can only offer up to 250 Mbit/s. As regards DSL, the Commission notes that Vodafone belongs to the early adopters of new DSL-based products. For instance, Vodafone started to offer high bandwidths of 250 Mbit/s for its DSL product in August 2018 in parallel to Deutsche Telekom and United Internet and earlier than the remaining competitors.³⁶⁶
- (451) Thirdly, as explained in section VIII.C.2.2.2.1.(i), Vodafone is one of the three main infrastructure-based competitors besides Unitymedia and Deutsche Telekom since its acquisition of Kabel Deutschland in 2013.

³⁶² Headline prices are the advertised prices.

³⁶³ Deutsche Telekom's reply to questionnaire Q11, question 79 [ID 3971]

³⁶⁴ Deutsche Telekom's reply to questionnaire Q11, question 80 [ID 3971]

³⁶⁵ EWE Tel's reply to questionnaire Q11, question 85.1 [ID 4047].

³⁶⁶ Telefónica's reply to questionnaire Q11, question 71/79 [ID 4109]. See also Responses to the Statement of Objections, paragraph 76(ii)(b).

- (452) The Commission notes that, albeit at a slower pace compared to Unitymedia, Vodafone is also competing on innovation and invests in network upgrade and expansion to maintain its market position. More precisely, until recently Vodafone has made only limited investment in network expansion to adjacent areas or in the roll out of FTTB infrastructure.³⁶⁷ Recently, however, in the context of its Gigabit strategy announced in September 2017, Vodafone has committed to invest [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY] in fibre projects over the next four years, including GigaGemeinde projects.³⁶⁸ Vodafone's GigaGemeinde or "municipality model" programme focuses on [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY]³⁶⁹ Besides GigaGemeinde, the upgrade of existing cable infrastructure through the accelerated adoption of DOCSIS 3.1 technology is the third leg of Vodafone's Gigabit investment plan. Vodafone's Gigabit offensive was implemented very recently only. As noted in a presentation of July 2018: "[REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]"³⁷⁰
- (453) In the market investigation, respondents have pointed to the possibility that Vodafone would expand its network into Unitymedia's footprint and thus that pre-Transaction, as well as absent the Transaction, Vodafone constitutes a potential competitive threat over Unitymedia's cable business that would be removed by the Transaction. The Commission considers that, if Vodafone were to pursue such a strategy, the expansion would also relate to building cable/fibre for the supply of TV signal transmission to MDU customers, due to the larger number of customers that the investment would allow to serve. Nonetheless, the Commission notes the following:
- (a) As further explained in section VIII.C.2.4.2.3.(i), the Commission has not identified sufficient evidence that would suggest that Vodafone's expansion into Unitymedia's footprint would be likely or reasonably predictable absent the Transaction. To the contrary, the evidence on file does not support third parties' claims on the loss of the potential competitive threat exerted by Vodafone over Unitymedia's cable business.
 - (b) In addition, as further explained in section VIII.C.2.2.2.3.(iii)(a), the Commission notes that Vodafone's network investment and innovation activities have not had a direct competitive impact on Unitymedia's network investment and innovation strategy and that the monitoring of Vodafone's activities in that respect by Vodafone has not gone beyond "*simple commercial benchmarking aimed at monitoring and possibly imitating best practices in the industry*".³⁷¹
- (454) Fourthly, the Commission notes that, to the extent that it competes on the basis of wholesale access to Deutsche Telekom's network, Vodafone has been able to compete on par with United Internet and to operate more competitively than other

³⁶⁷ See Form CO, para 6.379.

³⁶⁸ Vodafone's Gigabit strategy plan an investment of EUR 2 billion for both GigaGemeinde and GigaGewerbe. GigaGewerbe projects, [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY], concern the connection of business parks and are therefore not relevant for the supply of retail fixed internet access services to residential and small business customers.

³⁶⁹ See Form CO, paragraph 6.381 ff.

³⁷⁰ See Form CO, Annex 6.C.III.17B.

[DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY]. See Form CO, paragraph 6.610.

³⁷¹ Commission decision of 30 May 2018 in Case M.7000 – *Liberty Global/Ziggo*, paragraphs 667 and 694 to 695.

providers operating on the basis of wholesale access, due to unique characteristics. More precisely:

(a) Vodafone has several assets that allow it to obtain more favourable conditions from Deutsche Telekom than other access seekers and this allows it to be more price aggressive in the retail market. Even in relation to its DSL business, [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].

(i) As Vodafone explained, [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY]. More specifically, Vodafone currently uses both Layer 2 and Layer 3 access [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].³⁷² Around [...] of Vodafone's nationwide VDSL customers are already based on bitstream rather than LLU/SLU access. [...] of these VDSL bitstream customers were supplied via Layer 2 access at the end of business year 2018/2019 (an increase from about [...] in the previous business year).³⁷³

(ii) Vodafone owns its own IP-Backbone and connects its network to the biggest part of the 897) Broadband Network Gateways of Deutsche Telekom (Layer 2 platform). [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].³⁷⁴

(iii) Vodafone owns its own fixed infrastructure up to the Central Office ('Hauptverteiler', HVT). The last mile ('letzte Meile') from the Central Office to the customer is owned by Deutsche Telekom. Vodafone has access to the last mile via the wholesale product local copper line ('Teilnehmeranschlussleitung', TAL) offered by Deutsche Telekom.³⁷⁵

Thanks to this infrastructure, Vodafone is able to achieve lower wholesale access prices from Deutsche Telekom for VDSL. Indeed:

- The monthly fee Vodafone has to pay for HVt-TAL to Deutsche Telekom is EUR [...] and for KVz-TAL it is EUR [...]. The alternative ADSL wholesale products from Deutsche Telekom have a significantly higher monthly fee of EUR [...] depending on the specific access product. As a result of its ownership of infrastructure, Vodafone can rely on the more favourable TAL wholesale products.³⁷⁶
- The wholesale product Bitstream Layer 2 ('IP BSA') offered by Deutsche Telekom under the Kontingentmodell is the [...], allowing for a cost reduction compared to players using Layer 3 access products. In this respect, in the Statement of Objections, based on the data submitted by Telefónica³⁷⁷, the Commission estimated the cost advantage of Vodafone at around [...]. In the Response to the Statement of Objections, the Notifying Party submitted revised figures for the price differential between Layer 2 and Layer 3 bitstream access. The Commission notes that, while the cost reduction based on the figures submitted by the Notifying Party is lower compared to the data in the Statement of

³⁷² See Form CO, para 6.355.

³⁷³ See Parties' reply to RFI 24, question 18.

³⁷⁴ See Parties' reply to RFI 24, question 17.

³⁷⁵ Telefónica, submission of 10 March 2019, Access Seeker Memorandum, page 5 [ID 4891].

³⁷⁶ Telefónica, submission of 10 March 2019, Access Seeker Memorandum, page 6 [ID 4891].

³⁷⁷ Telefónica, Access Seeker Memorandum, para I (3) [ID 4891].

Objections, still the Notifying Party's figures confirm that Vodafone enjoys a cost advantage in the range of [...] for low speed wholesale access products to [...] for the 250 Mbit/s wholesale access products. The Notifying Party claims that the lower costs of Layer 2 bitstream access are offset by the greater infrastructure investment costs incurred by the access taker to build out the 897 access points (against 73 access points in the case of Layer 3 access). In this regard, the Commission agrees with the Notifying Party that Vodafone's cost advantage results from the greater investment in infrastructure it has made. In fact, this is precisely the element on the basis of which the Commission considers that Vodafone (together with United Internet) has been able to compete more aggressively than other providers operating on the basis of wholesale access. The fixed costs incurred by Vodafone to be able to benefit from Layer 2 wholesale cost structure translate into lower variable costs under Deutsche Telekom's Kontingentmodell and thus increase Vodafone's ability to compete on price compared to other xDSL access seekers.

- (b) Vodafone's competitive situation benefits from its cable infrastructure also outside its cable footprint. Indeed, Vodafone's marketing activity focuses on promoting cable (with higher bandwidth) which attracts potential customers to Vodafone's sales channels. This increases its chances of winning the customer, even when it turns out that Vodafone can only provide a DSL product (in particular by combining the offer with mobile bundle advantages).³⁷⁸ Moreover, respondents to the market investigation explain that Vodafone is often able to retain customers that are moving out of its cable footprint by migrating these customers to comparable DSL propositions.³⁷⁹
- (455) The important competitive constraint exerted by Vodafone, including its DSL product, is also confirmed by Unitymedia's internal documents. [...]:
 - (a) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].

Figure 4: [REFERENCE TO INTERNAL DOCUMENT]
[REFERENCE TO INTERNAL DOCUMENT]
Source: [REFERENCE TO INTERNAL DOCUMENT].
 - (b) A 2016 presentation [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] states that [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]³⁸⁰
 - (c) In another presentation of August 2017, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].³⁸¹
 - (d) Similarly, a presentation of August 2018 states that [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].³⁸²
- (456) Finally, in relation to the Notifying Party's argument that Vodafone's DSL offer is not a strong competitive constraint because [...] of Vodafone's customers in Unitymedia's footprint use ADSL technology which is a legacy product [DETAILS OF COMMERCIAL ACTIVITIES], the Commission notes that, according to the

³⁷⁸ Pyur's reply to questionnaire Q11, question 80 [ID 4020].

³⁷⁹ Pyur's reply to questionnaire Q11, question 81.1.8 [ID 4020].

³⁸⁰ [REFERENCE TO INTERNAL DOCUMENT].

³⁸¹ [REFERENCE TO INTERNAL DOCUMENT].

³⁸² [REFERENCE TO INTERNAL DOCUMENT].

forecast provided by the Notifying Party, [DETAILS OF COMMERCIAL ACTIVITIES] in the financial year which is set to start at the time of adoption of this Decision, as shown in Figure 5.³⁸³

Figure 5: Vodafone nationwide DSL subscribers split by ADSL and VDSL
Nationwide
[...]
Unitymedia's footprint
[...]

Source: Parties' reply to RFI 24, question 18.

- (457) Importantly, as explained by Vodafone, currently, approximately [...] of Vodafone's ADSL customers nationally and [...] in the Unitymedia footprint can be upgraded to VDSL if they wish.³⁸⁴ In fact, the Notifying Party explains that, absent the Transaction, its strategy would [COMMERCIAL ACTIVITIES AND STRATEGY]. Moreover, the Commission notes that [...]. The fact that [...] is not *per se* indication that [...] but it could rather be explained with [...] also reported in Unitymedia's and Vodafone's internal documents.³⁸⁶ In fact, the Commission notes that Vodafone estimated [COMMERCIAL ACTIVITIES].³⁸⁷ In this respect, the argument put forward by the Notifying Party's in the Response to the Statement of Objections, whereby Telefónica reports that more of its DSL customers are already on VDSL and that United Internet has proportionally more VDSL customers compared to Vodafone, has no bearing. Indeed, for the reasons explained in section VIII.C.2.2.2.4, Telefónica still remains a player with a limited market share and reduced ability to compete in the market. Furthermore, for the reasons explained in section VIII.C.2.2.2.4, the Commission has acknowledged that post-Transaction United Internet may be likely to have the ability to compete at least as regards price, but it may not have the incentives to do so to such an extent as to counteract the loss of competition deriving from the Transaction.
- (458) In the light of the above, as well as taking into account the evidence presented in section VIII.C.2.2.2.3.(iii) on the competitive constraint exerted by the Parties on each other, the Commission considers that Vodafone exerts an important competitive constraint in the retail market for the supply of fixed internet access services in Germany.
- (459) No evidence in the Commission's file suggests that, absent the Transaction, the competitive constraint exerted by Vodafone is likely to deteriorate. To the contrary, market participants expect the competitive pressure exerted by Vodafone to lead competitors, such as Unitymedia, to compete harder. In this respect, Telefónica stated that: *"In fact, Unitymedia may be expected to significantly step up its efforts to compete in the provision of fixed retail telecommunication services in the years to come, in particular in light of Vodafone's increasing pressure in Unitymedia's cable footprint"*.³⁸⁸

³⁸³ See Parties' reply to RFI 24, question 18. [...].

³⁸⁴ See Parties' reply to RFI 24, question 18.

³⁸⁵ See Annex 1.1. to Parties' reply to RFI 24 and Parties' reply to RFI 24, question 20.

³⁸⁶ See for example [REFERENCE TO INTERNAL DOCUMENT] and Vodafone's internal documents, [REFERENCE TO INTERNAL DOCUMENT].

³⁸⁷ See Annex 1.1. to Parties' reply to RFI 24.

³⁸⁸ Telefónica, submission of 21 December 2018, Memorandum Theories of Harm, p. 3 [ID 3228].

(iii) Competitive constraint exerted by the Parties on each other

(460) In this section, the Commission assesses the competition constraint that the Parties exert on each other. In this respect, a distinction has to be made between the interaction between the Parties' cable businesses and the interaction between the Parties' businesses within Unitymedia's footprint. Indeed, as explained at recital (48), the Parties' activities in relation to the supply of fixed internet access services are based on their own respective cable networks, which do not overlap. However, there are geographic overlaps between the Parties' activities in the Unitymedia's footprint, where Vodafone is active based on wholesale access to Deutsche Telekom's fixed network.

(a) Competitive interaction between the Parties' cable businesses

(461) As regards the competitive interaction between the Parties' cable businesses, the Commission notes that the Parties do not directly compete against each other to capture each other's customers. Their interaction takes the form of a continuous monitoring and benchmarking. In this respect, in the Statement of Objections the Commission identified a number of internal documents suggesting that the Parties benchmark themselves against each other nationwide. In particular, the Commission found documents suggesting that both Parties track the market performance [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]³⁸⁹ [...] ³⁹⁰ of each other's cable products, despite the lack of geographic overlap. Furthermore, in the Statement of Objections the Commission identified a number of internal documents suggesting that [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]. Notably, the Commission found [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]³⁹¹ [...] ³⁹².

(462) In the Response to the Statement of Objections, the Parties provided detailed clarifications about the documents at stake. They explained that those documents only show how the Parties benchmark each other's business as they represent each other's best comparator, alongside with other international examples contained in similar internal documents. On the other hand, the Parties clarified that the email correspondence, illustrated in the Statement of Objections, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].

(463) On the basis of the explanations provided by the Parties, the Commission considers that direct benchmarking between the Parties did not exceed "*simple commercial benchmarking aimed at monitoring and possibly imitating best practices in the industry*".³⁹³

(464) Furthermore, an analysis of retail prices did not reveal that price changes in the German retail market for the supply of fixed internet access services were consistently initiated by Vodafone or Unitymedia, sufficiently close in time to each other and in the same sequence, as would have been required for the two firms to indirectly constrain each other via a sequential pricing mechanism that transmits

³⁸⁹ [REFERENCE TO INTERNAL DOCUMENT]; Annex to Form CO, Annex 6.C.III.17B. [REFERENCE TO INTERNAL DOCUMENT].

³⁹⁰ [REFERENCE TO INTERNAL DOCUMENT]. [REFERENCE TO INTERNAL DOCUMENT]; [REFERENCE TO INTERNAL DOCUMENT]. [REFERENCE TO INTERNAL DOCUMENT].

³⁹¹ [REFERENCE TO INTERNAL DOCUMENT].

³⁹² [REFERENCE TO INTERNAL DOCUMENT].

³⁹³ Commission decision of 30 May 2018 in Case M.7000 – *Liberty Global/Ziggo*, paragraphs 667 and 694 to 695.

price changes of one firm to the territory of the other via national price responses of other players, such as Deutsche Telekom.³⁹⁴

- (465) Finally, the review of the Parties' internal documents [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]. Indeed, whilst, as explained in sections VIII.C.2.2.2.3.(i) and (ii), both Parties plan to continue expand their cable networks, these plans relate to [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]. Furthermore, as further explained in sections VIII.C.2.3.2.3.(i) and (ii), the Commission has not identified sufficient evidence that would suggest that either Party's expansion into the other Party's footprint would be likely or reasonably predictable absent the Transaction. To the contrary, as further explained in sections VIII.C.2.3.2.3.(i) and (ii), the evidence on file does not support third parties' claims on the loss of the potential competitive threat exerted by Parties over each other's cable business.
- (466) In light of the above, the Commission considers that the evidence in the file does not support the conclusion that the Parties' cable businesses exert an important competitive constraint on each other.
- (b) *Competitive interaction within Unitymedia's footprint*
- (467) Within Unitymedia's footprint, the competitive interaction between the Parties can be described in terms of substitutability. As stated in the Horizontal Merger Guidelines, the higher the degree of substitutability between the merging firms' products, the more likely it is that the merging firms would raise prices significantly.³⁹⁵ In this regard, the Commission needs to verify whether the rivalry between the parties to a concentration has been an important source of competition on the market.³⁹⁶
- (468) The parties to a concentration are not required to be each other's closest competitors for competition concerns to arise.³⁹⁷ As stated in the Horizontal Merger Guidelines, the higher the degree of substitutability of the products of the merging parties, the higher the likelihood to find competition concerns caused by a proposed merger. Closeness of competition between the merging parties is hence a matter of degree.
- (469) The Horizontal Merger Guidelines state that diversion ratios are one of the methods that can be used to assess the closeness of competition between the merging parties.³⁹⁸ The Commission has applied that type of analysis in previous merger cases in the telecommunications sector.³⁹⁹
- (470) The Commission's analysis is presented, firstly, based on a review of the qualitative evidence in the files (recitals (471) to (487)) and secondly, based on quantitative evidence (recitals (488) to (497)).

³⁹⁴ No finding in this respect was contained in the Statement of Objections.

³⁹⁵ Horizontal Merger Guidelines, paragraph 28.

³⁹⁶ Horizontal Merger Guidelines, paragraph 28.

³⁹⁷ Commission decision of 11 May 2016 in Case M.7612 – *Hutchinson 3G UK/Telefónica UK*, recitals 323-325; Commission decision of 2 July 2014 in Case M.7018 – *Telefónica Deutschland/E-Plus*, recitals 278-280.

³⁹⁸ Horizontal Merger Guidelines, paragraph 29.

³⁹⁹ For example, Commission decision of 1 September 2016 in Case M.7758 – *Hutchison 3G Italy / WIND / JV*; Commission decision of 11 May 2016 in Case M.7612 – *Hutchinson 3G UK/Telefónica UK*.

Qualitative evidence

- (471) As illustrated in section VIII.C.2.2.2.2.(iv), the retail market for the supply of internet fixed access services in Germany is very concentrated. As shown in Table 2 the Parties and the other two main suppliers, that is Deutsche Telekom and United Internet, account for over [80-90]% of the market by subscriptions.
- (472) Based on the evidence in the file, the Commission considers that, in such highly concentrated market, the Parties compete closely with each other, as well as with Deutsche Telekom and United Internet.
- (473) Firstly, this finding is supported by the responses of participants to the **market investigation**. In fact, in the first phase investigation, the majority of respondents ranked Vodafone as one of Unitymedia's closest competitors in the latter's footprint, considering parameters such as prices, quality, range of products offered.⁴⁰⁰ Most respondents also stated that Vodafone and Unitymedia currently exert significant competitive pressure on each other.⁴⁰¹
- (474) Similar results were obtained in the second phase market investigation. The Commission asked competitors to rank how closely different players have competed with the Parties' products in the German retail market for fixed internet access services in the past two to three years. Respondents stated that the closest competitor of Vodafone's DSL product is Deutsche Telekom, closely followed by Unitymedia and United Internet. NetCologne is next in the ranking, however, its footprint is very limited. Vodafone is considered to be significantly less close to Telefónica and Pyur.⁴⁰² Respondents expressed similar views when asked about the closeness of Unitymedia vis-à-vis several competitors. According to the Parties' competitors, Unitymedia is particularly close to Deutsche Telekom and Vodafone (DSL).⁴⁰³
- (475) Therefore, in line with the Commission's observation based on market shares, the ranking of the degree of closeness provided by respondents to the market investigation confirms that the German retail market for the supply of internet access service is essentially a four-player market, where Unitymedia, Deutsche Telekom, Vodafone and United Internet compete closely. While the degree of closeness between players operating on the basis of the same technology (xDSL network of Deutsche Telekom, that is to say Deutsche Telekom, Vodafone and United Internet) is higher, on balance there is a significant degree of closeness also between the Parties. Other players play a less significant role in the market.
- (476) Secondly, the finding of a close competitive behaviour of the Parties is supported by the **evidence on pricing** available in the Commission's file. Such evidence, presented in recitals (477) to (487), together with the other qualitative and quantitative evidence set out in this Decision presented respectively in recitals (473) to (475) and (488) to (497), shows that the Parties' pricing positioning is sufficiently close for their products to constitute an alternative for customers. To this effect, the fact that, as claimed by the Parties in the Response to the Statement of Objections, other competitors, such as United Internet, may also have a similar pricing behaviour has no bearing on the Commission's finding. This is because closeness of competition between the companies is a matter of degree, so the fact that other

⁴⁰⁰ Replies to questionnaire Q8, question 84.

⁴⁰¹ Replies to questionnaire Q8, question 85.

⁴⁰² Replies to questionnaire Q11, question 81.2.

⁴⁰³ Replies to questionnaire Q11, question 81.3.

competitors may have pricing behaviour similar to the one of the Parties (or more in general are also close competitors to the Parties) does not go against the conclusion that the Parties are close competitors.

- (477) In the first place, the Notifying Party has submitted an analysis of headline prices of 2P products including fixed internet access and fixed telephony services split by headline download speed on a quarterly basis for the period 2014 to 2018. This data is based on Vodafone's internal market intelligence. As the analysis focuses on headline prices, it shows limited price movements over time and does not represent effective prices paid by customers. Nevertheless, the data still constitutes a useful starting point for the analysis as it shows prices as originally marketed and as perceived by competitors and certain customers.
- (478) Figure 6 shows the evolution of headline prices for 2P products including fixed telephony and fixed internet access services with download speeds below 30 Mbit/s, while Figure 7 shows the evolution of headline prices for bundles including broadband products with download speeds from 100 to 200 Mbit/s.⁴⁰⁴ The comparison of headline prices gives the following insights into the competitive situation in the German market for retail internet access services:
- (a) Deutsche Telekom's headline prices are set at the highest level.
 - (b) Unitymedia's headline prices are particularly aggressive (even abstracting from Unitymedia's Eazy brand which is significantly cheaper than any of the other offers), especially if considering the speed offered. For speeds between 100 and 200 Mbit/s, Unitymedia offers the cheapest price.
 - (c) After Unitymedia, United Internet appears to be the most aggressive player in terms of pricing. However, at least for download speeds below 30 Mbit/s, this only holds for "1&1 Special 16" offer, not for its regular offer which is priced above Vodafone and Telefónica.
 - (d) Unitymedia, Vodafone, United Internet and Telefónica are competing closely in terms of pricing. For instance, at the end of the depicted period, for download speeds below 30 Mbit/s, Unitymedia, Vodafone and Telefónica offer their products at the same headline price (with Unitymedia offering more speed).

⁴⁰⁴

The figures provided by the Notifying Party for download speeds from 30 up to 100 Mbit/s and above 200 Mbit/s are not reproduced in this Decision. Nonetheless, firstly, they do not lead to a different result. Second, they are less relevant for a comparison as fewer competitors offer products in this range including Vodafone and Unitymedia.

Figure 6: Headline pricing analysis below 30 Mbit/s
Headline prices in Unitymedia's footprint for broadband products with download speeds below 30 Mbit/s



Source: Form CO, Figure 6.49.

Figure 7: Headline pricing analysis from 100 to 200 Mbit/s
Headline prices in Unitymedia's footprint for broadband products with download speeds from 100 up to 200 Mbit/s



Source: Form CO, Figure 6.51.

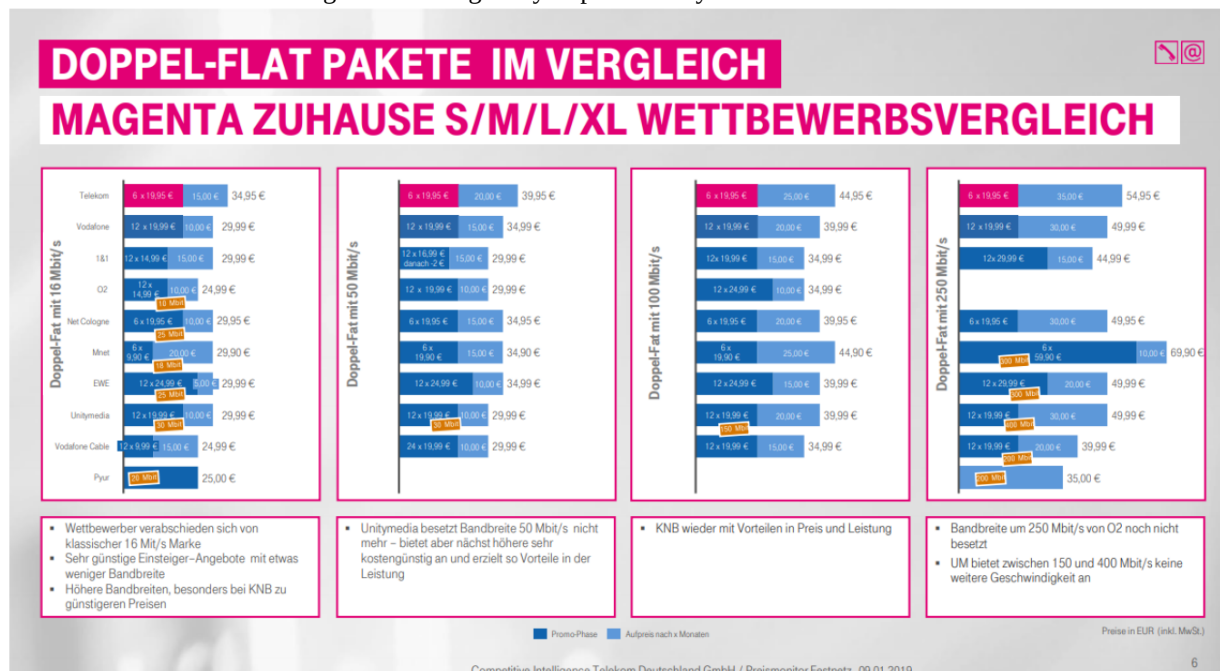
- (479) In the second place, the insights provided by the pricing analysis submitted by the Notifying Party are broadly in line with the description of other market participants.
- (480) In particular, respondents to the market investigation pointed to Unitymedia and United Internet as most aggressive players, while also describing Vodafone as relatively aggressive.⁴⁰⁵ For instance, Deutsche Telekom explains: “A price comparison of the different double play offerings shows (see annex price comparison) that the cable offerings of Vodafone and Unitymedia have an aggressive

⁴⁰⁵ Replies to questionnaire Q11, questions 83 and 85.2.

price/performance ratio; followed by 1&1 and Vodafone DSL as well as [Telefónica], although [Telefónica] does not offer a 250 Mbit/s product.”⁴⁰⁶

- (481) Several respondents to the market investigation have pointed out that Unitymedia and Vodafone are similar with regard to their extensive use of promotional campaigns. For instance, one respondent explained that: “Vodafone, Unity and United have established a market price “standard”. Vodafone and Unity often use additional promotions, especially on cable networks. Deutsche Telekom partly used similar discount schemes (e.g. 12 months 19,99 Euro).”⁴⁰⁷ Another respondent, specifically with regard to Vodafone’s DSL product, confirmed that Vodafone is known for its extensive discount policy, including discounts for the first months, one-time discounts if a customer subscribes online as well as discounts on hardware.⁴⁰⁸
- (482) In the third place, the pricing comparison provided by Deutsche Telekom, reproduced in Figure 8, also reports headline prices and confirms the conclusions based on the analysis of headline price provided by the Notifying Party.

Figure 8: Pricing analysis provided by Deutsche Telekom



Source: Annex to Deutsche Telekom’s reply to questionnaire Q11, question 83.9 [ID 3971].

- (483) In the fourth place, considering the promotional campaigns in which the Parties and their competitors engage, the headlines prices provided by the Notifying Party and depicted in Figures 6 to 8 do not show the full competitive interaction between the competitors active in the retail fixed internet access services market. In this regard, according to Telefónica, Unitymedia and Vodafone are the cheapest and closest competitors on the market for the retail supply of internet access services with Vodafone offering the lowest prices among DSL-based providers.⁴⁰⁹ The pricing analysis submitted by Telefónica of October 2018, which is based on Telefónica’s market intelligence data from its usual course of business and accounts for discounts

⁴⁰⁶ Deutsche Telekom's reply to questionnaire Q11, question 83.9 [ID 3971].

⁴⁰⁷ Freenet's reply to questionnaire Q11, question 85.1 [ID 3998].

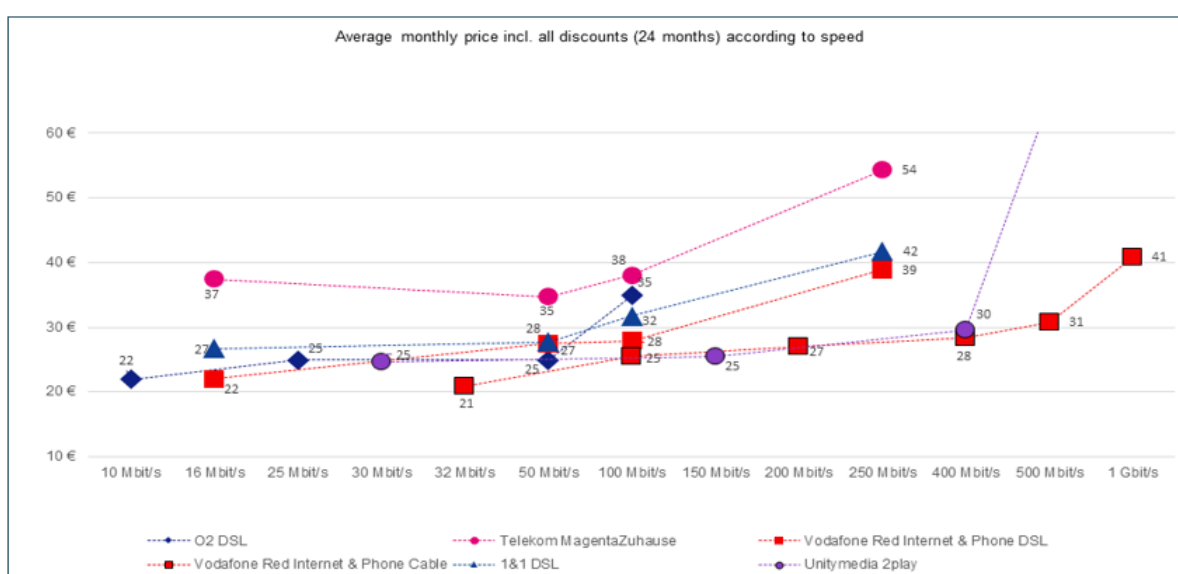
⁴⁰⁸ Telefónica's reply to questionnaire Q11, questions 72/80 [ID 4109].

⁴⁰⁹ Telefónica's reply to questionnaire Q11, question 72/80 [ID 4109]

over headline prices, supports the view that the Parties are the cheapest and closest competitors. Telefónica's pricing analysis is reproduced in Figure 9 and more generally leads to the following results when taking discounts into account:

- (a) It confirms that Deutsche Telekom's prices are significantly more expensive with regard to all speed categories.
- (b) It suggests that Vodafone's DSL product at speeds of 16Mbit/s and 100 Mbit/s are, at times (at least in October 2018), offered at the cheapest price available in Unitymedia's footprint.
- (c) It confirms that Unitymedia offers products at different bandwidths than its DSL-based competitor. Unitymedia offers more bandwidth at similar prices.
- (d) In October 2018, Vodafone and Unitymedia offered the cheapest prices for all speeds of 100 Mbit/s or higher in the Unitymedia footprint.

Figure 9: Pricing analysis provided by Telefónica, October 2018
Net retail prices for different bandwidths, October 2018



Source: Telefónica, Slides Meeting 27 November 2018, slide 9 [ID 3286].

- (484) In a subsequent submission, Telefónica also provided pricing analyses for November and December 2018. The observations that can be done based on these additional data points are similar to those drawn with respect to October 2018 data. For illustrative purposes, Figure 10 reproduce the December 2018 data and shows that the prices of Vodafone DSL and United Internet are more aligned for lower bandwidths and less aligned for higher bandwidths.

Figure 10: Pricing analysis provided by Telefónica, December 2018

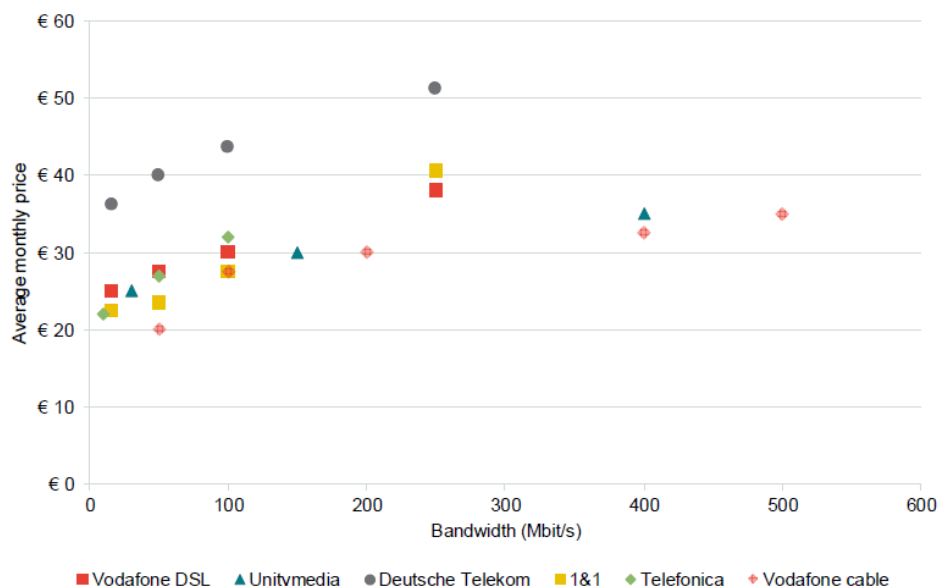
Net retail prices for different bandwidths, December 2018



Source: Telefónica, Slides Meeting 21 February 2019, slide 8 [ID 4901].

- (485) In the fifth place, in its Response to the Article 6(1)(c) Decision, the Notifying Party has submitted a further snapshot comparison of average monthly prices as of January 2019 in response to Telefónica's submission. The monthly prices reflect the average price over 24 months, including promotions on headline prices and monthly hardware costs. Moreover, the revised analysis includes a comparison of DSL prices for broadband speeds of 250 Mbit/s. When taking into account promotions, the pricing analysis of the Notifying Party shows the following results:
- (a) Deutsche Telekom's prices remain significantly more expensive with regard to all speed categories.
 - (b) For speeds below 100 Mbit/s, United Internet is significantly cheaper than Vodafone, with Telefónica also offering better or equal prices to Vodafone. However, Vodafone is cheaper than Telefónica for a speed of 100 Mbit/s. Moreover, Vodafone offers the lowest price available on the market for the DSL product with a speed of 250 Mbit/s.
 - (c) Unitymedia offers products at different bandwidths than its DSL-based competitors. Unitymedia typically offers higher bandwidths (for example, 30 Mbit/s instead of 16 and 50, 150 Mbit/s instead of 100) at similar prices to Vodafone's DSL products. Unitymedia offers its 400 Mbit/s product at a price below its competitors' 250 Mbit/s prices. Overall, Unitymedia offers the best value for money.
 - (d) In terms of price points, there is significant closeness between Unitymedia cable and Vodafone DSL, albeit at the lower end of the speed range. Vodafone's 16 Mbit/s DSL product and Unitymedia's 30 Mbit/s cable product are priced the same at EUR 24.99, while Vodafone's 100 Mbit/s DSL product, Vodafone's 200 Mbit/s cable product and Unitymedia's 150 Mbit/s product are priced at EUR 29.99.

Figure 11: Effective prices, January 2019
Comparison between 24 month average monthly price and bandwidth offered by different operators as of January 2019



Source: Response to Article 6(1)(c) Decision, Figure 5.

- (486) Therefore, even on the basis of the revised snapshot analysis submitted by the Notifying Party the Parties' pricing behaviour appears to be very similar.
- (487) This is confirmed by a comparison of effective prices carried out by Unitymedia in June 2018 and reproduced in Figure 12. According to this comparison, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].

Figure 12: [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]
[REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]

Source: [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]

Quantitative evidence

- (488) To assess the closeness of competition between the Parties with regard to the provision of fixed internet access services, which are often bundled with fixed telephony services (as set out in section VII.6.1), the Commission has computed the diversion ratios based on Fixed Number Portability ("FNP") data provided by the Parties.⁴¹⁰
- (489) When switching their telecommunications provider, consumers have the right to keep their fixed phone number. The FNP data records switches across fixed telephony operators relating to those customers who port their fixed number. As such, the diversion ratios based on FNP data are an informative proxy for the overall switching patterns in the retail market for fixed telecommunications services. The Commission is aware, however, that the FNP data have some limitations. Firstly, the FNP data include only switches of customers who port their fixed phone number⁴¹¹ and,

⁴¹⁰ Vodafone, reply to data RFI 8, 15, 17 and 21, and Unitymedia, reply to data RFI 8 and 18.

⁴¹¹ Number portability for fixed lines is not possible if a consumer is moving somewhere with a different prefix area code. In addition, some consumers do not care about keeping their number. Although FNP data relates to number porting, the Commission considers that the same data can be used to assess switching and closeness of competition Parties with regard to the provision of fixed internet access

secondly, switching behaviours are not necessarily induced by price changes but can also be the result of other non-price reasons. Although compared to the diversion ratios based on survey data the diversion ratios based on FNP data present some limitations, the Commission still considers the FNP data as a valuable source of information on customers' switching behaviours in the market for fixed internet access services.

- (490) The diversion ratio of firm j to firm i is computed as the number of port out requests received by firm j from firm i divided by the total number of port out requests received by firm j .
- (491) In the Statement of Objections, the Commission's analysis was based on quarterly portability data for the financial years 2016/17 and 2017/18 at national level⁴¹², at Unitymedia footprint level, and, within Unitymedia's footprint, at Federal State and district level (focusing on large cities with over 100 000 households).⁴¹³ In the Response to the Statement of Objections, the Parties contested that the figures presented by the Commission in the Statement of Objections did not include the most updated data provided by the Parties. In this Decision the Commission has therefore performed a revised analysis including also that data.
- (492) Table 8 presents the diversion ratios from Vodafone to its competitors and Table 9 from Unitymedia to its competitors for different geographical levels for the financial year 2017/18.⁴¹⁴ In addition, diversion ratios between the Parties are presented for the financial year 2016/17 and the second quarter of 2018.⁴¹⁵

Table 8: Vodafone's diversion ratio

Aggregation	2016/17	2017/18					2018 Q2
	Unity-media	Unity-media	Deutsche Telekom	United Internet	Telefonica	Others ⁴¹⁶	Unity-media
National	[20-30]%	[20-30]%	[40-50]%	[10-20]%	[5-10]%	[10-20]%	[10-20]%

services as the vast majority of consumers purchase fixed voice and broadband together (as set out in section VII.6.1). Thus, the fixed number porting process is also likely to indicate the destination of broadband customers in almost all cases where the number porting process is used.

⁴¹² Despite the analysis in this section relates to the competitive interaction between the Parties within the Unitymedia's footprint, the Commission has considered the diversion ratios at national level to assess to what extent the constraint exerted by the Parties' on each other within the Unitymedia's footprint is diluted when considered in the relevant market of national dimension.

⁴¹³ The analysis at footprint, federal state and district level includes only districts that are (at least partially) served by Unitymedia's cable network in Baden-Württemberg, Hessen and Nordrhein-Westfalen. Unitymedia's porting data were only available at telephone prefix areas and not at postal code level. In order to calculate the number of port outs on the postal code level a conversion table from Nexiga was used (provided by Deutsche Telekom in reply to data RFI 1).

⁴¹⁴ Diversion ratios to operator "Others" includes smaller providers that are not included in the analysis.

⁴¹⁵ Vodafone has provided data for the period from 2016 Q2 to 2018 Q3 and Unitymedia for the period 2016 Q1 to 2018 Q2 (in terms of calendar years). For consistency reasons, the Commission's analysis is based on the intersecting time interval of the provided data, that is to say, from 2016 Q2 to 2018 Q2 (in term of calendar years). The financial year 2016/17 runs from 1 April 2016 to 31 March 2017 (that is to say, 2016 Q2 to 2017 Q1).

⁴¹⁶ In the dataset provided by Vodafone, the operator category "Others" has been broken down into individual operators to the extent possible and thus further data cleaning for business customers, subsidiaries and other error sources was possible. In the dataset provided by Unitymedia, no further breakdown of the operator category "Others" was available for the porting data provided for telephone prefix areas. Thus, further data cleaning was not possible for Unitymedia and therefore Vodafone's data quality might be better.

Aggregation	2016/17	2017/18					2018 Q2
	Unity-media	Unity-media	Deutsche Telekom	United Internet	Telefonica	Others ⁴¹⁶	Unity-media
Unitymedia footprint	[40-50]%	[30-40]%	[40-50]%	[10-20]%	[5-10]%	[5-10]%	[30-40]%
Baden-Württemberg (BW)	[40-50]%	[30-40]%	[30-40]%	[10-20]%	[5-10]%	[0-5]%	[30-40]%
Hessen (HE)	[30-40]%	[30-40]%	[40-50]%	[10-20]%	[5-10]%	[5-10]%	[30-40]%
Nordrh.-Westfalen (NRW)	[40-50]%	[30-40]%	[40-50]%	[10-20]%	[5-10]%	[5-10]%	[30-40]%
BW: Stuttgart	[40-50]%	[40-50]%	[30-40]%	[10-20]%	[5-10]%	[0-5]%	[30-40]%
BW: Mannheim	[50-60]%	[40-50]%	[30-40]%	[10-20]%	[5-10]%	[0-5]%	[40-50]%
BW: Karlsruhe	[50-60]%	[50-60]%	[20-30]%	[20-30]%	[5-10]%	[0-5]%	[40-50]%
BW: Freiburg	[50-60]%	[40-50]%	[30-40]%	[10-20]%	[10-20]%	[0-5]%	[30-40]%
BW: Residual	[40-50]%	[30-40]%	[30-40]%	[10-20]%	[5-10]%	[0-5]%	[30-40]%
HE: Frankfurt a. M.	[50-60]%	[40-50]%	[30-40]%	[10-20]%	[5-10]%	[0-5]%	[40-50]%
HE: Wiesbaden	[40-50]%	[30-40]%	[30-40]%	[10-20]%	[10-20]%	[0-5]%	[40-50]%
HE: Kassel	[40-50]%	[30-40]%	[30-40]%	[10-20]%	[5-10]%	[5-10]%	[40-50]%
HE: Residual	[30-40]%	[30-40]%	[40-50]%	[10-20]%	[5-10]%	[5-10]%	[20-30]%
NRW: Köln	[20-30]%	[20-30]%	[30-40]%	[10-20]%	[5-10]%	[10-20]%	[10-20]%
NRW: Düsseldorf	[50-60]%	[40-50]%	[30-40]%	[10-20]%	[5-10]%	[0-5]%	[50-60]%
NRW: Essen	[30-40]%	[30-40]%	[40-50]%	[10-20]%	[5-10]%	[0-5]%	[30-40]%
NRW: Dortmund	[40-50]%	[30-40]%	[30-40]%	[10-20]%	[5-10]%	[0-5]%	[30-40]%
NRW: Duisburg	[40-50]%	[30-40]%	[40-50]%	[10-20]%	[5-10]%	[0-5]%	[30-40]%
NRW: Bochum	[50-60]%	[50-60]%	[30-40]%	[10-20]%	[0-5]%	[0-5]%	[50-60]%
NRW: Wuppertal	[50-60]%	[40-50]%	[30-40]%	[10-20]%	[5-10]%	[0-5]%	[40-50]%
NRW: Münster	[40-50]%	[30-40]%	[50-60]%	[5-10]%	[5-10]%	[0-5]%	[20-30]%
NRW: Bielefeld	[40-50]%	[40-50]%	[30-40]%	[5-10]%	[5-10]%	[5-10]%	[40-50]%
NRW: Bonn	[30-40]%	[30-40]%	[30-40]%	[10-20]%	[10-20]%	[0-5]%	[30-40]%
NRW: Aachen	[40-50]%	[30-40]%	[20-30]%	[5-10]%	[5-10]%	[30-40]%	[30-40]%
NRW: M'gladbach	[40-50]%	[20-30]%	[50-60]%	[10-20]%	[5-10]%	[0-5]%	[20-30]%
NRW: Gelsenkirchen	[50-60]%	[40-50]%	[40-50]%	[5-10]%	[0-5]%	[0-5]%	[40-50]%
NRW: Krefeld	[50-60]%	[40-50]%	[30-40]%	[10-20]%	[5-10]%	[0-5]%	[40-50]%
NRW: Oberhausen	[40-50]%	[20-30]%	[50-60]%	[10-20]%	[5-10]%	[0-5]%	[20-30]%
NRW: Residual	[30-40]%	[30-40]%	[40-50]%	[10-20]%	[5-10]%	[5-10]%	[20-30]%

Table 9: Unitymedia's diversion ratio⁴¹⁷

Aggregation	2016/17	2017/18					2018 Q2
	Voda-one	Voda-one	Deutsche Telekom	United Internet	Telefonica	Others ⁴¹⁸	Voda-fone
National	[10-20]%	[10-20]%	[50-60%]	[10-20]%	[5-10]%	[5-10]%	[10-20]%
Unitymedia footprint	[10-20]%	[10-20]%	[50-60%]	[10-20]%	[5-10]%	[5-10]%	[10-20]%
Baden-Württemberg (BW)	[10-20]%	[10-20]%	[50-60%]	[10-20]%	[5-10]%	[0-5]%	[10-20]%
Hessen (HE)	[10-20]%	[10-20]%	[50-60%]	[10-20]%	[5-10]%	[5-10]%	[10-20]%
Nordrh.-Westfalen (NRW)	[10-20]%	[10-20]%	[50-60%]	[10-20]%	[5-10]%	[10-20]%	[10-20]%
BW: Stuttgart	[20-30]%	[20-30]%	[40-50%]	[20-30]%	[5-10]%	[0-5]%	[20-30]%
BW: Mannheim	[10-20]%	[10-20]%	[50-60%]	[10-20]%	[5-10]%	[0-5]%	[10-20]%
BW: Karlsruhe	[10-20]%	[10-20]%	[50-60%]	[20-30]%	[5-10]%	[0-5]%	[10-20]%
BW: Freiburg	[10-20]%	[10-20]%	[50-60%]	[10-20]%	[10-20]%	[0-5]%	[10-20]%
BW: Residual	[10-20]%	[10-20]%	[60-70%]	[10-20]%	[5-10]%	[0-5]%	[10-20]%
HE: Frankfurt a. M.	[10-20]%	[10-20]%	[50-60%]	[10-20]%	[10-20]%	[0-5]%	[20-30]%
HE: Wiesbaden	[10-20]%	[10-20]%	[50-60%]	[10-20]%	[5-10]%	[5-10]%	[10-20]%
HE: Kassel	[10-20]%	[10-20]%	[40-50%]	[10-20]%	[10-20]%	[5-10]%	[10-20]%
HE: Residual	[10-20]%	[10-20]%	[60-70%]	[10-20]%	[5-10]%	[10-20]%	[10-20]%
NRW: Köln	[5-10]%	[10-20]%	[30-40%]	[5-10]%	[5-10]%	[40-50%]	[10-20]%
NRW: Düsseldorf	[20-30]%	[20-30]%	[40-50%]	[10-20]%	[5-10]%	[10-20]%	[10-20]%
NRW: Essen	[10-20]%	[10-20]%	[50-60%]	[10-20]%	[5-10]%	[0-5]%	[20-30]%
NRW: Dortmund	[10-20]%	[20-30]%	[50-60%]	[10-20]%	[0-5]%	[5-10]%	[10-20]%
NRW: Duisburg	[20-30]%	[20-30]%	[50-60%]	[10-20]%	[5-10]%	[0-5]%	20-30%]
NRW: Bochum	[20-30]%	[10-20]%	[40-50%]	[5-10]%	20-30%]	[0-5]%	[10-20]%
NRW: Wuppertal	[10-20]%	[10-20]%	[60-70%]	[10-20]%	[5-10]%	[0-5]%	[10-20]%
NRW: Münster	[10-20]%	[10-20]%	[60-70%]	[5-10]%	[0-5]%	[5-10]%	[10-20]%
NRW: Bielefeld	[20-30]%	[20-30]%	[50-60%]	[10-20]%	[5-10]%	[10-20]%	[20-30%]
NRW: Bonn	[5-10]%	[10-20]%	[60-70%]	[5-10]%	[5-10]%	[5-10]%	[5-10]%
NRW: Aachen	[10-20]%	[10-20]%	[20-30%]	[0-5%]	[5-10%]	[40-50%]	[10-20%]
NRW: M'gladbach	[20-30%]	[10-20%]	[60-70%]	[5-10%]	[0-5%]	[5-10%]	[10-20%]
NRW: Gelsenkirchen	[10-20%]	[10-20%]	[50-60%]	[30-40%]	[0-5%]	[0-5%]	[10-20%]
NRW: Krefeld	[10-20%]	[10-20%]	[60-70%]	[10-20%]	[5-10%]	[0-5%]	[10-20%]
NRW: Oberhausen	[20-30%]	[10-20%]	[60-70%]	[10-20%]	[0-5%]	[0-5%]	[10-20%]
NRW: Residual	[10-20%]	[10-20%]	[50-60%]	[10-20%]	[5-10%]	[10-20%]	[10-20%]

⁴¹⁷ Small differences in the diversion ratios between the national and Unitymedia footprint level are explained by the fact that the analysis at national level includes also the few districts that are covered by Unitymedia's cable network in other federal states than Baden-Württemberg, Hessen and Nordrhein-Westfalen.

⁴¹⁸ See footnote 413.

- (493) The analysis of the diversion ratios provides further evidence of the fact that the Parties compete closely to each other.
- (494) According to Table 8, the diversion ratios from Vodafone DSL to Unitymedia were [20-30]% at national and [30-40]% at Unitymedia footprint level in 2017/18. According to Table 9, the diversion ratios from Unitymedia to Vodafone were [10-20]% both at national and Unitymedia footprint level in 2017/18. Although the diversion ratios from the Parties to Deutsche Telekom are generally higher than the diversion ratios between the Parties, especially the diversion ratio from Vodafone to Unitymedia is also noteworthy.
- (495) The diversion ratios between the Parties at Unitymedia footprint level are in line with the diversion that one would expect based on market shares.⁴¹⁹ The observed switching behaviour provides evidence that Unitymedia exerts an important competitive constraint in the retail market for fixed internet services.
- (496) Furthermore, the Commission's analysis finds sizeable diversion ratios between the Parties at federal state and district level, especially for switching from Vodafone to Unitymedia. In line with the results of the Commission's market reconstruction, the diversion ratios between the Parties are generally higher in large cities with more than 100 000 households than in the residual districts that include also rural areas with low Unitymedia network coverage.
- (497) The analysis indicates that there is a general downward trend over time in the diversion ratios between the Parties at all geographical levels. Nonetheless, especially within Unitymedia's footprint, Unitymedia is the [...] receiver of customers from Vodafone, and [...] Vodafone is the [...] receiver of customers from Unitymedia.

Conclusion

- (498) In the light of the above, the Commission's considers that the Parties exert on each other an important competitive constraint in the retail market for the supply of fixed internet access services in Germany with specific regard to the Unitymedia's footprint, even if there they operate on the basis of different technologies (with different performances) and are not the closest competitors from all points of view.

(iv) Conclusion on the competitive constraint exerted by the Parties

- (499) Based on the above, the Commission considers that the Parties exert an important competitive constraint in the retail market for the supply of fixed internet access services in Germany with specific regard to the Unitymedia's footprint. The removal of such constraint is likely to lead to horizontal non-coordinated effects unless counteracted by the constraint exerted by remaining competitors in the market.

2.2.2.4. Competitive constraint from other competitors

- (500) In this section, the Commission assesses the competitive constraints exerted by other providers which will remain post-Transaction in the market for the retail supply of fixed internet access services in Germany and whether those providers would have the ability and the incentives to counteract the loss of competition deriving from the Transaction and described in the previous section.

⁴¹⁹ The diversion based on porting data from Vodafone to Unitymedia is [...] and from Unitymedia to Vodafone [...] than the diversion ratios based on market share data. The access to the underlying market share data has been provided according to the data room procedure.

(i) Deutsche Telekom

- (501) As illustrated in section VIII.C.2.2.2.2., Deutsche Telekom is currently the market leader by subscribers and revenues in the market for the retail supply of fixed internet access services in Germany. In Unitymedia's footprint, it is [ASSESSMENT OF MARKET POSITION] by subscribers and [ASSESSMENT OF MARKET POSITION] by revenues. As explained at recital (408), the Commission considers that the subscriber figures submitted by the Parties are likely to be more accurate. The discrepancy between subscriber and revenue figures may be the result of wrong assumptions made by the Parties in their methodology (which the Commission could not verify in the market reconstruction for lack of data) or may evidence, in relation to Deutsche Telekom, of a less aggressive pricing behaviour in the market compared to that of the Parties. The overall lower degree of aggressiveness by Deutsche Telekom is also confirmed by its annual growth rates, which are below the market average.
- (502) The fact that Deutsche Telekom tends to be an overall less aggressive player compared to the Parties is also confirmed by the Commission's pricing analysis illustrated in section VIII.C.2.2.2.3.(iii), which conclusively shows that Deutsche Telekom's prices are the highest in the market.
- (503) No evidence in the Commission's file suggests that, post-Transaction, Deutsche Telekom would change its pricing strategy. In fact, the Commission notes that Deutsche Telekom's incentives to undercut prices of competitors are constrained by the fact that it operates a regulated infrastructure for fixed internet access services and is legally obliged to act as a wholesaler for its downstream competitors. Indeed, pursuant to the German Telecommunications Act, the difference between its upstream services charges and retail prices is subject to ex-post regulatory control (margin squeeze-test). In this context, Deutsche Telekom pointed out that its *"leeway to act is limited – especially in terms of bundled discounts – because it might be held to behave abusively if the difference between upstream service charges and retail rates becomes too small"*.⁴²⁰
- (504) The less aggressive behaviour of Deutsche Telekom is also demonstrated by its investment strategy. As explained in section VIII.C.2.2.2.1., Deutsche Telekom offers fixed retail internet access services throughout Germany via a nationwide network which is still predominantly based on its traditional copper access network.⁴²¹ Whilst Deutsche Telekom has significantly improved its copper network through the introduction of its vectoring and super vectoring technology, the latter enabling speeds of up to 250 Mbit/s, Deutsche Telekom's copper network is not capable of matching the highest speeds/bandwidths of the cable networks of Vodafone and Unitymedia. Nonetheless, Deutsche Telekom has been very slow in implementing its announced plans to invest in FTTH, the current number of connected FTTH households remaining relatively limited.
- (505) In the course of the proceedings, Deutsche Telekom has submitted a complaint whereby the Transaction would severely decrease or eliminate its, as well as other competitors', ability and incentives to deploy fibre. This would have the effect to

⁴²⁰ Deutsche Telekom's reply to questionnaire Q8, question 98 [ID 2554].

⁴²¹ See Form CO, paragraph 6.387 and following.

significantly reduce infrastructure competition and innovation in the retail market for the supply of fixed internet services.⁴²²

- (506) On the one hand, Deutsche Telekom's concern stems from the elimination of Unitymedia as an important infrastructure competitor.⁴²³
- (507) On the other hand, Deutsche Telekom's concern is postulated on the fact that the planning of fibre roll out crucially depends on a minimum network utilisation via wholesale and retail customers in order to generate sufficient revenues to cover the significant capital and operational expenditures involved. As Vodafone is an important wholesale customer of Deutsche Telekom in Unitymedia's footprint, the migration of a large part of Vodafone's customers from Deutsche Telekom's xDSL network to Unitymedia's cable network post-Transaction would seriously affect the network utilization of Deutsche Telekom and thus its incentives to roll-out fibre.⁴²⁴ To corroborate its complaint, Deutsche Telekom submitted a simulation based on its fibre business plan and two studies.
- (508) Deutsche Telekom's modelling based on its own fibre business plan predicts that, without the wholesale revenues from Vodafone, the number of attractive municipalities in Unitymedia's footprint, where FTTH roll-out would be profitable for Deutsche Telekom, would be reduced as a result of the Transaction.⁴²⁵
- (509) The first study contains an economic model (the "NERA model"), which predicts that, without the wholesale revenues from Vodafone a new network by a third party is far less likely to acquire the critical mass of business that is needed to cover the high initial investment costs that are necessary to roll out a fibre network.⁴²⁶
- (510) The second study (the "WIK study") assesses the effect of coaxial cable infrastructures on fibre deployment and finds that fibre operators face particular difficulties in regions with broad cable coverage.⁴²⁷

⁴²² Deutsche Telekom, submission of 10 October 2018, Envisaged acquisition of Liberty Global's Unitymedia by Vodafone – Significant impediment to effective competition in German media and telecommunication market, 10 October 2018 [ID 446]; Deutsche Telekom's reply to RFI 10 [ID 4247]; Deutsche Telekom's reply to RFI 10, Annex 13, Impact of the proposed Vodafone-Unitymedia merger on the potential for fibre network deployment in Germany, NERA report prepared for Telekom Deutschland AG [ID 4250]; Agreed minutes of meeting of 27 November 2018 with Deutsche Telekom [ID 4451]; [CONFIDENTIAL]; Deutsche Telekom's comments on the Statement of Objections, section III [ID 5824]. According to Deutsche Telekom, this effect of the Transaction would also impact the supply of TV signal transmission to MDU and SDU customers, the TV signal delivery to Level 4 operators as well as, indirectly, the bargaining position of providers of audio-visual content and services vis-à-vis the merged entity, see Deutsche Telekom's comments on the Statement of Objections, paragraphs 45 and 60.

⁴²³ Deutsche Telekom, submission of 10 October 2018, Envisaged acquisition of Liberty Global's Unitymedia by Vodafone – Significant impediment to effective competition in German media and telecommunication market, 10 October 2018 [ID 446]; Deutsche Telekom's comments on the Statement of Objections, paragraph 40 [ID 5824].

⁴²⁴ Deutsche Telekom's comments on the Statement of Objections, paragraphs 40-43 [ID 5824].

⁴²⁵ Deutsche Telekom's reply to RFI 10, question 4 [ID 4247]; agreed minutes of meeting of 27 November 2018 with Deutsche Telekom [ID 4451]; [CONFIDENTIAL].

⁴²⁶ Deutsche Telekom, submission of 10 October 2018, Annex 7, Fibre deployment: specific effects on third parties [ID 2936]; Deutsche Telekom, submission of 9 November 2018, Envisaged acquisition of Liberty Global (Unitymedia) by Vodafone - Merger inhibits network competition and fibre roll-out [ID 2935]; Deutsche Telekom's reply to RFI 10, Annex 13, Impact of the proposed Vodafone-Unitymedia merger on the potential for fibre network deployment in Germany, NERA report prepared for Telekom Deutschland AG [ID 4250]; [CONFIDENTIAL].

⁴²⁷ Deutsche Telekom's comments on the Statement of Objections, Annex GMW 21 [ID 5824].

- (511) The Commission has carefully assessed Deutsche Telekom's concern. Based on the evidence in its file the Commission considers that the Transaction is not likely to have an impact on Deutsche Telekom's (and other competitors') ability and incentives to roll-out fibre.
- (512) Firstly, as explained in section VIII.C.2.2.2.3., no actual direct or indirect competition exist between the Parties' cable businesses pre-Transaction. Indeed, the Commission has not found evidence showing that the Parties' network investment and innovation activities have had a direct competitive impact on each other's network investment and innovation strategy and that their respective monitoring of the other Party's activities in that respect has not gone beyond "*simple commercial benchmarking aimed at monitoring and possibly imitating best practices in the industry*".⁴²⁸ Moreover, as further explained in section VIII.C.2.4.2.3., the Commission has not identified a coherent body of evidence that would suggest that either Party's expansion into the other Party's footprint would be likely or reasonably predictable absent the Transaction. To the contrary, the evidence on file does not support third parties' claims of the loss of the potential competitive threat exerted by the Parties over each other's cable business. Thus, no merger specific change can be identified to Deutsche Telekom's (and other competitors') ability and incentives to roll-out fibre from the elimination of Unitymedia as standalone infrastructure competitor.
- (513) Secondly, Deutsche Telekom's complaint is postulated on the assumption that wholesale access revenue are a key driver of fibre investments. However, it fails to take into account the link between investments and competition in the retail market for fixed internet services.
- (514) Indeed, in their business modelling on fibre investment, Deutsche Telekom appears to have assessed the investment case for fibre in isolation, considering only incremental costs and incremental revenues resulting from the investment, on the assumption that retail market shares do not vary between the scenario in which they deploy fibre and the counterfactual. To the contrary, when deciding whether to invest, Deutsche Telekom would need to consider that, if it fails to make sufficient investments to improve the quality of its network, it risks losing market share to Unitymedia, which, as Deutsche Telekom notes, is already able to offer customers bandwidths of up to 500 Mbit/s (and up to 1 Gbit/s in some areas where Unitymedia has upgraded its network to DOCSIS 3.1). Therefore, if the higher speeds offered by cable vis-à-vis xDSL were to become sufficiently important to impact on Deutsche Telekom's ability to compete, then the counterfactual would not be the status quo in terms of profitability (as in Deutsche Telekom's submission), but instead a reduction in Deutsche Telekom's wholesale and retail revenues. This would provide a "defensive" incentive to invest for Deutsche Telekom to maintain current market share and revenues.
- (515) The relevance of the link between investments and competition is also acknowledged by Deutsche Telekom's public statements. In a recent investor presentation, Deutsche Telekom stated that it is prioritising "*areas with strong competition and winback potential for customers lost to cable/other operators*" for its fibre roll-out.⁴²⁹ In the same vein a 2016 report of the Body of European Regulators for Electronic

⁴²⁸ Commission decision of 30 May 2018 in Case M.7000 – *Liberty Global/Ziggo*, paragraphs 667 and 694 to 695.

⁴²⁹ Deutsche Telekom Capital Markets Day 2018, slide 64 [ID 6599].

Communications (BEREC) notes that the “*strategic focus of incumbents in many [Member States] on NGA [that is, next generation access networks, consisting in whole or part of fibre] rollout in areas where cable is already present has shown that incumbents deploy their NGA networks (VDSL, FTTP) in direct response to competition from the rollout of DOCSIS enabled broadband on cable networks.*”⁴³⁰ Similarly, a study undertaken by WIK-Consulting for the telecommunications regulator of the United Kingdom, Ofcom, also found that “*the main factor which has driven next generation access (NGA) deployment is infrastructure competition – primary from cable, and in some cases from independent FTTH investors.*”⁴³¹

- (516) The relevance of the link between investments and competition is found also in several economic studies⁴³². A recent study by Fourie and de Bijl⁴³³ analyses the relationship between infrastructure-based competition and fibre penetration. The study of Fourie and de Bijl shows for some model specifications that infrastructure-based competition (measured by a HHI of different broadband infrastructures) bears a non-linear polynomial relationship with fibre penetration. They find a large effect on fibre in markets where there is very little infrastructure-based competition that could be explained by state support for fibre (and might outweigh a replacement effect whereby monopolists do not want to invest in fibre). (Moderate) infrastructure-based competition is found to have a positive impact on fibre penetration. The authors suggest that this could be due to the fact that investing in fibre may become the “only way out” for DSL operators threatens by extensive cable networks. The positive impact of competition on fibre is found to last up to a certain point, where after infrastructure-based competition becomes too severe to allow investment in fibre. The study found that, especially for countries with low fibre penetration, more competition between cable and DSL could have a positive impact of fibre rollout. The results show that the effect may be largest for countries who are only still “starters” in terms of fibre rollout.
- (517) In addition, Deutsche Telekom’s analysis is based on a binary fibre investment model, where either investment decisions are taken or not. In reality, the fact that Deutsche Telekom already has a legacy network in place significantly widens the range of options available to it, which in turn increases the complexity of its investment decision. As such, Deutsche Telekom is likely to constantly assess the business case for fibre roll-out on the basis of these alternative options, the relative merits of which will change over time as competition and demand evolves.

⁴³⁰ BEREC (2016), Challenges and drivers of NGA rollout and infrastructure competition, pages 12-13 [ID 6600].

⁴³¹ WIK Consulting, Competition & investment: An analysis of the drivers of superfast broadband. Study for Ofcom, July 2015 [ID 6824]. Available at https://www.ofcom.org.uk/_data/assets/pdf_file/0022/76702/competition_and_investment_fixed.pdf [ID 6824].

⁴³² See, for instance, W. Briglauer, G. Ecker and K. Gugler (2013), The impact of infrastructure and service-based competition on the deployment of next generation access networks: Recent evidence from the European member states, *Information Economics and Policy*, 25, 142–153 or W. Briglauer (2015), How EU sector-specific regulations and competition affect migration from old to new communications infrastructure: recent evidence from EU27 member states, *Journal of Regulatory Economics*, 48, 194–217.

⁴³³ Fourie and de Bijl (2018), Race to the top: Does competition in the DSL market matter for fibre penetration? *Telecommunications Policy*, 42(9), 778-793.

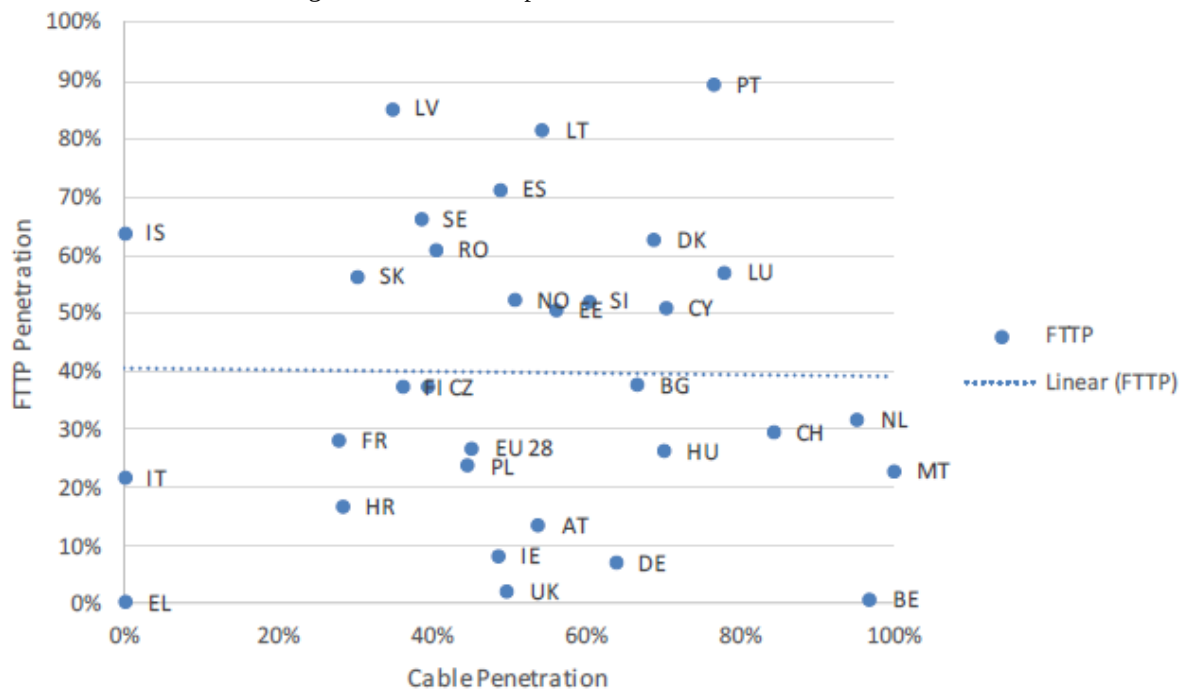
- (518) The Commission also considers that the NERA model does not provide sufficient support for Deutsche Telekom's claim. Indeed, the Commission notes that such model contains a number of questionable assumptions:
- (a) The NERA model assumes that the market share of retailers for new customers would remain static after migration to a new fibre network. Nonetheless, absent a clear regulatory framework for wholesale access to fibre network (in a context where Deutsche Telekom is advocating for "regulatory holidays" and the public consultation document published by BNetzA state that no price regulation may be imposed on operators of fibre networks⁴³⁴), the vertically integrated owner of the new fibre network would face lower variable costs following the deployment of its own network and could therefore be expected to lower prices to increase its market share (and hence profit maximisation). At the same time, the superior quality of services delivered over fibre could also have a positive impact on the market share of retailers. Therefore, the NERA model's assumption is unreliable.
 - (b) The NERA model assumes that the revenues lost as a result of the reduction of the number of Vodafone's customers on Deutsche Telekom's network cannot be recaptured by Deutsche Telekom. To the contrary, Vodafone's DSL customers migrating to Unitymedia's network could be recaptured as a result of retail competition. Indeed, even if those customers who just migrated to the cable network might be less inclined to switch again immediately, this effect should only be temporary.
 - (c) The NERA model assumes that absent the Transaction scenario all wholesale access takers (including Vodafone) buy wholesale services from the new fibre network, whereas in a post-Transaction scenario all but Vodafone buy wholesale access from the new fibre network. Considering that Deutsche Telekom has not been selling any wholesale access to its fibre infrastructure so far, the assumption seems questionable. Moreover, it is highly uncertain whether and at what point in time all wholesale access takers would enter into wholesale access contracts with Deutsche Telekom on the new fibre network.
- (519) As regards the WIK study, the Commission notes that:
- (a) The study examines a potential relationship between cable coverage and incentives to invest in fibre networks. However, the Transaction will not affect cable coverage in Germany and therefore this relationship provides no evidence that third parties' incentives to invest in fibre will change as a result of the Transaction.
 - (b) The study directly contradicts the conclusions reached by WIK-Consult in the referred study for Ofcom, which found that there is a strong correlation between cable coverage and investment in NGA (fibre to the cabinet, "FTTC", and FTTH).⁴³⁵
 - (c) The Parties submitted a comparison of the current coverage of cable operators with current coverage of competing FTTP operators across the EU countries presented in Figure 13. Contrary to the findings of the WIK-Consult study submitted by Deutsche Telekom, the comparison shows there is no clear

⁴³⁴ In this respect, see section VIII.C.2.2.2.1.(ii).

⁴³⁵ WIK Consulting, Competition & investment: An analysis of the drivers of superfast broadband. Study for Ofcom, July 2015 [ID 6715].

evidence of a negative (or, indeed, positive) relationship between FTTP and cable coverage, with some jurisdictions (such as Portugal) showing both high FTTP coverage and high cable coverage.

Figure 13: Relationship between cable and FTTP roll out



Source: Figure 2 of Annex 3 to Parties' submission of 16 May 2019.

- (d) The econometric analysis presented in the WIK-Consult's study has a number of shortcomings which undermine the robustness of the conclusions drawn from the analysis:

(i) The analysis assumes that fibre coverage prior to 2011 was not influenced by cable coverage. However, WIK-Consult provides no empirical evidence that there were any structural breaks to justify such assumption. WIK-Consult asserts that cable was not a competitive threat to incumbent operators prior to 2011 and therefore fails to consider whether in this period incumbents made defensive investments in fibre in areas of cable coverage. The assertion requires nonetheless justification for the following reasons. Firstly, using cable operators' market share as a proxy for the degree to which cable was a competitive threat in the period before and after 2011, it appears that cable operators' broadband market share in the period before 2011 was not materially different from that in the period after 2011.⁴³⁶ Secondly, the relevant input to WIK-Consult's model is the increase in fibre coverage over the period 2011 to 2017, rather than the absolute level of fibre coverage. If fibre coverage in 2011 were a function of cable coverage, that is to say if some incumbents had already invested in fibre (including FTTC) prior to 2011 in areas of cable coverage due to the competitive threat of cable, then it would be no surprise that the increase in fibre coverage seen since 2011 is negatively correlated with cable coverage, as subsequent fibre roll out would then be concentrated in those areas not covered by cable.

⁴³⁶

See <https://ec.europa.eu/digital-single-market/en/connectivity>

- (ii) The analysis does not appear to control for the fact that fibre deployment has been supported by state aid in certain areas in the majority of EU countries, with the level of support varying significantly – for example, over the period 2003-2018, total state aid expenditure on broadband infrastructure amounted to over EUR 13 billion in France, compared to around EUR 1.5 billion in Spain.⁴³⁷ Given the analysis is intended to assess whether cable coverage affects the commercial incentives for operators to invest, deployments that have been supported by state aid should be excluded from the analysis.
- (e) The WIK-Consult's study claims that its conclusion is supported by the recent study by Fourie and de Bijl⁴³⁸, which would find a negative relationship between cable and investments in FTTx-networks by drawing on a sample for 27 European countries from 2004 to 2015. However, this general conclusion from the Fourie and de Bijl analysis by WIK-Consult is over-simplistic. In their estimation, the pervasiveness of cable *and* DSL broadband networks show statistically significant and negative relationships with fibre penetration. Applied to Germany, where Deutsche Telekom operates the DSL broadband network, this supports the Commission's consideration at recital (517).
- (520) Finally, the Commission considers that Deutsche Telekom's view is not supported by evidence from the Liberty/Ziggo merger in the Netherlands. In fact, the available evidence concerning the Dutch market supports the view that the incumbent is incentivised to invest in infrastructure by competition from high speed cable infrastructure. On 22 November 2018, VodafoneZiggo announced its plan to roll out its first Gigabit network based on DOCSIS 3.1 technology to the city of Utrecht by 2020.⁴³⁹ A week later, on 28 November 2018, KPN subsequently announced its relaunched FTTH investment programme, with the intention to reach over 1 million further homes by 2021.⁴⁴⁰
- (521) Therefore, no evidence in the Commission's file suggests that, post-Transaction, Deutsche Telekom would change its speed of fibre roll-out due to a negative impact of the Transaction on its ability and financial incentives to undertake the related investments.
- (522) As stated above, the Commission nevertheless considers that it appears unlikely that it would have the incentives to compete to such an extent as to counteract the loss of competition deriving from the Transaction in particular in the Unitymedia's footprint.
- (ii) United Internet**
- (523) As illustrated in section VIII.C.2.2.2.2., United Internet (the parent company of 1&1) is currently the [ASSESSMENT OF MARKET POSITION] largest player in the market by both subscribers, revenues and gross adds. It is also the [ASSESSMENT OF MARKET POSITION] largest player by subscribers and revenues in the Unitymedia's footprint.

⁴³⁷ CERRE, State Aid for Broadband Infrastructure in Europe, Assessment and Policy Recommendations, 2018, page 78 [ID 6985]. Available at: https://www.cerre.eu/sites/cerre/files/CERRE_StateAidBroadband_FinalReport_0.pdf

⁴³⁸ Fourie and de Bijl (2018), Race to the top: Does competition in the DSL market matter for fibre penetration? *Telecommunications Policy*, 42(9), 778-793.

⁴³⁹ See press release at: <https://www.vodafoneziggo.nl/en/nieuws/utrecht-become-fastest-city-netherlands/>

⁴⁴⁰ See press release at: <https://overons.kpn/en/news/2018/kpn-accelerates-strategy-to-deliver-organic-sustainable-growth>

- (524) As discussed in section VIII.C.2.2.2.3.(iii), United Internet is an aggressive player in terms of pricing and compete closely with the Parties in this respect. In the market investigation, it stated that indeed it focuses on the “budget segment” of the market.⁴⁴¹
- (525) United Internet does not operate based on its own network infrastructure, but via wholesale access services provided by Vodafone and Deutsche Telekom. More in detail, [DETAILS OF BUSINESS STRATEGY]. Furthermore, United Internet contracts with Deutsche Telekom for DSL access [DETAILS OF BUSINESS STRATEGY]. As such United Internet is able to offer the same speed of Deutsche Telekom and, pre-Transaction, competes on par with Vodafone, in particular in the Unitymedia's footprint.
- (526) No evidence in the Commission's file suggests that post-Transaction United Internet will change its strategy. As regards pricing, the Commission considers that, while United Internet may still continue focusing on the lower price segment of the market (in line with its previous business strategy), given the reduction of competition resulting from the Transaction, United Internet may consider more profitable to compete less aggressively to take advantage of the price increase generated by the Transaction.
- (527) The Commission therefore considers that it appears unlikely that United Internet would have the incentives to compete to such an extent as to counteract the loss of competition deriving from the Transaction.⁴⁴²

(iii) Telefónica

- (528) As illustrated in section VIII.C.2.2.2.2., Telefónica has by all metrics shares around [5-10]%, both at national level and in the Unitymedia footprint.
- (529) While, as discussed in section VIII.C.2.2.2.3.(iii), Telefónica seems to compete closely with the Parties in terms of prices, it is perceived by the market as a less relevant competitor. For example, in the market investigation, Deutsche Telekom considers Telefónica a less relevant competitor in the supply of fixed internet access services, as it is more concentrated on its mobile business and does not (or is not able to) follow all relevant trends in the retail fixed internet access services market.⁴⁴³
- (530) The same views is expressed in the Parties' internal documents. For example, Vodafone clearly considers Telefónica [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS], as shown in the slide reproduced in Figure 14.

Figure 14: [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]
[REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]

Source: [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]

- (531) Telefónica has included only recently a 250 Mbit/s in its product portfolio. So far, it had only offered speeds of 10, 50 and 100 Mbit/s, which is seen as serious limitation to its competitiveness by competitors.⁴⁴⁴ This delay in introducing higher speeds to its product portfolio is an important evidence of the limited ability of Telefónica to compete in the market. This seems to be related to its less advantageous cost

⁴⁴¹ United Internet's reply to questionnaire Q8, question 84 [ID 2597].

⁴⁴² The Commission considers that, despite United Internet's complaint, its ability to compete is not likely to be reduced due to conglomerate effects post-Transaction for the reasons explained in section VIII.C.5.

⁴⁴³ Deutsche Telekom's reply to questionnaire Q11, question 81.1.8 [ID 3971].

⁴⁴⁴ Deutsche Telekom's reply to questionnaire Q11, question 81.1.8 [ID 3971].

structure compared to United Internet and Vodafone. In fact, Telefónica is active in the supply of fixed internet access services based on Layer 3 bitstream access to Deutsche Telekom's network, which allows for less flexibility.⁴⁴⁵

- (532) Importantly, Telefónica's growth rate, as illustrated in Table 4, has been negative in recent years.
- (533) No evidence in the Commission's file suggests that post-Transaction Telefónica's ability to compete would change. [CONFIDENTIAL].
- (534) In light of the above, the Commission considers that Telefónica is unlikely to have the ability to compete to such an extent as to counteract the loss of competition deriving from the Transaction.

(iv) Other players

- (535) In addition to the players discussed in the previous sections, there are a number of other regional or local cable operators active in Germany (such as EWE in the north of Germany, M-Net in the Munich area or Tele Columbus in the east of Germany). In the Unitymedia footprint, there is only one non-marginal regional cable operator active, namely NetCologne. NetCologne's activities are limited to the geographic areas around Cologne and Aachen.
- (536) Respondents to the market investigation consider that the competitive role of regional operators like Tele Columbus and city carriers like NetCologne is constrained by the limited size of their respective networks.⁴⁴⁶ In this respect, Deutsche Telekom explained its answer as follows: *"Telecolumbus' footprint is too small to exert significant pressure on Vodafone. FTTB operators such as NetCologne are also able to offer higher bandwidths but have usually only a very limited footprint (NetCologne network is limited to the greater Cologne area)."*⁴⁴⁷
- (537) No evidence in the Commission's file suggests that post-Transaction the ability to compete of these regional or local cable operators would change.⁴⁴⁸
- (538) In light of the above, the Commission considers that regional or local cable operators are unlikely to have the ability to compete to such an extent as to counteract the loss of competition deriving from the Transaction.

2.2.2.5. Likely overall effects of the Transaction

(i) Qualitative assessment

- (539) As illustrated in section VIII.C.2.2.2.2.(v), the retail market for the supply of internet fixed access services in Germany is very concentrated. As set out in sections VIII.C.2.2.2.3.(i) and VIII.C.2.2.2.3.(iii), Unitymedia (the [ASSESSMENT OF MARKET POSITION] largest player in the market) has exerted an important

⁴⁴⁵ See Form CO, para 6.390.

⁴⁴⁶ Replies to questionnaire Q11, question 81.1.8. See also Telefónica's reply to questionnaire Q8, question 76.1 [ID 2437].

⁴⁴⁷ Deutsche Telekom's reply to questionnaire Q11, question 81.2.8 [ID 3971].

⁴⁴⁸ Based on the evidence in its file, the Commission considers that the Transaction is not likely to have an impact on the ability and incentives to roll-out fibre of the Parties' competitors for the same reasons explained in section VIII.C.2.2.2.4.(i) in relation to Deutsche Telekom.

Furthermore, in the market investigation, complaints have been raised as regards the potential impact on entry and expansion in the market for the retail supply of fixed internet access services in Germany as a result of an acceleration of the fixed-mobile convergence which would allegedly be brought about by the Transaction. These effects are assessed in Section VIII.C.5 on the potential conglomerate effects of the Transaction.

competitive constraint in such market on Vodafone and the other competitors. This is evidenced by the strong performance shown by Unitymedia in terms of price. The Commission has no reason to believe that Unitymedia's current competitive constraint is likely to deteriorate absent the Transaction.

- (540) Similarly, as illustrated in sections VIII.C.2.2.2.3.(i) and VIII.C.2.2.2.3.(iii), Vodafone (the second largest player in the market) has exerted an important competitive constraint in the retail market for internet fixed access services in Germany, including in Unitymedia's footprint where it operates based on wholesale access to Deutsche Telekom's network. Importantly, Vodafone has been able to compete on par with United Internet and to operate more competitively than other providers operating on the basis of wholesale access, due to its unique characteristics. The Commission has no reason to believe that Vodafone's current competitive constraint is likely to deteriorate absent the Transaction.
- (541) The Transaction would combine the operations of Vodafone and Unitymedia, further increasing the concentration levels in the market and creating a new number [ASSESSMENT OF MARKET POSITION] player in the market with a share by subscribers of over [30-40]%. In particular, in the footprint of Unitymedia, the Transaction will strengthen the leading position of Unitymedia and the merged entity's subscriber share would be higher than at national level and above [40-50]%.
- (542) The Commission considers that the elimination of the competitive constraints exerted by the Parties pre-Transaction, both on each other and on other competitors, is likely to significantly weaken competition and induce price increases in the Unitymedia's footprint as illustrated in section VIII.C.2.2.2.5.(ii).
- (543) For the reasons explained in section VIII.C.2.2.2.4., the reduction of the competitive pressure resulting from the Transaction is not likely to be counteracted by other competitive constraints which will remain on the markets. Indeed, the remaining players in the market are likely not to have the ability or the incentives to compete aggressively against the merged entity.
- (544) Therefore, the Commission considers that the Transaction is likely to lead to anticompetitive horizontal non-coordinated effects in the retail market for the supply of internet fixed access services in Germany, in particular in the Unitymedia's footprint. Unless such effects are counteracted by entry, buyer power or efficiencies, the Transaction would be likely to significantly impede effective competition in a substantial part of the internal market.
- (545) The Commission's assessment is supported by the view expressed by respondents to the market investigation, which unanimously expressed the view that the Transaction would lead to anticompetitive effects in the German retail market for the supply of retail fixed internet access services.⁴⁴⁹

(ii) Quantitative analysis of the likely price effects

(a) Introduction

- (546) In a number of recent cases, in particular in the mobile telecommunications industry, the Commission has used standard “upward pricing pressure” (“UPP”) techniques to quantify the extent to which a transaction is likely to lead to non-coordinated effects arising from the elimination of horizontal competition between the merging parties.

⁴⁴⁹

Replies to questionnaire Q8, question 112.6.

- (547) As explained in the Horizontal Merger Guidelines, this most direct effect may lead to price increases as the merging firms realise that sales that would have been lost to the other merging party following a price increase in the absence of the merger remain within the merged entity post-Transaction which leads to an incentive to raise price for the merged entity.⁴⁵⁰ The extent to which the merger raises incentives for the merged entity to raise price depends on the degree of substitutability between the merging firms' products – the closer the merging firms products are from the point of view of consumers, the stronger the competitive constraint that is being removed – and the higher the merging firms margins – because higher margins on recaptured sales imply a greater change of incentive from such recapturing post-Transaction.⁴⁵¹
- (548) Quantitative UPP techniques and its variants analyse the change in firms' economic incentives resulting from the merger under the assumption that competition in the market can be approximated by the standard economic model of non-coordinated price (that is, Bertrand) competition between firms offering differentiated products – and summarise in simple to interpret estimates of price effects. The framework is in line with the mechanisms described in the Horizontal Merger Guidelines.
- (549) These techniques typically bring together quantitative information on: (i) the degree of substitution between the different firms, in particular the merging parties, product offerings in the market (typically in the form of diversion ratios); (ii) margins and prices; and (iii) market shares or quantities. The advantage of these techniques is that they allow to summarise the interplay of these important elements in simple to interpret predictions for the likely increase of prices (within a coherent economic framework).
- (550) In the case of the Transaction, as in previous mergers in which the Commission has employed such techniques to quantify unilateral effects, the merger brings together two horizontal competitors.
- (551) However, in this case the use of such techniques faced a number of challenges.
- (552) Firstly, while Vodafone and Unitymedia exercise a direct competitive constraint on each other by offering households alternative broadband products, this competitive interaction is limited to Unitymedia's footprint, which covers approximately 11.5 million households out of 41.0 million in Germany.
- (553) Secondly, while Unitymedia offers cable based products via its own cable network, Vodafone [DETAILS OF COMMERCIAL CAPABILITIES] offers DSL based products in the Unitymedia footprint for which it relies on access to Deutsche Telekom's copper network. Vodafone therefore does not compete with its own infrastructure in the Unitymedia footprint and, as an access seeker, has a substantially different cost position and earns lower contribution margins.
- (554) Thirdly, Vodafone's commercial strategy currently appears to be to (i) employ national pricing, that is to say, it charges the same price for a given product through the whole of Germany; and (ii) tie the prices of its DSL based products to its cable based products in the Kabel Deutschland's footprint [DETAILS OF BUSINESS STRATEGY AND PRICING].
- (555) Vodafone's nationwide DSL internet access offer establishes a competitive link between Vodafone's cable network and Unitymedia's cable network offer. Given the

⁴⁵⁰ Horizontal Merger Guidelines, paragraph 24.

⁴⁵¹ Horizontal Merger Guidelines, paragraph 27.

uniform pricing, as shown in the internal documents cited in section VIII.C.2.2.2.3.(iii)(a), Vodafone takes into account changes in the pricing of Unitymedia's cable price in its nationwide pricing scheme. For instance, if Unitymedia were to lower its prices within its footprint, Vodafone would react and most likely adapt its DSL offer (to reflect the changed trade off between demand and costs).⁴⁵² Under the link between Vodafone's DSL and cable prices, this trade off would also involve changes in the pricing for Vodafone's cable products within its own footprint. Vice versa, if Vodafone decided to change its cable price, it would also impact its DSL price and hence Unitymedia.

- (556) This view is shared by Telefónica, which describes the price competition between Unitymedia and Vodafone as follows: *“First, price competition takes place on national level. This can be seen from the national pricing strategies of all market participants that are active on national level such as Vodafone, Deutsche Telekom, United Internet and Telefónica Deutschland. Indeed, these suppliers predominantly set nationwide prices for their fixed retail telecommunications services. Thus, price competition by Unitymedia in the three states of North Rhine-Westphalia, Hesse and Baden-Wuerttemberg, which account for approx. 40% of the households in Germany, has a direct impact on national prices of nationwide players like Deutsche Telekom and Vodafone. Since Vodafone's national prices mirror Unitymedia's prices, price competition by Unitymedia has a particularly strong effect on Vodafone at national level.”*⁴⁵³ Post-Transaction, this significant competitive constraint currently exercised by Unitymedia's prices on Vodafone's national pricing would cease to exist.⁴⁵⁴
- (557) The specifics of the Transaction (geographically limited overlap, national pricing, [DETAILS OF BUSINESS STRATEGY AND PRICING], different technologies) significantly complicate the application of standard price pressure tools to quantify likely price effects.
- (b) *Notifying Party's submissions on likely price effects*
- (558) The Notifying Party has made a number of economic submissions regarding the quantification of likely price effects.
- (559) Firstly, the Notifying Party submitted a “quantitative analysis of the likely price effects resulting from the Transaction” with the Response to the Article 6(1)(c) Decision (the “UPP submission”).⁴⁵⁵ That analysis combines diversion ratios (from fixed number portability data) between the Parties at the national level as a measure of the average degree of substitutability nationwide with average contribution margins of the Parties.
- (560) On the assumption that Vodafone's DSL products are priced nationally but without being linked to Vodafone's cable prices, the Notifying Party reports a first order approximation of predicted price increases (absent efficiencies) of [5-10]% for Vodafone's DSL products and [0-5]% for Unitymedia products with a subscriber weighted average of [0-5]% for both Parties.⁴⁵⁶

⁴⁵² Deutsche Telekom's reply to questionnaire Q8, question 86.1 [ID 2554].

⁴⁵³ Telefónica's reply to questionnaire Q8, question 76.1 [ID 2437].

⁴⁵⁴ Telefónica's reply to RFI 11, question 5 [ID 4188].

⁴⁵⁵ “Quantitative analysis of the likely price effects resulting from the Transaction”, Frontier Economics, 6 January 2019 [ID 3194].

⁴⁵⁶ This first order approximation of predicted price increases is based on the assumption of linear demand and are derive the price increases for each product on the assumption that the margin of the other product remains at the pre-merger level. It is computed as one half of the “gross upward pricing

- (561) The Notifying Party argues that these computations overstate likely price effects, because:
- (a) They focus only on the price changes by the Parties which account for only a limited share of the overall market;
 - (b) The Transaction would give Vodafone access to cable infrastructure in the Unitymedia footprint, which, when accounted for in the computation as a reduction in marginal costs, would lead to a prediction of price reductions in this methodology;
 - (c) The analysis ignores the link between the prices of DSL and cable products of Vodafone [DETAILS OF BUSINESS STRATEGY AND PRICING].
- (562) The Notifying Party submits that the [DETAILS OF BUSINESS STRATEGY AND PRICING] would be maintained post-Transaction and would imply that any price increase of DSL products driven by the elimination of horizontal competition in the Unitymedia product would be more costly as it would also imply a price increases on Vodafone cable products, leading to a loss of cable customers in Vodafone's cable footprint where the merger would have no direct effect. When this effect is accounted for, the first order approximation for the price increase on Vodafone products (absent synergies) would be reduced to [0-5]% with an average effect across both Parties of [0-5]%.
- (563) Secondly, in a subsequent submission⁴⁵⁷ (The "IPR submission"), the Notifying Party provides a more detailed indicative price rise analysis and underlines the challenges in modelling predicted price increases. In particular, Vodafone's current pricing strategy (national pricing and alignment of Vodafone DSL and cable prices) raises challenges for the model's calibration, which need to be addressed with *ad hoc* assumptions.⁴⁵⁸
- (564) According to the Notifying Party, the choice of assumption does not have a material impact on the results, when it is assumed that the pricing strategy (with respect to national pricing and the alignment between cable and DSL prices) is maintained post-Transaction. This is because, in that case, only the aggregate demand function for Vodafone cable and DSL products is relevant for the optimisation. Under that assumption, the indicative price rise (absent efficiencies) for Vodafone cable and DSL products is predicted to be around [0-5]%, while Unitymedia cable prices would increase by around [0-5]–[0-5]% post-Transaction.⁴⁵⁹ If it is further assumed that

pressure index" (GUPPI). This first order approximation ignores feedback effects which arise from the fact that a price increase in one product leads to higher margins of that product as well as increased demand of the other product. As both of these factors increase in the incentives to raise price for the other product, the first order approximation (which ignores these factors) will slightly understate predicted price increases for the merging parties.

⁴⁵⁷ Presentation "IPR analysis – A pack for discussion with the European Commission", Frontier Economics and CRA, 7 February 2019 [ID 4114]

⁴⁵⁸ These calibration challenges arise for technical reasons. Calibration that "fits" the model to the pre-merger situation requires that the number of unknown demand parameters equals the number of optimisation conditions. When there number of products for which demand needs to be modelled equals the number of prices over which firms optimise, this is typically the case. However, when Vodafone cable and DSL prices are linked, the number of prices over which the model is optimised is smaller than the number of products not all demand elasticity parameters can be calibrated. Additional *ad hoc* assumptions are required to resolve this problem.

⁴⁵⁹ In contrast to the first order approximations of the earlier submission, the indicative price rise computations by the Notifying Party account for feedback effects between the pricing decisions of the Parties.

Unitymedia prices will be aligned with the Vodafone national offer (which introduces a further price constraint post-Transaction), the predicted price increase for Unitymedia cable drops to around [0-5]% while that on Vodafone products increases by around one half of a percentage point to around [5-10]% (absent efficiencies).

- (565) According to the Notifying Party, the results of the modelling are, however, non-robust to the choice of assumption to address the calibration issue, when it is assumed that the link between DSL and cable prices is abandoned post-Transaction. The Notifying Party points out that these results combine Transaction-related diversion effects with the consequences of breaking the link between Vodafone's cable and DSL prices, which makes such scenarios "more challenging to calibrate". In particular, the predicted magnitude of price increases (absent efficiencies) for DSL products varies with the assumption (from [5-10]% to [10-20]% for Vodafone DSL products and [0-5]%-[5-10]% for Unitymedia cable). Moreover, the prediction for the change in Vodafone cable price varies between +[10-20]% and -[5-10]%.
- (566) The Notifying Party also models scenarios which it considers capture the effect of Vodafone actively migrating customers from DSL to cable products in the Unitymedia's footprint. As before, such active migration efficiencies are modelled as marginal cost reductions in the model. According to the Notifying Party's model, such migration synergies would lead to an overall reduction of Vodafone prices (DSL and cable) by around [0-5]% combined with an increase in Unitymedia's prices of the same magnitude if the current pricing constraints are maintained. If a post-Transaction alignment of cable prices is assumed, prices would fall across the board. Qualitatively similar conclusions are reached in the scenarios where the link between DSL and cable prices is assumed to be abandoned post-Transaction.
- (567) Thirdly, the Notifying Party has also submitted papers⁴⁶⁰ analysing the evolution of Vodafone cable prices following Vodafone's acquisition of Kabel Deutschland's cable network in September 2013. According to the Notifying Party, that transaction provides a good natural experiment for the Transaction as Vodafone, which was competing with a DSL based product in the Kabel Deutschland footprint prior to that merger, exercised a similar level of competitive constraint on Kabel Deutschland as it does on Unitymedia today (as it would be shown by similar market shares prior to the that transaction). According to the Notifying Party, and using the evolution of prices in the Unitymedia's footprint as a benchmark, there would be no indication that the Vodafone/ Kabel Deutschland transaction lead to increases in the prices of cable based broadband products. The Notifying Party proposes both a graphical analysis of the evolution of prices as well as a statistical analysis. It considers the results from this analysis to be robust. According to the Notifying Party, the absence of price increases following the Vodafone / Kabel Deutschland transaction confirms that that the (current) Transaction would not lead to price increases.

⁴⁶⁰ "Competitive impact of the Vodafone/KDG merger", Frontier Economics, 6 January 2019 [ID 3193]; "Competitive impact of the VF-KDG merger – an econometric analysis", Frontier Economics and CRA, February 2019 [ID 4116]; "Competitive impact of the Vodafone-KDG merger, follow-up to CET meeting", Frontier Economics 20 February 2019, [ID 4385-2]; "M.8864 Vodafone/Liberty Global, Competitive Impact of the VF-KDG Merger: Methodology and Specification Decisions", Charles River Associates, 20 February 2019 [ID 4385-3]

(c) *Commission's assessment*

- (568) The Commission's assessment of quantitative evidence on the effect of the elimination of direct competition starts with the Notifying Party's UPP submission and IPR submissions as well as further calibration scenarios run on the latter by the Commission. It then turns to Notifying Party's empirical evidence of the evolution of prices following the Vodafone/Kabel Deutschland transaction.

Quantitative UPP and IPR analyses

- (569) Firstly, as regards the Notifying Party's UPP submission, the Commission accepts that such analyses can be useful as a first approximation. However, the Commission considers that it has been superseded by the Notifying Party's IPR submission which, while relying on the same underlying concepts and inputs, also accounts for the impact of Vodafone's [DETAILS OF BUSINESS STRATEGY AND PRICING] which the Notifying Party considers to be an important constraint on the merged entity post-Transaction.
- (570) Secondly, the Commission acknowledges that the link between Vodafone cable and DSL prices raises challenges for the calibration of a model that distinguishes between Vodafone cable and DSL products and necessitates additional *ad hoc* assumptions. The price predictions derived on the assumption of [DETAILS OF BUSINESS STRATEGY AND PRICING] for Vodafone's DSL and cable products in the Notifying Party's UPP submission are also affected by this difficulty as they implicitly assume the absence of such a link.
- (571) Thirdly, the Commission has carefully analysed the detailed indicative price rise analysis in the IPR submission and the sensitivity of the results to different calibration assumptions:
- (a) With national pricing and DSL/cable link pre- and post-Transaction, that is to say, when all the constraints arising from the existing pricing policies are accepted as put forward by the Notifying Party, predicted price increases as presented by the Notifying Party are on the order of [5-10]% on Vodafone cable/DSL products and [0-5]-[0-5]% on Unitymedia products. Two additional calibration scenarios implemented by the Commission result in very similar ranges when the [DETAILS OF BUSINESS STRATEGY AND PRICING] is maintained.⁴⁶¹ This confirms that the indicative price rise results under the [DETAILS OF BUSINESS STRATEGY AND PRICING] assumption are relatively insensitive to calibration choices. However, as will be discussed in point (c) of this recital, the Commission finds slightly higher indicative price rises if it uses "internally consistent" diversion ratios.
 - (b) When it is assumed that Vodafone DSL prices will be decoupled from Vodafone cable prices post-Transaction, the precise results become sensitive to additional assumptions required for the calibration. Under each of the three different scenarios examined in the Notifying Party's more detailed analysis, as well as in the simple approximation of Notifying Party's first submission, the predicted price effects significantly increase for Vodafone DSL products (ranging from [5-10]% to [10-20]%) and also, albeit to a lesser extent, on Unitymedia cable (ranging from [0-5]% to [5-10]%). The main impact of the calibration assumption is on the predicted effect on Vodafone cable prices, which, depending on the assumption, are predicted to either significantly

⁴⁶¹

See point (c) below.

decrease or increase. The very significant increase in the Vodafone cable price arises in a calibration scenario which, as the Notifying Party points out, implies an diversion ratio between Vodafone's cable product and Vodafone's DSL products of over 200% (although diversion ratios should not be able to exceed 100%). The strong decreases in Vodafone's cable prices arise in scenarios where the [DETAILS OF BUSINESS STRATEGY AND PRICING] imposes a strong constraint on Vodafone pre-Transaction and where this constraint is removed post-Transaction. These decreases are therefore the result of the removal of pricing constraints and not of the Transaction as such. As the Notifying Party notes, none of these calibration scenarios is ideal.

- (c) To examine the impact of some of the shortcomings in the analysis, the Commission has examined additional calibration scenarios. These scenarios assume that Vodafone cannot improve profits by dropping its [DETAILS OF BUSINESS STRATEGY AND PRICING] pre-Transaction. In contrast to the Notifying Party's first scenario, the first alternative scenario by the Commission uses Vodafone internal diversion ratios between cable and DSL for the calibration; the second alternative scenario assumes no substitution between Vodafone cable and Vodafone DSL products in the Kabel Deutschland footprint, where [DETAILS OF BUSINESS STRATEGY]. The Commission considers these scenarios more plausible than the Notifying Party's scenarios as they avoid both, implausibly high implied diversion ratios, and strong incentives to abandon the [DETAILS OF BUSINESS STRATEGY AND PRICING] independently of the Transaction.
- (d) Moreover, the Notifying Party's calibrations further rely on diversion ratios that combine number portability data for cable and DSL products within individual diversion ratios, which can lead to distortions. The Commission considers it preferable to avoid such potential distortions and has therefore computed two further scenarios which use only "internally consistent" diversion ratios.⁴⁶²
- (e) In the alternative scenarios (which use the Notifying Party's approach to diversion ratios), the Commission finds indicative price rises of [5-10]-[5-10]% for Vodafone DSL and cable and [0-5]-[0-5]% for Unitymedia cable products when the [DETAILS OF BUSINESS STRATEGY AND PRICING] is maintained, which are close to the indicative price rises in the Notifying Party's submissions. However, the indicative price rises increase to [5-10]-[5-10]%, for Vodafone products and [0-5]-[5-10]% for Unitymedia cable if only "internally consistent" diversion ratios are used for the calibration.
- (f) When the [DETAILS OF BUSINESS STRATEGY AND PRICING] (but national pricing for DSL is maintained) the additional scenarios predict price increases of around [5-10]% for Vodafone DSL, [0-5]% for Unitymedia cable

⁴⁶²

Specifically, the Notifying Party relies on the diversion ratio from Vodafone to Unitymedia which combines in the denominator number porting events away from Vodafone from both cable and DSL products. This can be problematic if cable customers have a different propensity to port their number. Indeed the ratio of ports to churn differ significantly across Vodafone cable and DSL products. To avoid distortions arising from such issues, the Commission has examined calibration scenarios that are only based on "internally consistent" diversion ratios, that is to say, only diversion ratios where the numerator and the denominator come from the same data source and product.

and [0-5]-[0-5]% for Vodafone cable products.⁴⁶³ With “internally consistent” diversion ratios the indicative price rise under independent pricing become [5-10]-[5-10]% for Vodafone DSL, [0-5]-[5-10]% for UM cable and [0-5]-[0-5]% for Vodafone cable.

- (572) In the Response to the Statement of Objections, the Notifying Party agrees with the Commission’s focus on the IPR model. However, it fundamentally disagrees with the Commission’s approach regarding migration efficiencies. According to the Notifying Party, the IPR model faces limitations and no longer produces meaningful predictions when it moves away from assumptions that correspond to observable pre-Transaction behaviour, in particular regarding a removal of the price linkages. The Notifying Party also considers that the additional calibration scenarios of its IPR analysis run by the Commission are not more robust than those it originally proposed and that some of these further calibrations simply assume away problems arising from limitations of the model. Moreover, not adjusting diversion ratios downwards to allow for elastic demand at the market level would lead to inflated price predictions. For these reasons, the Notifying Party considers that the Commission cannot conclude that there is evidence of significant indicative price rises even absent any efficiencies. Instead, the absence of “cogent and consistent” evidence of significant price increase would be supportive of the lack of a significant impediment of effective competition, particularly given the effect of the efficiencies from migration.
- (573) The Commission notes that arguments relating to efficiencies arising from Vodafone obtaining access to Unitymedia’s cable network are addressed in section VIII.C.2.2.2.7..
- (574) Regarding limitations of the modelling framework and robustness of estimates, the Commission acknowledges that the calibration of the model raises specific challenges in this case and has examined the sensitivity of results to different assumptions (see recitals (570)-(571)). The Commission considers, subject to sensitivities and caveats relating to the calibration assumptions, that the results of the IPR analysis can be given some, albeit low evidentiary weight.
- (575) The additional calibrations scenarios run by the Commission focus on modifications to the calibration scenarios which it considers more plausible (yet pragmatic) solutions to the calibration challenges than the solutions proposed by the Notifying Party (see recital (571) (c)-(f)). In particular, the Commission’s alternative assumption that setting prices according to the [DETAILS OF BUSINESS STRATEGY AND PRICING] is optimal pre-Transaction serves to identify the purely merger specific effect of relaxing that assumption post-Transaction from any pre-Transaction incentives to remove it.⁴⁶⁴ The Commission acknowledges that these

⁴⁶³ The results under the [DETAILS OF BUSINESS STRATEGY AND PRICING] (while maintaining the pre-existing ARPU difference between DSL and cable products) are almost identical regardless of whether the Unitymedia cable prices are constraint to be the same as Vodafone cable prices or not. Finally, when the [DETAILS OF BUSINESS STRATEGY AND PRICING] but national pricing for cable products is introduced, the increase for DSL remains around [5-10]%, the effect on Unitymedia prices becomes to [0-5]-[0-5]%, while the effect on Vodafone cable prices becomes to [0-5]-[0-5]%. The corresponding figures when “internally consistent” diversion ratios are used become [5-10]% to [5-10]% for Vodafone DSL, [0-5]% to [0-5]% for Unitymedia cable, and [0-5]% to [5-10]% for Vodafone cable.

⁴⁶⁴ The Commission agrees with the Notifying Party that the cost of the constraint are likely non-zero but small and that there are likely other [DETAILS OF BUSINESS STRATEGY AND PRICING] that are not modelled in the analysis. However, the Commission does not consider that a cost of the constraint equal to [...] of profits (as implied by the Notifying Party’s analysis) can be considered as small.

scenarios do not examine robustness to what it considers less plausible calibration assumptions.

- (576) Regarding the use of diversion ratios that do not foresee that customers would leave the market (which amounts to assuming inelastic demand), the Commission notes that it simply followed and used the diversion ratios proposed by the Notifying Party in its analysis. Moreover, while an aggregate (non-modelled) market wide demand response may lead to a slight overstatement of indicative price rises for the parties, the fact that the responses from rivals are not modelled leads to a slight understatement of expected post-Transaction price increases. The Commission acknowledges such effects in principle. However, a full modelling of these issues goes beyond the scope of the exercise in this case.
- (577) Overall, the Commission acknowledges that the IPR analysis (including the modifications introduced by the Commission) face a number of challenges and limitations in the context of this case, which have to be taken into account in the assessment. The Commission therefore agrees that the analysis has a lower predictive power than in cases that do not face such challenges. The Commission therefore considers that the analysis can be given only low evidentiary weight in the overall assessment of the present Transaction.

Quantitative evidence on evolution of prices following Vodafone/Kabel Deutschland

- (578) The Commission also has a number of reservations regarding the submissions by the Notifying Party regarding the absence of price increases following the acquisition of Kabel Deutschland (“KDG”) by Vodafone in 2014, which, according to the Notifying Party, confirm that the Transaction would not lead to price increases:
- (579) Firstly, [DETAILS OF COMMERCIAL ACTIVITIES].⁴⁶⁵ The focus on [DETAILS OF COMMERCIAL ACTIVITIES], may have taken priority over reacting to changed pricing incentives resulting from the elimination of competition for marginal customers. The pricing data may hence not yet reflect changes in marginal incentives if such effects materialise with a delay. Moreover, an analysis of this type cannot, by its nature, isolate the competitive impact of a transaction alone, but can at best inform of the net effect for competitive impact and any countervailing factors or efficiencies of a past transaction.
- (580) In the Response to the Statement of Objections, the Notifying Party argues that migration incentives are clearly relevant to the competitive assessment, as one should be assessing the overall effect on consumers. Moreover, the analysis would also find no price effects after the end of active migration [DETAILS OF COMMERCIAL ACTIVITIES].⁴⁶⁶
- (581) The Commission notes that its argument was referring to the migration of infra-marginal customers – which may lead to a short-run pre-occupation following integration efforts after a transaction but not to a long run change in pricing incentives. The extent to which migration will affect pricing incentives on a permanent basis is part of the assessment of efficiencies. As regards the time period

Moreover, the foregoing of [DETAILS OF BUSINESS STRATEGY AND PRICING] post-Transaction also cannot be modelled. The Commission therefore considers that the effect of relaxing the constraint post-Transaction can be most plausibly assessed under the assumption that the prices are optimal pre-Transaction, that is to say, that the cost is zero.

⁴⁶⁵ Vodafone’s reply to RFI 19, para 2.2.

⁴⁶⁶ Reply to the Statement of Objections, para 142.(i).

after [DETAILS OF COMMERCIAL ACTIVITIES], the Commission considers that the period of approximately [DETAILS OF COMMERCIAL ACTIVITIES] may still be too short to reliably identify trends.

- (582) Secondly, after the KDG acquisition, Vodafone introduced a [DETAILS OF BUSINESS STRATEGY AND PRICING].⁴⁶⁷[...]. If its pricing flexibility is constrained by this policy, as the Notifying Party argues, it will tend to have the effect of [DETAILS OF BUSINESS STRATEGY AND PRICING] in the absence of such a constraint. The introduction of this [DETAILS OF BUSINESS STRATEGY AND PRICING] may therefore distort the evolution of the cable price and the validity of the exercise.
- (583) In the Response to the Statement of Objections, the Notifying Party notes that there is no material difference in the merger effect over time, [DETAILS OF BUSINESS STRATEGY AND PRICING] (the first stage of which occurred in March 2015).⁴⁶⁸
- (584) In this respect, the Commission considers that the introduction of several factors ([DETAILS OF BUSINESS STRATEGY AND PRICING]) may have influenced the evolution of price for some time which complicates the interpretation of the data. While the Commission acknowledges that the data is not conclusive whether merger effects differed over time it is also not inconsistent with such factors having affected relative price increases.
- (585) Thirdly, while the Commission had preliminary doubts that the Notifying Party's analysis does not satisfactorily control for the joint evolution in speed and price for at each of the price points for high, medium and low usage customers, the Commission acknowledges that the additional empirical analysis in the Reply to the Statement of Objections⁴⁶⁹ addresses these concerns. According to that analysis, the difference in prices between Unitymedia and Vodafone/KDG appear to narrow in the period before the transaction then increase between 2014 and 2016 and then narrow again between 2016 and 2018. This appears to be driven primarily by movements in the higher Unitymedia price as Vodafone/KDG prices have remained comparatively stable. The Commission acknowledges that this does not amount to clear evidence of Vodafone price increases following that transaction.
- (586) Fourth, Vodafone's acquisition of KDG likely had a different competitive impact as the increment from the transaction and the combined market share was lower. In particular, according to the Notifying Party's submission,⁴⁷⁰ the increment resulting from the KDG acquisition was [5-10]% with combined market share of [30-40]% in the KDG footprint, while the Transaction leads to an increment of [5-10]% and a combined market share [40-50]% in the Unitymedia's footprint.
- (587) In the Response to the Statement of Objections, the Notifying Party reiterates that it considers the overall market structure in the two footprints to be similar at the time of the respective mergers regarding the combined share of around [70-80]% of the respective merging parties and Deutsche Telecom; and that the increment from the transactions, whilst smaller in absolute terms in Vodafone/KDG was similar in relative terms to the current transaction. Moreover, market shares would in any event

⁴⁶⁷ Vodafone's reply to RFI 19, para 1.2(i).

⁴⁶⁸ Reply to the Statement of Objections, para 142.(i).

⁴⁶⁹ Reply to the Statement of Objections, Annex B.3

⁴⁷⁰ "Competitive impact of the Vodafone/KDG merger", Frontier Economics, 6 January 2019 [ID 3193].

not fully capture the dynamics of competition and, in particular, the closeness of competition between the merging parties.

- (588) The Commission considers that these arguments do not undermine its observation that the current transaction results in a larger increment and a larger combined market share for the merging parties than the Vodafone/KDG transaction. Moreover, it is why the evolution in the dynamics of competition between cable and DSL technologies in general would make the transaction more rather than less comparable.
- (589) Finally, the Notifying Party also considers that the absence of price effects following the Vodafone/KDG transaction demonstrates that the IPR model (not accounting for migration synergies) cannot be relied upon to determine the likely price effects of the Transaction. This is because the same model, when applied to the Vodafone/KDG transaction would predict price increases of [0-5]% for Vodafone's DSL offering and [0-5]% for KDG's cable offering which were not observed. Similarly, the model would predict that KDG's cable subscriber numbers would have [...].⁴⁷¹
- (590) The Commission acknowledges that the IPR model when applied to the Vodafone/KDG acquisition does not predict the evolution of prices following that transaction. However, the Commission does not consider this to invalidate the IPR model for the purposes of assessing the Transaction (subject to the caveats stated above) for the following reasons:
- (591) In the first place, for the reasons discussed above, the transactions are not comparable and the actions after 2014 (that is to say, migration efforts [DETAILS OF BUSINESS STRATEGY AND PRICING]) may have delayed price effects.
- (592) In the second place, the Notifying Party uses diversion ratios in its IPR analysis of the Vodafone/KDG acquisition that are based on national subscriber market shares in 2013 which need not reflect the closeness of competition between the Vodafone and KDG at the time. Similarly, the margins used relate to Vodafone's fiscal year 2016 and need not reflect the margins in 2013. The IPR predictions therefore cannot be considered reliable.
- (593) In the third place, evolution of DSL prices has already seen a sharp decline prior to the KDG acquisition, which does not seem to be reflected in the Notifying Party's analysis.⁴⁷² This pre-existing trend, cannot be accounted for by using Unitymedia as a control group.

Conclusion

- (594) The results from quantitative analyses indicate that absent efficiencies the elimination of horizontal competition between the Parties is likely lead to significant price increases even when accounting for national pricing policies and Vodafone's [DETAILS OF BUSINESS STRATEGY AND PRICING]. However, due to the specific challenges in the calibration the evidentiary weight that can be given to the quantitative analysis in this case is low.
- (595) The Commission acknowledges that the evidence on prices following Vodafone's acquisition of Kabel Deutschland in 2014 does not indicate increase in KDG cable prices following that transaction. However, the Commission considers this of little

⁴⁷¹ Reply to the Statement of Objections, para 142(iii).

⁴⁷² "Competitive impact of the Vodafone-KDG Merger – Follow-up to CET meeting", Frontier economics, 20 February 2019, Figures 7 and 8.

informative value in light of (i) the differences in the two transactions and (ii) the [DETAILS OF BUSINESS STRATEGY AND PRICING] and migration efforts after 2014.

2.2.2.6. No likely entry and no countervailing buyer power

- (596) The Commission notes that the market for the retail provision of fixed internet services is characterised by substantial barriers to entry due to the high upfront investment needed to set up an own network. This is in particular the case in areas which are already covered by the cable and/or copper network of respectively the Parties and Deutsche Telekom, due to the low profitability of any investment.⁴⁷³
- (597) Whilst the possibility of entry based on regulated wholesale access to Deutsche Telekom's xDSL network reduces entry barriers, it still requires investments to build the interconnections to provide services via Layer 3 bitstream access (which requires the least level of investment).
- (598) In this context, respondents to the market investigation generally consider that future entry is unlikely.⁴⁷⁴ For instance, Telefónica explains that "*it is unlikely that post-transaction a company would enter the market and make up for the loss of competition as a result of the Proposed Transaction.*"⁴⁷⁵ In fact, the Parties themselves in the Response to the Statement of Objections acknowledge that they are not aware of any major new entry likely to occur.
- (599) Moreover, the Commission considers that, given the limited size of customers, they are unlikely to exert any countervailing buyer power. This finding is supported by the view expressed by respondents to the market investigation, which confirm that customers have no countervailing buyer power.⁴⁷⁶ This is because residential and small business customers are price takers, who do not influence the terms and conditions of the purchase as they do not negotiate individual contracts.
- (600) Therefore, the Commission considers that the anticompetitive horizontal non-coordinated effects of the Transaction in the retail market for fixed internet access services are unlikely to be offset by entry or buyer power.

2.2.2.7. Efficiencies

(i) Framework of assessment

- (601) The Commission's framework for assessing efficiencies resulting from a merger is set out in paragraphs 77 and 78 of the Horizontal Merger Guidelines: "*The Commission considers any substantiated efficiency claims in the overall assessment of the merger. It may decide that, as a consequence of the efficiencies that the merger brings about, there are no grounds for declaring the merger incompatible with the common market pursuant to Article 2(3) of the Merger Regulation. This will be the case when the Commission is in a position to conclude on the basis of sufficient evidence that the efficiencies generated by the merger are likely to enhance the ability and incentive of the merged entity to act pro-competitively for the benefit of consumers, thereby counteracting the adverse effects on competition which the*

⁴⁷³ Replies to questionnaire Q8, question 112.6. This is also demonstrated by the fact that not even the Parties, despite third party claims, appear to constitute each other potential competitor at infrastructure level in view of a possible cable overbuild, see sections VIII.C.2.2.2.3. and VIII.C.2.4 above.

⁴⁷⁴ Replies to questionnaire Q8, question 112.6.1.

⁴⁷⁵ Telefónica, submission of 14 November 2018, Legal memorandum, page 8 [ID 3226].

⁴⁷⁶ See, for example, Telefónica, submission of 14 November 2018, Legal memorandum, page 8 [ID 3226].

merger might otherwise have. For the Commission to take account of efficiency claims in its assessment of the merger and be in a position to reach the conclusion that as a consequence of efficiencies, there are no grounds for declaring the merger to be incompatible with the common market, the efficiencies have to benefit consumers, be merger specific and be verifiable. These conditions are cumulative".

(602) The Commission will therefore consider positive effects of efficiencies that benefit consumers as part of its overall assessment of the concentration, provided the efficiencies are substantiated and satisfy the three cumulative criteria:

- (a) Efficiencies have to be verifiable such that the Commission can be reasonably certain that the efficiencies are likely to materialise and be substantial enough to counteract a merger's potential harm to consumers;⁴⁷⁷
- (b) Efficiencies have to be a direct consequence of the concentration and cannot be achieved to a similar extent by less anticompetitive alternatives;⁴⁷⁸
- (c) Efficiencies have to benefit consumers in the sense that they should be substantial and timely and should, in principle, benefit consumers in those relevant markets where it is otherwise likely that competition concerns would occur.⁴⁷⁹

(603) The Horizontal Merger Guidelines further explain that the burden of proof for showing that efficiencies fulfil the above criteria lies with the merging parties as most of the information is solely in their possession. It is, therefore, incumbent upon the parties to provide in due time all the relevant information necessary to demonstrate that the claimed efficiencies are merger-specific and likely to be realised. Similarly, it is for the parties to show to what extent the efficiencies are likely to counteract any adverse effects on competition that might otherwise result from the merger, and therefore benefit consumers.⁴⁸⁰ Furthermore, evidence relevant to the assessment of efficiency claims should include, in particular, internal documents that were used by the management to decide on the merger, statements from the management to the owners and financial markets about the expected efficiencies, historical examples of efficiencies and consumer benefit, and pre-Transaction external experts' studies on the type and size of efficiency gains, and on the extent to which consumers are likely to benefit.⁴⁸¹

(ii) Migration synergies

(a) *Notifying Party's submission*

(604) The Notifying Party submits that the Transaction would give rise to "migration synergies" with an estimated value of over EUR [DETAILS OF SYNERGIES]. Obtaining ownership of Unitymedia's cable infrastructure would allow Vodafone to offer new and existing customers higher quality cable products with faster broadband speeds than absent the Transaction where Vodafone's DSL based products rely on wholesale access to Deutsche Telekom's fixed network.

(605) As wholesale access to Deutsche Telekom's network involves access costs that are significantly higher than the associated incremental cost of the equivalent elements

⁴⁷⁷ Horizontal Merger Guidelines, paragraph 86.

⁴⁷⁸ Horizontal Merger Guidelines, paragraph 85.

⁴⁷⁹ Horizontal Merger Guidelines, paragraph 79.

⁴⁸⁰ Horizontal Merger Guidelines, paragraph 87.

⁴⁸¹ Horizontal Merger Guidelines, paragraph 88.

of the Unitymedia network, Vodafone would have a strong financial incentive post-Transaction to migrate existing DSL customers in the Unitymedia footprint to cable products. Consumers would benefit from such migration through incentive schemes and higher quality. The net present value of such “unbundled local loop migration” or “ULL migration” would be EUR [DETAILS OF SYNERGIES].

- (606) Moreover, the difference in variable costs would also provide a strong incentive for Vodafone to acquire new customers through lower prices/higher quality than in counterfactual thereby also benefitting new customers. Such “ULL avoidance” in the acquisition of new customers is expected to generate cost savings with a net present value of EUR [DETAILS OF SYNERGIES].
- (607) Moreover, the improvement in Vodafone’s cost structure would lead to lower long-run prices and better quality services for Vodafone customers.
- (608) Furthermore, the Parties will be able to provide more competitive, higher quality fixed-mobile bundles in the Unitymedia footprint.
- (609) The Notifying Party considers such efficiencies to be merger specific as they would not be available to Vodafone absent the Transaction. Lower prices and higher quality would also benefit consumers. The claims would also be verifiable via internal documents and investor presentations. Moreover, the experience of the migration for customers following Vodafone’s acquisition of Kabel Deutschland in 2014 demonstrates such efficiencies.
- (610) The Notifying Party submits that the effect of these migration synergies can be accounted for in the quantitative analysis of the non-coordinated effect of the Transaction on fixed broadband products as a reduction in direct variable/marginal costs. Doing so would show that such a marginal cost reduction would result in a strong incentive for the merged entity to reduce prices which would more than offset any incentive to increase price resulting from the elimination of competition between the Parties.
- (611) In the Reply to the Statement of Objections, the Notifying Party argues that claimed efficiencies satisfy the criteria of the Horizontal Merger Guidelines. The synergies formed a critical part of Vodafone’s business case for the Transaction which was informed by previous experience from the Vodafone/KDG acquisition.⁴⁸² The claimed efficiencies would be verifiable through internal documents, statements in investor presentations, and historical examples in the form of the experience from the Vodafone/KDG acquisition – sources of evidence explicitly referred in the Horizontal Merger Guidelines.⁴⁸³ The Notifying Party also points to evidence [DETAILS OF BUSINESS ACTIVITIES].⁴⁸⁴ The Notifying Party also explains that it correctly quantified the difference in incremental costs between serving customers with cable products instead of DSL products.⁴⁸⁵
- (612) While Unitymedia’s incentive to acquire customers would be reflected in market prices pre-Transaction, the Notifying Party argues that Vodafone’s change in incentive post-Transaction will need to be accounted for in the assessment. Vodafone would also have lower conversion costs for migrating existing DSL customers to

⁴⁸² Reply to the Statement of Objections, para 149 et seq.

⁴⁸³ Reply to the Statement of Objections para 184-185.

⁴⁸⁴ Reply to the Statement of Objections para 161-164.

⁴⁸⁵ Reply to the Statement of Objections para 185.

cable than Unitymedia's cost of acquiring such customers pre-Transaction.⁴⁸⁶ As Vodafone would gain direct access to the distribution technology rather than having to rely on wholesale access to Deutsche Telecom's DSL infrastructure, the Transaction would in fact have a vertical as well as a horizontal dimension. Migration synergies would be akin to a vertical efficiency and the downward pricing pressure from such a vertical efficiency would need to be taken into account in the overall assessment even if one eventually reached the conclusion that did does not completely outweigh the upward pressure from the loss of horizontal competition between rival broadband suppliers.⁴⁸⁷

- (613) According to the Notifying Party, there could be no consumer welfare loss from the withdrawal of the Unitymedia brand, because brand is the least important parameter of competition and because the Transaction would not affect the fundamental assets and capabilities of the Parties to win customers. Similarly, [DETAILS OF SYNERGIES].⁴⁸⁸
- (614) Moreover, the Notifying Party argues that Vodafone would have assets and capabilities that can be used to increase cable gross additions for the merged entity. The efficiencies would not depend on Vodafone selling more fixed internet products but only more [DETAILS OF SYNERGIES] than Unitymedia standalone. [DETAILS OF SYNERGIES] Vodafone has strong existing sales channels and, if anything, a stronger incentive post-Transaction to expand them than Unitymedia alone.⁴⁸⁹ The logic of the quantified migration synergies in internal documents is also that newly acquired or migrated cable customers on which such synergies are based are inherently in addition to any customer acquisitions of Unitymedia standalone.⁴⁹⁰
- (615) According to the Notifying Party, findings from the Vodafone/KDG acquisition are entirely relevant. [DETAILS OF SYNERGIES]. The Commission's evidence would therefore provide no logical grounds for ignoring the migration synergies in their entirety. [DETAILS OF SYNERGIES].⁴⁹¹
- (616) Finally, the Notifying Party argues that in line with the standard assumptions underpinning IPR analyses, migration synergies should be treated as a reduction in costs of Vodafone's fixed internet products as proposed in its submissions. The purpose of IPR models is to consider post-Transaction changes in short run pricing incentives under "hypothetical" all-else-equal situations without taking into account supply-side repositioning. Not incorporating migration at all, would not allow for the option of directly offering cable to (existing and would be) DSL customers in the Unitymedia footprint post-Transaction.⁴⁹²
- (b) *Commission's assessment*
- (617) According to the Commission's practice, variable or marginal cost reductions are more likely to be passed on to consumers than fixed cost savings, as they directly

⁴⁸⁶ Reply to the Statement of Objections para 153-155.

⁴⁸⁷ Reply to the Statement of Objections, Annex B.2, "Economic Considerations on the Quantitative Assessment of Unilateral Effects in the German Broadband Market", CRA, page 1-2.

⁴⁸⁸ Reply to the Statement of Objections para 165-170.

⁴⁸⁹ Reply to the Statement of Objections para 171-175.

⁴⁹⁰ Reply to the Statement of Objections para 157(i).

⁴⁹¹ Reply to the Statement of Objections para 179-183 and 157(ii).

⁴⁹² Reply to the Statement of Objections, Annex B.2, "Economic Considerations on the Quantitative Assessment of Unilateral Effects in the German Broadband Market", CRA, page 2.

affect firms' pricing incentive.⁴⁹³ The reason is that a reduction in the marginal costs of serving additional customers increases the margin earned on such customers and hence the incentive to attract additional customers through lower prices. Accordingly, the Commission considers that variable cost savings (to the extent that they would likely result in lower marginal costs) would likely be (partly) passed on to consumers in terms of lower prices. As other efficiencies, variable cost efficiencies further need to be verifiable and merger specific.

- (618) In this case, the starting point for the Commission's assessment is that the migration synergies claimed by the Notifying Party do not rest on any reduction in variable costs of different technical broadband solutions offered by either Vodafone or Unitymedia in the Unitymedia footprint. Pre-Transaction Unitymedia offers fixed internet products via its cable network, while Vodafone offers fixed internet products via wholesale access to Deutsche Telekom's DSL network. The Notifying Party does not claim that the costs of providing fixed internet products over either cable or wholesale access via DSL would change post-Transaction. The Notifying Party's claim about migration synergies is solely based on the fact that Unitymedia's cable network would come under Vodafone's control as a result of the Transaction. While Vodafone would sell cable products in preference over DSL based access products [DETAILS OF COMMERCIAL STRATEGY], DSL products would also [DETAILS OF COMMERCIAL STRATEGY] at their pre-merger cost.
- (619) The Commission acknowledges that gaining access to the cable infrastructure of Unitymedia will allow Vodafone to serve (or at least offer) existing and new customers which it would have served via wholesale access to Deutsche Telekom's DSL infrastructure in the absence of the Transaction at lower incremental costs via cable (where cable is available). The Commission accepts that this is a merger specific and verifiable change.
- (620) However, the Commission re-emphasises that the Transaction will not change the technological options available to customers or the costs of the suppliers of providing these options. While pre-Transaction customers within the Unitymedia footprint can choose between cable based fixed internet products from Unitymedia and DSL based products from Vodafone (among other providers), competition between these products will be eliminated post-Transaction and the Parties will [DETAILS OF COMMERCIAL STRATEGY].
- (621) The Commission agrees with the Notifying Party that the IPR framework is not well suited to assess supply side repositioning or the disappearance of brands. IPR analyses focus on the effect on pricing incentives of the change of ownership and marginal costs under the assumption that product characteristics and available brands remain unchanged. The claimed efficiencies are inherently linked to a product repositioning (by changing the technology of Vodafone products or the brand of the cable offer). The Commission considers that IPR analysis cannot be relied upon in this case for assessing effects of the Transaction that go beyond the pure change of ownership. In particular, the Notifying Party's quantification of the effect of claimed efficiencies in the IPR framework treats the migration efficiencies as a pure cost reduction while abstracting from the supply side repositioning aspect of the change in technology of the Vodafone product (which is the very reason for the cost efficiency) as well as the disappearance of the Unitymedia brand. The Commission

⁴⁹³

Horizontal Merger Guidelines, paragraph 80.

cannot accept this as a useful balancing of the effect of claimed variable costs efficiencies against the harm from the transaction in this case.

- (622) Therefore, the Commission can only perform a qualitative assessment and balancing of claimed variable costs efficiencies.
- (623) Firstly, the Commission acknowledges that as regards the migration of Vodafone's existing DSL customers to cable, Vodafone likely faces lower costs to migrate its customers than the costs Unitymedia would need to incur to acquire such customers from Vodafone. The Commission therefore considers that existing Vodafone DSL customers would likely benefit from being offered Vodafone's cable based products and from being incentivised to migrate to cable. However, this benefit would be limited to Vodafone's existing DSL customers in the Unitymedia footprint ([5-10]% of customers in the Unitymedia footprint which corresponds to approximately [0-5]% of customers nationwide). Such an effect would also only be transitory, as it would disappear once customers churn.
- (624) Similarly, the Commission acknowledges that the Transaction would allow Vodafone to offer higher quality fixed-mobile bundles in the Unitymedia footprint than either party could offer absent the Transaction. However, as illustrated in section VII.6, fixed-mobile bundles are of limited importance in Germany.
- (625) The two effects are therefore unlikely to outweigh the harm arising from elimination of competition between the Parties.
- (626) Secondly, the Commission considers that the claimed downward pricing pressure resulting from Vodafone being able to offer new customers cable products post-Transaction (which allows it to save on wholesale access charges to Deutsche Telekom) is already present in the market as Unitymedia already benefits fully from the lower cost cable infrastructure with which it competes with Vodafone. The change of ownership of the cable infrastructure does therefore not lead to a new form of downward pricing pressure as regards competition for new customers. Similarly, the availability of high speed cable products does not depend on the Transaction as such products are offered and would continue to be offered by Unitymedia absent the Transaction.
- (627) The claim that the change of ownership of the cable infrastructure would generate an efficiency that would dampen or outweigh the elimination of competition between the Parties thus depends on the extent to which Vodafone would have a significantly greater ability to acquire new customers than Unitymedia for reasons other than the lower costs or higher quality of cable based products.
- (628) The Notifying Party considers that the re-branding of Unitymedia's products will not have a material impact on consumer welfare. According to the Notifying Party, the merged entity's ability to acquire cable customers would increase as the Transaction combines the fundamental assets and capabilities of Vodafone and Unitymedia to win customers. If anything, the merged entity would also have a stronger incentive to [DETAILS OF BUSINESS ACTIVITIES].
- (629) The Commission does not consider the extent of such effects to be sufficiently substantiated by the Notifying Party. The main arguments by the Notifying Party are its projections for the combined entity relative to the Parties standalone [DETAILS OF COMMERCIAL SYNERGIES]. While the Commission acknowledges that [DETAILS OF COMMERCIAL SYNERGIES], the KDG acquisition differed from the Transaction (as set out in recitals (586)-(588)). It is hence not clear that the same effects would materialise in this case.

(630) Overall, the Commission concludes that while the Transaction is likely to lead to some limited efficiencies in the form of (i) better products and incentives to existing Vodafone DSL customers that migrate to cable; (ii) better fixed-mobile bundles; and (iii) a greater ability of the combined entity to acquire new cable customers relative to Unitymedia's ability standalone, the Notifying Party has not demonstrated that such efficiencies would be likely to outweigh the harm resulting from the elimination of competition between the Parties.

(iii) Acceleration of infrastructure development in Germany

(a) Notifying Party's submission

(631) Firstly, the Notifying Party submits that the Transaction would also substantially expedite Germany's infrastructure development. The merged entity would deliver Gigabit connections to an additional 25 million German households by 2022 (an almost nine-fold increase from 3 million currently). According to the Notifying Party, it is highly uncertain whether the same could be achieved in the counterfactual, in particular given that Unitymedia, [DETAILS OF BUSINESS STRATEGY]. In particular, the increased scope of the merged entity would improve the business case for such upgrades in light of supply-side synergies from using a common infrastructure to deliver both fixed broadband and mobile backhaul.

(632) Secondly, the Notifying Party also claims that the synergies from the Transaction would facilitate the merged entity's infrastructure investment in Germany both in terms of fibre network roll out and the development of 5G capabilities, with over EUR [...] of investment planned over the next four years.

(633) Thirdly, the Notifying Party believes that the competitive stimulus from the merged entity would also incentivise Deutsche Telekom to accelerate its own infrastructure development plans. Vodafone expects that, as a result of this competitive reaction, fibre roll out by Deutsche Telekom would reach an [DETAILS OF INTERNAL ASSESSMENT OF COMPETITORS] homes beyond existing expectations. Following the announcement of the Transaction, Deutsche Telekom has already announced an acceleration of its investments plans in May 2018, announcing new plans to ramp up fibre roll out to 2 million households each year by 2021.

(b) Commission's assessment

Verifiability and merger specificity

(634) None of the efficiency claims related to the acceleration of infrastructure development in Germany are sufficiently substantiated to assess their verifiability and merger specificity.

(635) As a preliminary remark, the Commission notes that the Notifying Party has not attempted to sufficiently substantiate the efficiency claims linked to the acceleration of infrastructure development. The Form CO contains a very short section describing these efficiency claims, which roughly corresponds to the description set out above,⁴⁹⁴ and does not include any relevant annexes setting out the underlying calculations. The Response to the Article 6(1)(c) Decision does not contain any relevant information in this regard beyond the information already provided in the Form CO. The Notifying Party has not made any additional submissions in this regard. In particular, the Notifying Party has not substantiated its efficiency claims in the Response to the SO.

⁴⁹⁴

See Form CO, Section 9.

- (636) Regarding the first efficiency claim, the Commission notes that it is impossible to verify this claim as the Notifying Party has provided very limited information only. In particular, the Commission has received no underlying calculations of the claimed 25 million additional Gigabit connections.
- (637) Based on the information available to the Commission, it seems highly unlikely that the Transaction would deliver 25 million additional Gigabit connections.
- (638) With regard to Vodafone's footprint, the Commission notes that Vodafone had implemented its Gigabit initiative already in 2017 irrespective of the current Transaction. In September 2017, Vodafone announced the upgrade of its 12.6 million cable homes to DOCSIS 3.1.⁴⁹⁵ Together with Vodafone's Giga Gewerbe⁴⁹⁶ and Giga Gemeinde projects, Vodafone expected to deliver around 13.7 million new Gigabit connections. Hence, there is no merger-specific change with regard to Vodafone's footprint.
- (639) With regard to Unitymedia's footprint, the Commission notes that it is actually Unitymedia that (i) was the first to start the DOCSIS 3.1 roll out and (ii) has been more aggressive with regard to network upgrades and expansions in the past (see section VIII.C.2.2.2.3.(i)). In any case, the Notifying Party has not demonstrated that it would deliver more Gigabit connections than Unitymedia itself would have done absent the Transaction. Moreover, it is unlikely that Unitymedia, who has been very active in making investments in the past, would fall behind Vodafone in this respect in the future. Rather, Unitymedia is very likely to continue making infrastructure investment absent the Transaction as it has been pre-Transaction.
- (640) In this respect, the Commission notes that Unitymedia has continued its roll out, announcing the launch of DOCSIS 3.1 in Mannheim and Heilbronn in February 2019 and committing to DOCSIS 3.1 roll out vis-à-vis certain Level 4 operators under an individual contract by end of 2019.⁴⁹⁷ To the contrary, as Vodafone explained in mid-March 2019, it is currently working on a technical solution to improve the upload speed and cannot indicate a launch date.⁴⁹⁸
- (641) Regarding the second efficiency claim, the Notifying Party claims that the Transaction would result in substantial cost and cross-selling synergies. Vodafone expects to achieve operating cost and CAPEX synergies of approximately EUR [...] on an annual basis by the fifth year post closing, excluding integration costs (equivalent to a net present value of approximately EUR [...] net of integration costs), as well as synergies from cross-selling to the combined customer base with an estimated net present value exceeding EUR [...] (net of integration costs and the expected impact of increased competition from Vodafone's rivals).
- (642) However, the Commission has not received any underlying calculations of the predicated synergies. Moreover, the Commission has received no information at all regarding the impact of the predicted efficiencies on the investment figure of EUR [...]. Thus it is impossible for the Commission to verify the Notifying Party's claim.

⁴⁹⁵ See <https://www.vodafone.com/content/index/media/vodafone-group-releases/2017/vodafone-germany-gigabit-investment-plan.html#> [ID 5080].

⁴⁹⁶ Vodafone's Giga Gemeinde project does not relate to residential customers, as it concerns the connection of business parks.

⁴⁹⁷ See RFI 25 to the Parties, question 7.

⁴⁹⁸ See <http://www.digitalfernsehen.de/Gigabit-Kabelinternet-noch-mit-einigen-Schwaechen.176182.0.html> [ID 4950].

- (643) Regarding the third efficiency claim, the Commission notes that it is impossible to verify this claim as the Notifying Party has provided very limited information only regarding its belief that the Transaction will incentivise Deutsche Telekom to accelerate its fibre roll out. In particular, the Commission has received no underlying calculations of the claimed 4 million additional households. Moreover, the Notifying Party has provided no evidence that would suggest a causal link between the announcement of the Transaction and Deutsche Telekom's announcement of its fibre strategy.

Benefit to consumers

- (644) As discussed above, the claimed efficiencies related to the acceleration of infrastructure development do not meet the criterion of verifiability and of merger specificity. For this reason, it is not necessary to conclude as to their benefit to consumers.
- (645) Nevertheless, the Commission points out that a significant share of synergies seem to be related to fixed cost savings. In relation to these claims the Commission, consistently with its practice, considers that the fixed cost savings claimed by the Notifying Party would not directly benefit consumers in the form of lower prices. The Commission notes, as a general point, that fixed cost savings are less likely to be passed on to consumers than variable cost savings. This is because fixed costs savings do not affect marginal pricing decisions, and are therefore unlikely to lead to lower prices. In this case, the Notifying Party has not shown how fixed costs savings would affect pricing decisions.
- (646) Moreover, the Notifying Party has not established a clear and direct link between the claimed fixed cost savings and the claimed overall consumer benefits derived from higher investments or improved quality. There is no specific link going from a particular fixed cost saving to a specific quality improvement or additional investment. The Notifying Party has not explained any specific mechanism linked to the fixed cost savings due to which the merged entity (and/or Deutsche Telekom) would be likely to accelerate their infrastructure investment. The Notifying Party merely stated that the increased scope of the merged entity would improve the business case for network upgrades without explaining the improved business case in any further detail.

(iv) Sharing backhaul infrastructure

(a) Notifying Party's submission

- (647) The Notifying Party submits that the Parties would also generate synergies by using common network infrastructure for both fixed and mobile services. In particular, access to Unitymedia's fibre network would allow Vodafone [DETAILS OF SYNERGIES]. This would also facilitate the roll out of new mobile technology such as 5G and will bring higher quality mobile services to consumers.
- (648) The Notifying Party explains that, in the Unitymedia's footprint, Vodafone [DETAILS OF SYNERGIES].

(b) Commission's assessment

Benefit to consumers

- (649) The efficiency related to better mobile backhaul concerns the market for the retail supply of mobile telecommunications services.

- (650) As explained in section VII.2.1., the results of the first phase market investigation clearly indicate that mobile broadband is not considered to be part of the same market as retail fixed internet access services.
- (651) The Commission notes that the efficiency falls outside the markets on which the Commission has identified consumer harm in this Decision.
- (652) Such alleged efficiency thus cannot be taken into account in the competitive assessment of the Transaction pursuant to paragraph 79 of the Horizontal Merger Guidelines.

Verifiability and merger specificity

- (653) As discussed above, the claimed efficiency related to Vodafone's mobile network does not meet the criterion of giving rise to a benefit to consumers. For this reason, it is not necessary to conclude as to its verifiability and merger specificity.
- (654) Nevertheless, the Commission notes that it is also impossible to assess the verifiability and merger specificity of this efficiency claim as the Notifying Party has not provided the necessary information in this regard.
- (655) The Form CO contains a very short section describing this efficiency claim, which does not include any relevant annexes setting out the underlying calculations. The Response to the Article 6(1)(c) Decision does not contain any relevant information in this regard beyond the information already provided in the Form CO. The Notifying Party has not made any additional submissions in this regard.
- (656) In addition, in a different context, the Notifying Party itself referred to the limited scope of this efficiency: *"The proposed transaction will have very limited impact on the development on Vodafone's mobile network. Only one specific synergy has been calculated as part of the business case, which arises from using Unitymedia's network to connect mobile base stations or points of concentration to the Vodafone backhaul network. This synergy amounts [DETAILS OF SYNERGIES] (see further the response to question 28 below), reflecting the extremely limited impact of the merger in this respect."*⁴⁹⁹

(iv) Conclusion on efficiencies

- (657) In light of the above, the Commission considers that the Notifying Party has not demonstrated that the efficiencies claimed would outweigh the harm resulting from the elimination of competition between the Parties.

2.2.3. Conclusion

- (658) In light of the foregoing, the Commission concludes that the Transaction would significantly impede effective competition in the market for the retail supply of fixed internet access services in Germany as a result of horizontal non-coordinated effects.

2.3. Horizontal non-coordinated effects in the retail supply of mobile telecommunications services in Germany

2.3.1. The Notifying Party's view

- (659) The Notifying Party submits that there is only a minor overlap on the German retail mobile market due to Unitymedia's very small presence as a service provider based on wholesale access to Telefónica's mobile network.

⁴⁹⁹ See Parties' reply to RFI 22, question 26.

- (660) Firstly, the Notifying Party points out that Unitymedia has *de minimis* market position given its market share of below [0-5]% on all bases. Therefore, Unitymedia is not a significant competitor.
- (661) Secondly, the Notifying Party explains that Unitymedia is not a close competitor to Vodafone. Unitymedia is active on a limited basis offering mobile services only to customers within its cable footprint and primarily to those also purchasing a fixed cable service from Unitymedia. It is only offering post-paid services.
- (662) Thirdly, the merged entity will face significant competition from other providers, including MNOs Deutsche Telekom and Telefónica as well as service providers such as Freenet and United Internet. The Notifying Party states that several non-MNOs, including MVNOs Lebara and Lycamobile, have a stronger market position than Unitymedia.
- (663) Fourthly, the Notifying Party refers to low barriers to entry for service providers and MVNOs which would also constrain the merged entity. In the Notifying Party's view, this is also evidence by the fact that the German mobile market has one of Europe's most advanced non-MNO sectors, with around 30 legal entities providing mobile services as MVNOs, service providers or branded resellers. These non-MNOs have been steadily increasing their market share in recent years.

2.3.2. *The Commission's assessment*

2.3.2.1. The German market for retail mobile telecommunications services

- (664) There are three MNOs active on the retail mobile market in Germany: Deutsche Telekom, Telefónica and Vodafone.
- (665) Besides the MNOs, there are also other mobile telecommunications services providers, such as Unitymedia, which do not operate a mobile network and compete based on a wholesale access agreement with an MNO. These players comprise MVNOs, service providers and branded resellers.
- (666) MVNOs and service providers sell mobile services to end customers, under their own brands and for their own account based on wholesale access granted by MNOs to their mobile networks. MVNOs control certain parts of the network infrastructure, such as the core network, which allows them to control their traffic and enter into interconnection agreements with other providers. Service providers do not control any network infrastructure.
- (667) Branded resellers do not enter into contracts with end customers. They do not provide their own mobile telecommunications services and thus do not need to utilise the MNOs' networks. Instead they operate as distributors of these services on behalf of MNOs, while using their own brand and their own distribution channels.

2.3.2.2. Market shares and concentration levels

- (668) The market shares of the Parties and their largest competitors in the market for the retail supply of mobile telecommunications services in Germany are illustrated in Table 10 in terms of subscribers and revenues for the period 2015-2018.

Table 10: Market shares for the retail supply of mobile telecommunications services
(2015-2018)

Nationwide	2015/2016		2016/2017		2017/2018	
	M	%	M	%	M	%
Subscribers						
Vodafone	[...]	[20-30]%	[...]	[20-30]%	[...]	[20-30]%
Unitymedia	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%
Combined	[...]	[20-30]%	[...]	[20-30]%	[...]	[20-30]%
Telefónica	[...]	[30-40]%	[...]	[30-40]%	[...]	[30-40]%
Deutsche Telekom	[...]	[20-30]%	[...]	[20-30]%	[...]	[20-30]%
Freenet	[...]	[10-20]%	[...]	[10-20]%	[...]	[10-20]%
United Internet	[...]	[5-10]%	[...]	[5-10]%	[...]	[5-10]%
Lebara	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%
Lycamobile	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%
Total	[...]	100%	[...]	100%	[...]	100%
Revenues						
Vodafone	[...]	[20-30]%	[...]	[20-30]%	[...]	[20-30]%
Unitymedia	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%
Combined	[...]	[20-30]%	[...]	[20-30]%	[...]	[20-30]%
Deutsche Telekom	[...]	[30-40]%	[...]	[30-40]%	[...]	[30-40]%
Telefónica	[...]	[20-30]%	[...]	[20-30]%	[...]	[20-30]%
Freenet	[...]	[5-10]%	[...]	[5-10]%	[...]	[10-20]%
United Internet	[...]	[5-10]%	[...]	[5-10]%	[...]	[5-10]%
Lebara	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%
Lycamobile	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%
Total	[...]	100%	[...]	100%	[...]	100%

Source: Form CO.

- (669) Table 10 shows that pre-Transaction Vodafone is the number two or three provider of retail mobile communication services in Germany based on revenues and subscribers, respectively. On the contrary, Unitymedia has a market share of [0-5]% in terms of subscribers and [0-5]% in terms of revenues only.
- (670) Similar conclusions hold true based on share estimates for narrower segmentations of the market, that is to say, with respect to the distinction between residential and business customers as well as postpaid and prepaid customers. Within each possible segment of the retail mobile market, Unitymedia has a market share of below [0-5]%.⁵⁰⁰ Unitymedia is not active in the prepaid segment. Segment share data are provided in Table 11.

⁵⁰⁰

See Form CO, Annex 6.C.VII.8.

Table 11: Segment shares for the retail supply of mobile telecommunications services
(2018)

Nationwide	Residential		Business		Postpaid		Postpaid residential	
	M	%	M	%	M	%	M	%
Subscribers								
Vodafone	[...]	[10-20]%	[...]	[40-50]%	[...]	[20-30]%	[...]	[10-20]%
Unitymedia	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%
Combined	[...]	[10-20]%	[...]	[40-50]%	[...]	[20-30]%	[...]	[10-20]%
Telefónica	[...]	[30-40]%	[...]	[5-10]%	[...]	[20-30]%	[...]	[20-30]%
Deutsche Telekom	[...]	[20-30]%	[...]	[50-60]%	[...]	[30-40]%	[...]	[20-30]%
Freenet	[...]	[10-20]%	-	-	[...]	[10-20]%	[...]	[10-20]%
United Internet	[...]	[5-10]%	-		[...]	[10-20]%	[...]	[10-20]%
Lebara	[...]	[0-5]%	-		-		-	-
Lycamobile	[...]	[0-5]%	-	-	-	-	-	-
Total	[...]	100%	[...]	100%	[...]	100%	[...]	100%
Revenues								
Vodafone	[...]	[20-30]%	[...]	[30-40]%	[...]	[20-30]%	[...]	[20-30]%
Unitymedia	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%
Combined	[...]	[20-30]%	[...]	[30-40]%	[...]	[20-30]%	[...]	[20-30]%
Telefónica	[...]	[20-30]%	[...]	[10-20]%	[...]	[10-20]%	[...]	[20-30]%
Deutsche Telekom	[...]	[20-30]%	[...]	[50-60]%	[...]	[30-40]%	[...]	[20-30]%
Freenet	[...]	[10-20]%	-	-	[...]	[10-20]%	[...]	[10-20]%
United Internet	[...]	[10-20]%	-	-	[...]	[5-10]%	[...]	[10-20]%
Lebara	[...]	[0-5]%	-	-	-	-	-	-
Lycamobile	[...]	[0-5]%	-	-	-	-	-	-
Total	[...]	100%	[...]	100%	[...]	100%	[...]	100%

Source: Form CO.

(671) Moreover, the gross add market shares provided by the Notifying Party show that Unitymedia has not been able to [...].⁵⁰¹ Its gross add market share is [...].

⁵⁰¹

See Form CO, Table 6.57.

Table 12: Gross add shares for the retail supply of mobile telecommunications services
(2015-2018)

Nationwide	2015/2016		2016/2017		2017/2018	
	M	%	M	%	M	%
Subscribers						
Vodafone	[...]	30-40[%]	[...]	[30-40]%	[...]	[30-40]%
Unitymedia	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%
Combined	[...]	[30-40]%	[...]	[30-40]%	[...]	[30-40]%
Telefónica	[...]	[40-50]%	[...]	[40-50]%	[...]	[40-50]%
Deutsche Telekom	[...]	[20-30]%	[...]	[20-30]%	[...]	[20-30]%
Total	[...]	100%	[...]	100%	[...]	100%

Source: Form CO.

- (672) Table 13 sets out the level of HHI pre-Transaction, post-Transaction and the change in HHI, based on the market shares in the business years 2017-2018.

Table 13: HHI (2017-2018)

	Pre-Transaction	Post-Transaction	Change in HHI
Subscribers	[2000-3000]	[2000-3000]	[0-500]
Revenues	[2000-3000]	[2000-3000]	[0-500]

Source: Commission's computation.

2.3.2.3. Assessment

- (673) Based on the market share data presented in Table 10, the market and segment shares of the merged entity will be below the 25% market share threshold set forth in recital (32) of the Merger Regulation to identify concentrations which, by reason of the limited market share of the undertakings concerned, are not liable to impede effective competition may be presumed to be compatible with the common market. Only by revenues at market level, the share of the merged entity would be [0-5] percentage point above such threshold. Furthermore, post-Transaction, there will be no significant change to the market structure due to Unitymedia's extremely limited market position. As shown in section VIII.C.2.3.2.2. the increment brought about by the Transaction would be below [0-5] under any possible market segmentation.
- (674) The Commission also notes that Unitymedia is active on the mobile market in Germany as service provider. Post-Transaction the three MNOs will remain active on the market: Telefónica ([20-30] in terms of subscribers), Deutsche Telekom ([20-30]%) and the merged entity ([20-30]%). The other two MNOs will continue to exert significant competitive pressure on the merged entity for the provision of mobile services at retail level post-Transaction.
- (675) Even among the non-MNOs, Unitymedia does not play a special role on the market. Firstly, Unitymedia is significantly smaller than other non-MNOs, such as the service providers Freenet ([10-20] in terms of subscribers) and United Internet ([5-10]%) as well as the MVNOs Lebara ([0-5]%) and Lycamobile ([0-5]%). Secondly, Unitymedia does not have any distinguishing characteristics as service provider. In particular, it has not participated in spectrum auction with the intention to expand its position in the mobile market.

- (676) In addition, based on the results of the market investigation, the Commission has not identified any specific competition concerns arising in relation to the horizontal non-coordinated effects of the Transaction in the retail supply of mobile telecommunications services on a standalone basis in Germany.⁵⁰²

2.3.3. Conclusion

- (677) In light of the foregoing, the Commission concludes that the Transaction would not significantly impede effective competition in the market for the retail supply of mobile telecommunications services in Germany.

2.4. Horizontal non-coordinated effects in the retail supply of TV signal transmission to MDU customers

2.4.1. The Notifying Party's view

- (678) The Notifying Party submits that the Transaction does not give rise to any horizontal concerns in relation to the retail supply of TV signal transmission to MDU customers given the non-overlapping nature of the Parties' cable networks. The absence of direct competition is also evidenced by the Parties' win and loss data. Therefore, there is no loss of any actual direct cable-to-cable competition resulting from the Transaction.
- (679) With regard to potential direct cable-to-cable competition, the Notifying Party argues that entry by one of the Parties in the footprint of the other Party is highly unlikely in the short to medium term. According to the Notifying Party, cable overbuild is not economically viable even in the context of large MDU contracts, due to the combination of the high costs faced to serve customers outside the Parties' own footprints and the more limited revenue opportunities that would be available to a new entrant compared to an existing player within the footprint. [DETAILS OF COMMERCIAL AND INVESTMENT STRATEGY].
- (680) With regard to actual indirect competition, the Notifying Party explains that there is no significant indirect competition between the Parties that would be lost as a result of the Transaction. In its Response to the Article 6(1)(c) Decision, the Notifying Party sets out in more detail why there is no mechanism by which such indirect competition would materialise.
- (681) Firstly, the Notifying Party explains that MDU customers are not able to use this kind of benchmarking in negotiations. There is no basis on which to assume that pricing terms in one area are transferrable to another as pricing for a specific MDU will depend in part on the alternative options available in the relevant local area and will therefore vary between different cities and regions. In practice, [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS]. [CONFIDENTIAL CONTRACT INFORMATION]. In addition, there are only six nationally operating housing associations in Germany. Consequently, even if competitive benchmarking were to exist, the scope and effect of such benchmarking would be rather limited and applicable only to a small number of MDUs.

⁵⁰²

In the market investigation, complaints have been raised as regards the potential impact on entry and expansion in the market for the retail supply of mobile telecommunications services in Germany as a result of an acceleration of the fixed-mobile convergence which would allegedly be brought about by the Transaction. These effects are assessed in Section VIII.C.5 on the potential conglomerate effects of the Transaction.

(682) Secondly, the Notifying Party explains that there is no transmission of competitive conditions via nationally operating competitors. In particular, there is no evidence that any Party acts as a price leader. Furthermore, MDU contracts are often bilaterally and confidentially negotiated, have varying and complex structures and take into account the specific local factors. [CONFIDENTIAL CONTRACT INFORMATION]. Therefore, there is no easy benchmarking between competitors active in different regions.

2.4.2. *The Commission's assessment*

2.4.2.1. The German market for the retail TV signal transmission to MDU customers

(i) Network infrastructure

(683) As already discussed in section VIII.C.2.2.2.1., Vodafone and Unitymedia own Germany's two main large-scale cable networks.

(684) In addition, the following players own local or regional cable networks, however, these are much more limited in their geographic scopes: Tele Columbus (mainly in the east of Germany) and city carriers such as NetCologne (Cologne and Aachen area), Wilhelm.tel (Hamburg area) and M-Net (Munich area). Deutsche Telekom builds own cable networks to MDU premises on a case-by-case basis.⁵⁰³

(685) The cable network in Germany is divided into a number of different levels. Level 3 consists of the cable infrastructure from the backbone up to the point of interconnection outside or on the end customer's premises (that is, in the basement of an apartment building). Level 4 is the in-house wiring connecting the Level 3 cable infrastructure to the connection socket(s) inside each individual dwelling.⁵⁰⁴

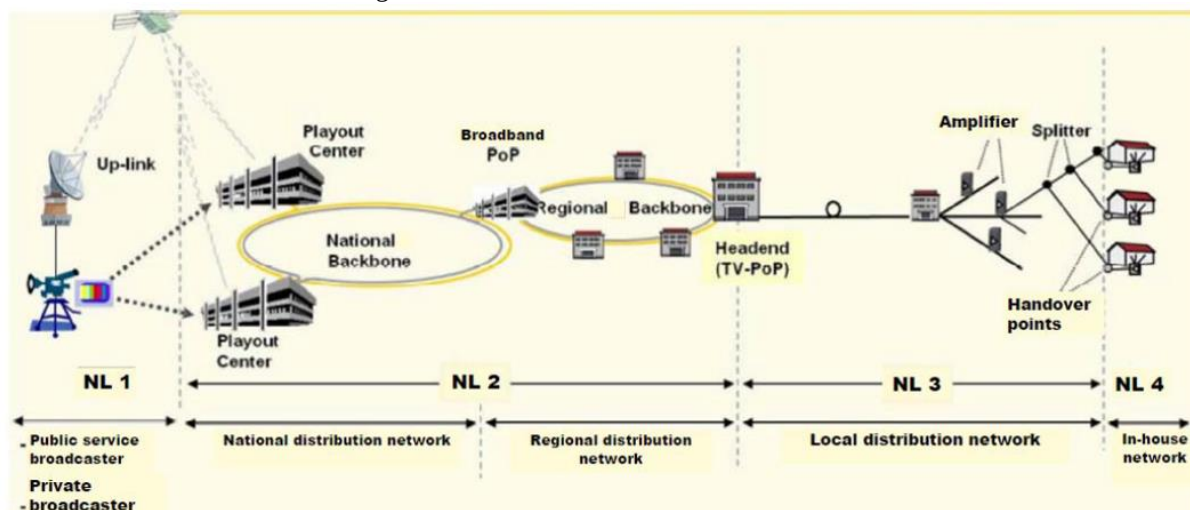
(686) The division between Level 3 and Level 4 networks is a peculiarity of the German cable network. While network levels 1 to 3 were originally operated by the Deutsche Bundespost, the installation and operation of the in-house distribution networks (Level 4) was left to small and medium-sized electrician companies and it was these companies that generally held the end customer relationship with the relevant property owners.

(687) Today, the Level 4 network may be owned, constructed/maintained/modernised and operated by a Level 3 cable network operator or a Level 4 operator. Alternatively, it can also be owned by MDU customers, primarily housing associations, which grant usage rights to a Level 3 or Level 4 operator, which may also be affiliated to the housing association. Certain housing associations, or affiliates of housing associations, act as operators of the Level 4 in-house network but do not have as their main goal the operation of the network and do not offer network operation services to third parties.

⁵⁰³ Deutsche Telekom's non-confidential reply to RFI 20, question 1 [ID 4793].

⁵⁰⁴ See Form CO, paragraphs 6.330ff and 6.418ff.

Figure 15: Overview of German cable network



Source: Form CO, Figure 6.3.

- (688) The Parties provide intermediary TV signal delivery services to Level 4 operators but do not provide wholesale access to their Level 3 network for other fixed services.

(ii) Regulatory Regime

- (689) With regard to the contracts between MDU customers and their tenants, there are specific ancillary cost privileges (Nebenkostenprivileg).⁵⁰⁵ According to section 566 (1) German Civil Code, the parties to a lease agreement may agree that the tenant bears, in addition to the rent, those operating costs which are constantly incurred by the owner and which can be apportioned to the tenant according to the German Betriebskostenverordnung (“Operating Cost Regulation”), which are known as recognised operating costs or Nebenkosten. The Operating Cost Regulation allows the housing association or landlord to pass on (increased) variable costs to the tenants without having to increase the rent. Such costs include water, gas, electricity and maintenance of, for example, elevators. Section 2 No 15 of the Operating Cost Regulation stipulates that costs associated with the operation of an in-house cable distribution system are recognised operating costs.⁵⁰⁶ These costs include the monthly fee for the basic TV package that usually includes the public broadcasters (in HD quality) as well as the main FTA channels (in SD quality).

(iii) General market developments and characteristics

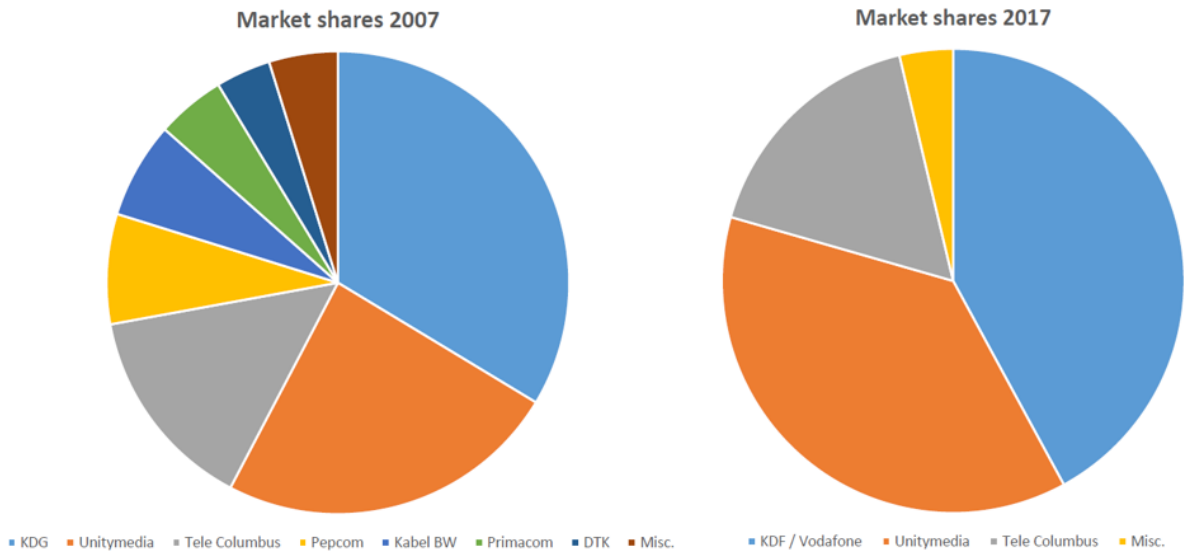
- (690) On the supply side, the market for the supply of retail TV signal transmission to MDU customers is highly concentrated.
- (691) On the one hand, the high level of concentration is the result of a wave of consolidation in the market in the last 15 years. There has been regional consolidation between the nine regional cable companies that were originally sold by Deutsche Telekom starting in 2002.⁵⁰⁷ In addition, many smaller players have been acquired by the larger cable network operators such as the Parties or Tele Columbus.

⁵⁰⁵ See Form CO, paragraph 6.425.

⁵⁰⁶ In principle, the Nebenkostenprivileg also covers the costs of the operation of a SAT-ZF antenna.

⁵⁰⁷ FRK, Meeting presentation of 21 November 2018, page 4 [ID 4712].

Figure 16: Market share evolution from 2007 to 2017



Source: FRK, Meeting presentation of 21 November 2018, pages 10 and 11 [ID 4712].

- (692) In addition, the segment of independent Level 4 operators has shrunk significantly. In 2006, BNetzA estimated that there were up to 14 000 Level 4 operators active in the market. However, other sources estimated that it were rather 4 000 to 5 000. Tele Columbus estimates that this number has significantly decreased.⁵⁰⁸ By contrast, today, the Fachverband Rundfunk- und Breitbandkommunikation (“FRK”), association of small- and medium-sized cable network operators, has about 150 members, including Tele Columbus, and estimates that its members have approximately 6 million homes passed and 5 million homes connected.
- (693) On the other hand, the high level of concentration is also favoured by the market characteristics as this market has high barriers to entry.⁵⁰⁹ Such barriers relate to the contract lengths of exclusive MDU contracts, which are very long, on average five to ten years, but sometimes the duration of contracts can be longer than ten years. This makes it difficult to build up an MDU customer base, as the window of opportunity is very rare. The “Nebenkostenprivileg” anchored in German law which enables housing associations to pass on the costs of the TV signal supply to their tenants within the monthly utility bill makes housing associations more price-insensitive and therefore gives little incentive to switch suppliers. Housing associations are risk-averse as switching supplier may entail disruptions of the TV signal. Such technical problems are strongly resented by the tenants of the MDU customers. Moreover, market entry requires significant CAPEX investments into infrastructure. Lastly, the tender terms and conditions have become increasingly complex and technical.
- (694) The significant barriers to entry are also evidenced by the lack of substantial entry into this market in recent years. In fact, there has not been significant recent entry in this market in recent years except Deutsche Telekom, the German telco incumbent, which has had, however, some difficulties to expand its market position (see section VIII.C.2.4.2.4.(i).(b).)).

⁵⁰⁸ Tele Columbus, Meeting presentation of 28 February 2019, page 3 [ID 4522].

⁵⁰⁹ See for instance Deutsche Telekom’s non-confidential reply to RFI 20, question 5 [ID 4793]; Tele Columbus, submission of 12 November 2018, EU Competitive Assessment Vodafone Unitymedia, page 26 [ID 2974].

- (695) On the demand side, the housing association sector has also been subject to consolidation.⁵¹⁰ Some of the largest housing associations in Germany have been formed through mergers and/or a series of acquisitions. For example, Vonovia, currently the largest housing association active in Germany, was formed through the merger of Deutsche Annington and Gagfah in 2015 and it has also acquired several smaller housing associations. Deutsche Wohnen, currently the second largest housing association in Germany, has completed a series of acquisitions over the last six years. The following Figure 17 shows the 15 largest housing associations in Germany. IT can be expected that at these largest housing associations (and housing associations forming purchasing groups) will have some degree of buyer power vis-à-vis providers of TV signal transmission.

Figure 17: Top 15 housing associations by size

15.	GAG Immobilien AG, Köln	47.000
14.	ABG Frankfurt Holding, Frankfurt/M.	52.000
13.	GEWOBA, Bremen	55.000
12.	Stadt und Land, Berlin	56.000
11.	Nassauische Heimstätte, Frankfurt/M.	59.000
10.	HOWOGE Gruppe, Berlin	60.000
9.	GEWOBA Gruppe, Berlin	60.000
8.	DEGEWO-Unternehmensgruppe, Berlin	74.000
7.	Grand City, Berlin (nicht GdW)	83.000
6.	TAG Immobilien AG (nicht GdW)	83.000
5.	Vivawest Wohnen GmbH, Gelsenkirchen	122.000
4.	LEG Immobilien AG, Düsseldorf	130.000
3.	SAGA, Hamburg	133.000
2.	Deutsche Wohnen SE, Berlin	161.000
1.	Vonovia SE, Bochum	409.000

Source: GdW's non-confidential reply to RFI 22, question 2 [ID 4312].

- (696) Nevertheless, overall, the housing association sector remains unconcentrated. According to statistics provided by the Notifying Party, there are around 230 000 housing associations in Germany.⁵¹¹ The Notifying Party estimates that of these around 2% are larger housing associations with 300 units or more. Furthermore, of the estimated 9 million units in Germany managed by professional housing associations, an estimated 34% are managed by larger housing associations with 300 units or more.
- (697) Furthermore, it is important to note that many MDU contracts are the result of negotiations, bids or formal tender procedures. Respondents to the market investigation explain, that due to the nature of competition in the market for the retail TV signal transmission to MDU customers, the number of competitors is extremely important and directly influences the resulting price level.⁵¹²

⁵¹⁰ See Form CO, Annex 6.C.IV.4.

⁵¹¹ See Form CO, Annex 6.C.IV.4.

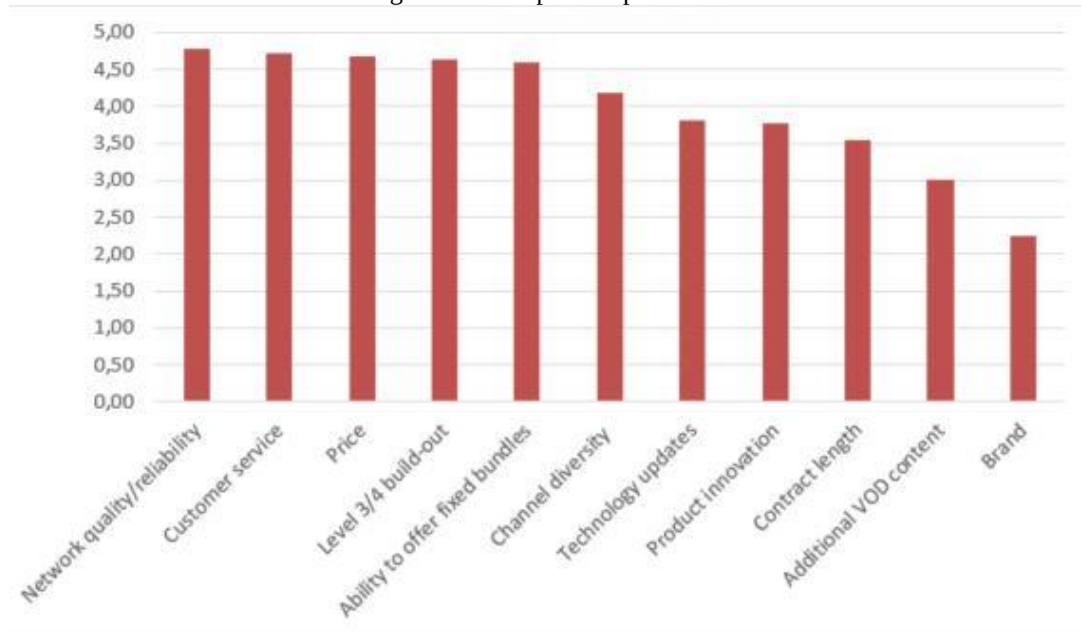
⁵¹² Replies to questionnaire Q12, question 24.

- (698) In this respect, housing association Gewobag explained that prices in Berlin are the lowest in Germany because three cable network operators (Vodafone, Tele Columbus, Deutsche Telekom) are active in Berlin. More generally, Gewobag explains that the more bidders participate, the lower the resulting price level. Similarly, LEG and Nassauische Heimstätte confirm that the number of competitors participating in negotiations and tenders increases housing associations' bargaining power and has a price-dampening effect. In addition, Nassauische Heimstätte states that the presence of potential or adjacent operators can also have a price-reducing effect. Level 4 operator Cable4 confirms that the established cable network operators dramatically cut their prices if they face competition. In particular, they undercut the incremental costs of alternative operators that would have to build out Level 3 infrastructure. Similar considerations apply to the infrastructure requirements stipulated in MDU contracts.⁵¹³
- (699) Lastly, there are two interlinked trends to be observed in the market for the retail TV signal transmission to MDU customers which are relevant for the competitive assessment of this market. Fast broadband connections are increasingly important for tenants. Therefore, housing associations increasingly include obligations for the cable network operator to build-out and to upgrade the network (for example, FTTB/H) in MDU contracts. While the MDU contract concerns the provision of retail TV signals, the infrastructure component secures the availability of a high-speed cable network for the purpose of retail fixed internet access services.
- (iv) Competitive parameters**
- (700) The Commission has investigated the relative importance of different parameters of competition in the retail market for TV signal transmission to MDU customers in Germany. On the basis of the Parties' MDU customers responding to the market investigation, the Commission has identified several important parameters of competition: network quality/reliability, customer service, price, Level 3 and 4 build-out and the ability to offer fixed bundles.⁵¹⁴ Housing associations value all of these factors highly. They emphasize that these correspond to the factors tenants expect them to deliver in order to for tenants to perceive the provided basic TV package as attractive.
- (701) Other commercial aspects of the TV product (for example, channel diversity, product innovations or additional VOD content) or the contract (for example, contract length) are less important according to these results. However, respondents also explain that different cable operators do not significantly differ with respect to some of these factors, such as channel diversity.

⁵¹³ Cable4's reply to questionnaire Q11, question 48.2 [ID 3531].

⁵¹⁴ Replies to questionnaire Q12, question 10.

Figure 18: Competitive parameters



Source: Replies to questionnaire Q12, question 10.

2.4.2.2. Market shares and concentration levels

(i) National market shares

(702) The Commission considers that the market shares provided by the Notifying Party have several important limitations:

- (a) Firstly, the Notifying Party was not able to provide market shares accurately reflecting the Commission's market definition.⁵¹⁵ As explained by the Notifying Party⁵¹⁶, the total TV market size in relation to MDU contracts in each footprint has been estimated based on the total number of TV homes connected in the relevant footprint that are part of an MDU. As explained in section VII.5. regarding market definition, some smaller MDU customers, such as private landlords renting out only a handful of units do not have the specific demand requirements of MDU customers and are excluded from the relevant market. Furthermore, the Commission notes that the market size estimated by the Notifying Party is also considerably higher than the market size estimated by other sources. For instance, according to the German FCO's Referral Request and information based on its previous proceedings, the size of the MDU market is only 12-14 million households.⁵¹⁷ According to Tele Columbus, the MDU market has a size of 13 million households today and according to Deutsche Telekom around 12 million households.⁵¹⁸
- (b) Secondly, and related to the first point, the Notifying Party included in the total market size MDU customers supplied via IPTV, terrestrial or satellite head-ends. Based on the information provided by the Notifying Party, the

⁵¹⁵ See Parties' reply to RFI 25, question 1.

⁵¹⁶ See Form CO, Annex 6.C.IV.25.

⁵¹⁷ Referral Request, paragraph 38.

⁵¹⁸ Tele Columbus, submission of 29 August 2018, Meeting presentation, page 4 [ID 2606]; Deutsche Telekom's non-confidential reply to RFI 10, question 21, Figure 9 [ID 4247].

Commission was able to correct the market size data by subtracting MDU customers supplied via SAT-ZF and individual satellite solutions.

- (c) Thirdly, the Notifying Party was only able to provide estimates of competitors' market shares for Tele Columbus and Deutsche Telekom. The subscriber numbers for "Others" have been calculated as the difference between the MDU market size and the Parties', Tele Columbus', Deutsche Telekom's and satellite volumes.
- (d) Fourthly, the market shares provided by the Notifying Party overestimate Deutsche Telekom's position. The Notifying Party stated that Deutsche Telekom supplied approximately [INTERNAL ASSESSMENT OF COMPETITION] MDU connections in 2017/2018. However, according to the information provided by Deutsche Telekom itself, it supplies only [...] cable TV households.⁵¹⁹ For completeness, the Commission notes that the Notifying Party also slightly underestimated Tele Columbus' market position. This was also corrected based on the information provided by Tele Columbus.⁵²⁰
- (703) In light of the above, the Commission considers that the market shares provided by the Notifying Party underestimate the Parties' position. Accordingly, those market shares correspond to the lowest possible shares of the Parties and do not accurately reflect their position in the market for the retail supply of TV signal transmission to MDU customers as defined in section VII.5.⁵²¹
- (704) The Commission has calculated more accurate market shares at national level for the year 2017/2018⁵²², based on non-confidential information provided by competitors. In particular, the Commission relies on the market size provided by Tele Columbus (13 million units), which lies in the middle of the range stated by the German FCO. Importantly, for Deutsche Telekom's share the figure used by the Commission is the stated much smaller number of [...] units (average of the non-confidential range provided by Deutsche Telekom). The category "Others" was adjusted accordingly to match the updated market size figure. Besides different view on market definition, the Parties have not criticised the Commission's market reconstruction in the Response to the Statement of Objections.
- (705) Market shares at national level based on the Commission's reconstruction are presented in Table 14.

Table 14: Market shares for the retail supply of TV signal transmission to MDUs (subscribers)

2017/2018	Nationwide	
	M	%
Vodafone	[...]	[40-50]%

⁵¹⁹ Deutsche Telekom's non-confidential reply to RFI 20, question 4 [ID 4793].

⁵²⁰ Tele Columbus, Meeting presentation of 29 August 2018, page 3 [ID 2606], that is to say, 92% of 2.37 million subscribers.

⁵²¹ The Notifying Party was not able to provide gross adds or revenue shares for the retail TV signal transmission to MDU customers. In addition, the Notifying Party was not able to provide comprehensive segment shares regarding possible segments of the MDU market, for instance regarding the type of MDU customer (private landlords vs. professional housing associations) or the size of the MDU contract in terms of units supplied. However, in light of the clear conclusions that can be drawn from the subscriber market shares (that is to say, a highly concentrated market with high market shares of the Parties but no overlap between them) more market share information would be of limited additional value.

⁵²² A similar exercise could not be made in relation to narrower geographic level or previous years due to lack of data.

2017/2018	Nationwide	
	M	%
Unitymedia	[...]	[20-30]%
Combined ⁵²³	[...]	[60-70]%
Tele Columbus ⁵²⁴	[...]	[10-20]%
Deutsche Telekom ⁵²⁵	[...]	[0-5]%
Others ⁵²⁶	[...]	[10-20]%
Total	13	100%

Source: Commission calculation.

- (706) Table 14 shows that pre-Transaction, at national level, the Parties are the number one and two players with shares significantly higher than the third player (Tele Columbus) and the fourth player (Deutsche Telekom). Post-Transaction, based on subscriber numbers, the merged entity would have a market share of close to 70% ([60-70]%) with an increment of about 30% ([20-30]%). Post-Transaction, the merged entity would become the clear market leader, followed by Tele Columbus ([10-20]%) and Deutsche Telekom ([0-5]%).
- (707) The Commission's market reconstruction is confirmed by the information provided by third parties, according to which the Parties' combined market share is similar to the Commission's computation or even more significant.
- (708) In this respect, FRK described the market situation as follows: *"Subsequent to the initial separation a consolidation took place and, one by one, the initial 16 regional companies merged into Unitymedia and Kabel Deutschland (now Vodafone). Unitymedia now owns the state-wide networks of ish (state of Northrhine-Westphalia), iesy (state of Hesse) and KabelBW (state of Baden-Wurtemberg) with a nationwide (!) market share of 35-40%; Vodafone (previously Kabel Deutschland) now owns most of the state-wide networks in the rest of Germany with a nationwide (!) market share of 40-45%. Tele Columbus and all other (!) small and medium sized cable network operators have a significantly smaller nationwide (!) market share of jointly (!) 13-18% – which is decreasing consistently."*⁵²⁷ According to FRK, the merged entity would hence have a combined market share of 75% to 85% post-Transaction.
- (709) Similarly, the submission by the Parties' two main competitors, Tele Columbus and Deutsche Telekom, state that the Parties' combined market share post-Transaction is in the range of 70 to 80%.

Table 15: Market shares for the retail supply of TV signal transmission to MDUs provided by Parties' competitors

Nationwide	Tele Columbus	Deutsche Telekom
Merged entity	70-80%	80%
Tele Columbus	15-25%	15%
Deutsche Telekom	<1%	2%
Others	<4%	3%
Total	100%	100%

⁵²³ See subscriber figures provided by the Notifying Party in the Form CO, Table 6.28.

⁵²⁴ Tele Columbus, Meeting presentation of 29 August 2018, page 3 [ID 2606].

⁵²⁵ Deutsche Telekom's reply to RFI 20, question 4 [ID 4793].

⁵²⁶ "Others" is calculated as the difference between market size and the sum of the listed competitors' subscriber figures.

⁵²⁷ FRK, submission of 10 December 2018, page 3 [ID 3100].

(ii) Shares in cable footprints

- (710) Based on the information provided by the Notifying Party, Table 16 sets out the shares of the Parties and their largest competitors in the regional markets/segments for the retail supply of TV signal transmission to MDU customers in terms of households connected.

Table 16: Shares for the retail supply of TV signal transmission to MDUs (subscribers)

2017/2018	Vodafone footprint		Unitymedia footprint	
	M	%	M	%
Vodafone	[...]	[60-70]%	[...]	[0-5]%
Unitymedia	[...]	[0-5]%	[...]	[70-80]%
Combined	[...]	[60-70]%	[...]	[70-80]%
Tele Columbus	[...]	[10-20]%	[...]	[5-10]%
Deutsche Telekom	[...]	[5-10]%	[...]	[0-5]%
Others	[...]	[5-10]%	[...]	[10-20]%
Total	[...]	100%	[...]	100%

Source: Commission calculation based on the Form CO (Table 6.28) to remove connections supplied via satellite.

- (711) As shown in Table 16, there is no overlap in the Vodafone footprint as Unitymedia does not actively compete for MDUs outside its footprint.⁵²⁸ Similarly, there is no overlap in the Unitymedia footprint as Vodafone does not actively compete for MDUs outside its footprint.⁵²⁹ Accordingly, there is no actual direct competition between the Parties at regional level, given the Parties' non-overlapping cable networks.
- (712) The Commission was not able to compute updated market shares per footprint, therefore the shares provided by the Parties are used as proxy, even though they are likely to underestimate the Parties' position for the same reasons explained in section VIII.C.2.4.2.2.(i). However, the market structure is correctly reflected in the provided market shares.

(iii) Concentration levels

- (713) As explained, the market for the retail supply of TV signal transmission to MDU customers is very concentrated with only three main players at national level (Vodafone, Unitymedia, Tele Columbus), reduced to two post-Transaction. Other competitors, in other words, Deutsche Telekom, city carriers and Level 4 operators, only have a limited position in this market.
- (714) Table 17 sets out the national level of HHI pre-Transaction, post-Transaction and the change in HHI, based on the market shares in the business years 2017-2018, as reconstructed by the Commission and reported in Tables 14 and 16.

⁵²⁸ Unitymedia serves a very small number of households outside its footprint on an exceptional basis. [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS].

⁵²⁹ Vodafone serves a very small number of households with cable TV outside its cable footprint on an exceptional basis. [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS].

Table 17: HHI (subscribers, 2017-2018)

	Pre-Transaction	Post-Transaction	Change in HHI
Subscribers (incl. Others)			
Nationwide	[2000-3000]	[5000-6000]	[2000-3000]
Vodafone footprint	[4000-5000]	[4000-5000]	0
Unitymedia footprint	[5000-6000]	[5000-6000]	[0-500]
Subscribers (excl. Others)			
Nationwide	[2000-3000]	[4000-5000]	[2000-3000]
Vodafone footprint	[4000-5000]	[4000-5000]	0
Unitymedia footprint	[5000-6000]	[5000-6000]	[...]

Source: Commission's computation.

- (715) Pre-Transaction the retail market for the retail TV signal transmission to MDU customers is very concentrated, with concentration levels above [2000-3000] both on national and regional level.
- (716) Post-Transaction, concentration levels will increase considerably to about [5000-6000], with change in HHI above [2000-3000] on national level.
- (717) However, on regional level, there is no change in HHI due to the Parties' non-overlapping activities.⁵³⁰

(iv) Conclusion

- (718) Based on the above, the Commission considers that, while the market for the retail TV signal transmission to MDU customers is highly concentrated and each of the Parties has a very strong position in its respective footprint, there is no merger-specific change as the Parties do not directly compete with each other in this market.
- (719) If the market is regional in scope, it follows that there is no meaningful horizontal overlap between the Parties.
- (720) Even if the market is national in scope, the Transaction does not lead to an increase in market power as there is no meaningful overlap in the activities of the Parties.

2.4.2.3. Competitive constraint exerted by the Parties

- (721) In this section, the Commission assesses in detailed the competitive constraints exerted by the Parties, which will be removed by the Transaction, as well as their likely evolution absent the Transaction.
- (722) The assessment is undertaken, firstly, in relation to the constraints that each of the Parties has played, and it is likely to play absent the Transaction, in the market for the retail supply of TV signal transmission to MDU customers (sections VIII.C.2.4.2.3.(i). and VIII.C.2.4.2.3.(ii).), and in relation to the constraint that the Parties have exerted on each other (section VIII.C.2.4.2.3.(iii).).

(i) Vodafone

- (723) Vodafone is one of the only two large cable network operators active in this market, Unitymedia being the other one.
- (724) As explained in section VIII.C.2.4.2.2., Vodafone has a nationwide market share of about [40-50]%. In its footprint, Vodafone has a market share of at least [60-70]% and likely even higher. Vodafone has a dominant market position within its footprint.

⁵³⁰ The concentration levels per footprint may be underestimated as the market shares per footprint could not be updated. However, in any case, no change will occur in terms of concentration in the respective cable footprints.

- (725) Moreover, Vodafone is active in the intermediary TV signal delivery to Level 4 operators within its footprint. It supplies wholesale TV signal to about [INFORMATION CONCERNING SALES] households, its largest wholesale customer being [INFORMATION CONCERNING SALES].
- (726) Currently, Vodafone is mainly active within its own cable network footprint. [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS] Beyond that, Vodafone submits that it does not have any plans to expand its network infrastructure (in particular also not to Unitymedia's footprint) due to the lack of profitability of such an investment.⁵³¹ Vodafone in particular points to the high costs of the Level 3 network to connect customers outside of its footprint: *"The largest cost of connecting buildings outside the Parties' footprints relates to the civil works (digging) required to install the link from the building to the nearest point of connection to the network. [...]. The cost of digging typically makes up the vast majority of total Level 3 capex costs."* *"In addition, the cost of digging rises rapidly with the distance between the buildings that belong to the housing association or landlord and the nearest point of connection to the network."*⁵³²
- (727) However, respondents to the market investigation expect Vodafone to expand its network to Unitymedia's footprint in the future.⁵³³ Almost all competing telecommunications operators responding to the market investigation replied that Vodafone could realistically be a provider of TV signal transmission services to MDU customers in Unitymedia's footprint by infrastructure expansion into Unitymedia's footprint. These respondents see the lack of actual competition potentially as sign of tacit collusion between the Parties.⁵³⁴ Moreover, they expect Vodafone to become more aggressive competitors in Unitymedia footprint in the next two to three years due to the need to find growth opportunities and the increasing importance of multi-play products which improve the economics of overbuild.
- (728) Tele Columbus provided an overview of the infrastructure that Vodafone already has available in Unitymedia's footprint in its view: Vodafone has a full-functioning backbone infrastructure in the Unitymedia footprint in North Rhine-Westphalia and Hesse, which could – with very little investments – be used in order to compete with Unitymedia. Secondly, Vodafone also has an existing fixed line network that it acquired from Arcor in 2008. Thirdly, Vodafone will also need to build a fibre infrastructure within the Unitymedia footprint after obtaining its 5G mobile license in order to fulfil the associated coverage obligations and provide 5G services with its targeted high speeds. Based on this infrastructure, the connection of MDU buildings within the Unitymedia footprint will become even more commercially viable for Vodafone.⁵³⁵ Other competitors also refer to Vodafone's DSL and mobile customer base in Unitymedia's footprint.⁵³⁶

⁵³¹ Except in terms of the projects presented in section VIII.C.2.2. which do not concern Unitymedia's territory.

⁵³² See Form CO, para. 6.583 and 6.584.

⁵³³ Replies to questionnaire Q8, questions 62 and 74; replies to questionnaire Q11, question 55.

⁵³⁴ Third parties' allegations of tacit collusion between the Parties were not substantiated, were not confirmed by a review of the Parties' internal documents and were contradicted by the evidence on file regarding the insufficient profitability of cable overbuild.

⁵³⁵ Tele Columbus, Submission of 12 November 2018, EU Competitive Assessment Vodafone Unitymedia [ID 2974].

⁵³⁶ NetCologne's comments on the Statement of Objections, section 1.2.1 [ID 5854].

- (729) The Commission has assessed whether the Transaction would remove Vodafone as competitor in Unitymedia's footprint. If the market is regional in scope, Vodafone's expansion into Unitymedia's footprint would constitute the entry of a potential competitor.⁵³⁷ If the market is national in scope, Vodafone's expansion into Unitymedia's footprint would constitute, within that market, a competitive constraint in areas where previously it did not exist. While the Commission normally bases its assessment on the competitive condition existing at the time of the merger, in some circumstances, the Commission may take into account future changes to the market that can reasonably be predicted.⁵³⁸
- (730) Regardless of the geographic scope of the market, to show that there is potential competition between the Parties that would be removed as a result of the Transaction, it is not sufficient to find the theoretical ability for Vodafone to expand into Unitymedia's footprint. In order to give rise to a significant impediment to effective competition, this would have to occur with sufficient likelihood.
- (731) The Commission has analysed the evidence on the likely evolution of the competitive constraint exerted by Vodafone absent the Transaction. However, the Commission has not identified a coherent body of evidence that would suggest that Vodafone's expansion into Unitymedia's footprint would be likely or reasonably predictable absent the Transaction. To the contrary, the evidence on file does not support third parties' claims of a loss of potential competition from Vodafone for the following reasons.
- (732) Firstly, the Commission takes note of the fact that Vodafone has not overbuilt Unitymedia's cable infrastructure in the past. This is also not disputed by market participants.⁵³⁹ Therefore, any finding of potential competition would have to clearly set out why the Commission considers that Vodafone is likely to depart from its previous conduct.
- (733) Secondly, the Commission's analysis of Vodafone's internal documents [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁵⁴⁰ [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].
- (734) Vodafone's investment guidelines specify [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].
- Figure 19: [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]
[REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]
Source: [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].
- (735) With the exception of the least profitable investment opportunity overbuild, Vodafone pursues these investment opportunities to some extent. [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY]⁵⁴¹[DETAILS OF

⁵³⁷ Horizontal Merger Guidelines, paragraphs 58-60.

⁵³⁸ Horizontal Merger Guidelines, paragraph 9.

⁵³⁹ See replies to questionnaire Q8, question 62.

⁵⁴⁰ See for example Vodafone, Meeting Presentation of 29 January 2019, Session 2 – Vodafone infrastructure investment; Form CO, Annex 6.C.IV.39 and Annex 6.C.IV.41; Response to the Article 6(1)(c) Decision, Annexes C.V.1 and C.V.4-C.V.9.

⁵⁴¹ Subsidies are only available in underserved areas so, by definition, Vodafone's subsidised municipality model activities will not lead to any overbuild of the Unitymedia cable footprint.

COMMERCIAL OR INVESTMENT STRATEGY]⁵⁴²). [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].

- (736) Vodafone's investments [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].⁵⁴³ [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS].⁵⁴⁴ As Table 18 shows, [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS].

Table 18: [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS]
[DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS]

Source: Annex C.V.1 of Response to the Article 6(1)(c) Decision.

- (737) The opportunities available to Vodafone to add new homes within its existing cable footprint or close to it are in comparison more profitable than potential overbuild as: i) this generally requires less infrastructure to be built; and (ii) this offers higher revenue opportunities given the absence of an incumbent cable operator (as competing against incumbent operators necessarily means that the new entrant would achieve a lower long term market share).
- (738) Accordingly, two contemporaneous internal assessments [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]⁵⁴⁵ [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁵⁴⁶
- (a) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].
- (b) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].
- (739) Overall, a review of Vodafone's modelling confirmed aggressive underlying assumptions with regard to obtainable market shares, costs and revenues. It is important to stress that [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] modelling explicitly took into account the best-case scenario of connecting MDU customers and upselling broadband services to tenants in MDU buildings.^{547,548} Nevertheless, the expected return on investment would be significantly below Vodafone's investment thresholds. The limited profitability even in the context of MDU customers is linked to the fact that (i) housing association buildings are not necessarily clustered, (ii) buildings in local area are likely to be owned by a number of different housing associations which will be up for renewal at different points in time and (iii) MDU contracts only provide operators with a guaranteed level of revenue in relation to retail TV signal transmission.
- (740) Vodafone's existing infrastructure, to the extent useful, was taken into account in the modelling discussed in the previous recital but did not render the economics of overbuild sufficiently profitable for the following reasons:⁵⁴⁹

⁵⁴² [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].

⁵⁴³ [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS].

⁵⁴⁴ Based on a review of the list of approved investments projects (notably in the context of Vodafone's GigaGewerbe and GigaGemeinde programmes as well as approval documents for new housing formations), the Commission considers that, in practice, these guidelines are followed.

⁵⁴⁵ [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS]

⁵⁴⁶ See Response to the Article 6(1) (c) Decision, Annex C.V.1; See Parties' reply to RFI 22.

⁵⁴⁷ The Parties provided additional results including revenues from upselling premium TV or digital HD. [INFORMATION ON PRICING STRUCTURE].

⁵⁴⁸ Vodafone's [...] modelling also included some additional revenues from cross-selling mobile services, [REFERENCE TO INTERNAL DOCUMENT].

⁵⁴⁹ See Response to the Article 6(1) (c) Decision, Annex C.V.1; Parties' reply to RFI 19, question 6; Parties' reply to RFI 22, question 4 und 27; Parties' reply to RFI 24, question 32-35.

- (a) Vodafone's existing backbone infrastructure: Vodafone's backbone outside of Vodafone's own footprint is limited to fibre at the higher levels (Level 1 and Level 2) of the network, generally linking up the main cities in Germany and connecting to Deutsche Telekom's local exchanges. This infrastructure does not change the economics of overbuild as, in order to deliver retail fixed services, Vodafone would require an access network which would entail significant Level 3 build out (which is the largest part of any fibre or cable network roll out investment).
 - (b) Vodafone's acquisition of the Arcor network: The Arcor infrastructure was originally designed to offer long distance services and it does not have an inner-city build out that could serve as a basis for fibre (or cable) roll out to households. At most, therefore, it could serve as part of a regional backbone and Vodafone would still need to carry out significant Level 3 build out.
 - (c) Vodafone's ISIS network owned through the Arcor acquisition: [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].
 - (d) Vodafone's 5G roll out: [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY]^{550,551} [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].
- (741) [DETAILS OF COMMERCIAL ACTIVITIES].⁵⁵²
- (742) [DETAILS OF COMMERCIAL ACTIVITIES], the Parties submitted modelling of a different scenario that was stated during the market investigation: expansion into an adjacent overbuild area. It is necessarily a hypothetical exercise as neither Party has conducted any in-depth economic analysis of expansion in border areas. Again, the analysis further supports the conclusion that expansion to the other Party's footprint does not meet the Parties' investment criteria.⁵⁵³
- (743) Thirdly, there is no evidence that the economics of overbuild will improve as claimed by third parties. With respect to argument that Vodafone will need to find growth opportunities, it has to be noted that Vodafone is diversified internationally and considers the profitability of any investments in Germany in the context of its broader portfolios and investment opportunities. There is no reason to believe that in order to achieve growth in Germany Vodafone would at some point seek to invest in overbuild projects which do not meet its investment criteria. With regard to the argument that the increasing importance of multi-play products which improve the economics of overbuild, it has to be noted that Vodafone's assessment discussed in the previous recitals already include expected cross-selling revenues as part of the modelling. [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY], if anything, it seems that construction activity and in particular activity in the

⁵⁵⁰ [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].

⁵⁵¹ This is also reflected in the related synergies in the context of the Transaction. [INFORMATION ON SYNERGIES POST-TRANSACTION].

⁵⁵² See Response to the Article 6(1) (c) Decision, Annex C.V.1.

⁵⁵³ While this is a hypothetical exercise, the Commission has found the underlying assumptions to be appropriate and the results to be robust against changes in the underlying assumptions. In particular, the Parties' hypothetical modelling addresses the flaws identified by the FCO in Liberty/KBW.

installation of telecommunications infrastructure has been strong in the last three years, leading to an increase in demand for labour to carry out civil works.⁵⁵⁴

(744) Fourthly, the cable overbuild by other competitors is not comparable to Vodafone. There are a number of factors which distinguish the investment decisions of Vodafone and these other competitors. More precisely:

(a) Tele Columbus: As discussed in more detail in section VIII.C.2.4.2.3.(i).(a)., Tele Columbus grew out of the acquisition and consolidation of numerous local Level 4 operators. Over time, Tele Columbus connected clusters of buildings to a satellite head-end, creating island networks, and subsequently connected some of these island networks through Level 3 infrastructure connected to a national backbone to be able to offer broadband services to tenants. However, in recent years, the evidence in fact suggests that Tele Columbus has not carried out any significant investment in expanding its Level 3 network.

(b) City carriers: City carriers generally have a different investment focus compared to large international corporate groups which are listed on stock exchanges and have to balance the interest of different stakeholders. They may be willing to pursue long-term investment plans with longer payback periods, particularly in the case of publicly-owned city carriers (as is the case of NetCologne, M-Net, Wilhem.tel) where the projects give rise to wider benefits for the municipality. The Commission's market investigation confirmed that [CONFIDENTIAL].⁵⁵⁵ [CONFIDENTIAL].⁵⁵⁶ [CONFIDENTIAL].⁵⁵⁷

(c) Deutsche Telekom: Deutsche Telekom also builds out fibre to compete for MDU contracts based on a cable TV product. However, there are two important differences compared to Vodafone. Firstly, Deutsche Telekom may at least use its existing fibre lines in order to create the required fibre connection between the central office and the street cabinets.⁵⁵⁸ Secondly, [CONFIDENTIAL].⁵⁵⁹

(745) Finally, it is also unlikely that Vodafone would enter into Unitymedia's footprint through non-infrastructure based means for the following reasons which are also evidenced by Vodafone's internal documents and modelling submitted:⁵⁶⁰

(a) Leased Lines: Leased lines do not fundamentally change the economics of overbuild as it simply shifts the costs from capital costs to operational costs. In addition, there are a number of operational constraints linked to the limited supply of dark fibre and costly deployment solutions in order to connect multiple MDU buildings. [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS].

(b) Satellite infrastructure and Level 4 networks: [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS].

⁵⁵⁴ See <https://www.wik.org/fileadmin/Studien/2018/WIK-Tiefbaustudie.pdf> [ID 6792], https://www.inside-handy.de/news/glasfaser-ausbau-probleme-tiefbau-bagger?xing_share=news [ID 6780]

⁵⁵⁵ [CONFIDENTIAL].

⁵⁵⁶ [CONFIDENTIAL].

⁵⁵⁷ [CONFIDENTIAL].

⁵⁵⁸ Deutsche Telekom's non-confidential reply to RFI 26, questions 1-5 [ID 4693].

⁵⁵⁹ [CONFIDENTIAL].

⁵⁶⁰ See for example Response to the Article 6(1) (c) Decision, Annex C.V.1.

(746) In summary, Vodafone currently does not exert a competitive constraint in or on Unitymedia's footprint. No evidence in the Commission's file suggests that its competitive constraint would expand to Unitymedia's footprint absent the Transaction.

(ii) Unitymedia

(747) Unitymedia is one of the only two large cable network operators active in this market, Vodafone being the other one.

(748) As explained in section VIII.C.2.4.2.2., Unitymedia has a nationwide market share of about [30-40]%. In its footprint, Unitymedia has a market share of at least [70-80]% and likely even higher. Unitymedia has a dominant market position within its footprint.

(749) Moreover, Unitymedia is active in the intermediary TV signal delivery to Level 4 operators within its footprint. It supplies wholesale TV signal to about [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS] households, its largest wholesale customer being [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS].

(750) Compared to Vodafone, Unitymedia is said to be particularly strong with regard to network upgrades to fibre infrastructure. In this regard, Tele Columbus explains: *"Unitymedia builds out high quality FTTB/FTTH infrastructure. Also smaller city network providers like M-Net, NetCologne, Wilhelm.tel build out FTTH/B. In contrast to that, Vodafone only invests in FTTB/H (including 32 homes passed per node) if there is competitive pressure; without such competitive pressure Vodafone relies on its current network and is more likely to avoid such investments."*⁵⁶¹ This is also confirmed by housing associations responding to the market investigation who explain that Vodafone is more reluctant to employ FTTB instead of HFC infrastructure than Unitymedia.⁵⁶² [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY]⁵⁶³ In fact, there are examples of both Parties where they carried out FTTB/H network upgrades or where they declined them. [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS] This [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS] is consistent with the Parties' view that HFC technology has the potential to deliver Gigabit speeds by implementing DOCSIS 3.1 and therefore offers an attractive price performance ratio for MDU customers (particularly where the Parties can use existing HFC infrastructure rather than overbuilding existing HFC with fibre).

(751) Currently, [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY] Beyond that, Unitymedia submits that [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY]⁵⁶⁴

(752) However, respondents to the market investigation expect Unitymedia to expand its network to Vodafone's footprint in the future.⁵⁶⁵ Almost all competing telecommunications operators responding to the market investigation replied that Unitymedia could realistically be a provider of TV signal transmission services to

⁵⁶¹ Tele Columbus' reply to questionnaire Q11, question 49.2 [ID 4020].

⁵⁶² Replies to questionnaire Q12, question 11.3.

⁵⁶³ See Parties' reply to RFI 35, question 1.

⁵⁶⁴ Except in terms of the projects presented in section 8.2.2.3.(i) which do not concern Vodafone's territory.

⁵⁶⁵ Replies to questionnaire Q8, questions 63 and 74; replies to questionnaire Q11, question 55.

MDUs in Vodafone's footprint by infrastructure expansion into Vodafone's footprint. These respondents see the lack of actual competition potentially as sign of tacit collusion between the Parties.⁵⁶⁶ Moreover, they expect Unitymedia to become more aggressive competitors in Vodafone footprint in the next two to three years due to: (i) the need to find growth opportunities; and (ii) the increasing importance of multi-play products which improve the economics of overbuild.

- (753) Respondents to the market investigation acknowledge that Unitymedia is likely to have a lesser incentive to expand in Vodafone's footprint than vice versa.⁵⁶⁷ In fact, Unitymedia has none of Vodafone's alleged competitive advantages (in particular Vodafone's pre-existing infrastructure and DSL and mobile customer base in Unitymedia's footprint). Therefore, one can consider that if overbuild by Vodafone using fibre is not economically viable, it will also not be viable for Unitymedia to overbuild Vodafone using fibre.
- (754) Nevertheless, the Commission has also assessed whether the Transaction would remove Unitymedia as competitor in Vodafone's footprint based on the same framework as discussed in recitals (729) to (730) with respect to Vodafone.
- (755) The Commission has analysed the evidence on the likely evolution of the competitive constraint exerted by Unitymedia absent the Transaction. However, the Commission has not identified a coherent body of evidence that would suggest that Unitymedia's expansion into Vodafone's footprint would be likely or reasonably predictable absent the Transaction. To the contrary, the evidence on file does not support third parties' claims of a loss of potential competition from Unitymedia for the following reasons.
- (756) Firstly, the Commission takes note of the fact that Unitymedia has not overbuilt Vodafone's cable infrastructure in the past. This is also not disputed by market participants.⁵⁶⁸ Therefore, any finding of potential competition would have to clearly set out why the Commission considers that Unitymedia is likely to depart from its previous conduct.
- (757) Secondly, the Commission's analysis of Unitymedia's internal documents [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁵⁶⁹ [...].
- (758) Unitymedia's investment criteria [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].^{570,571} [...].
- (759) [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].⁵⁷² As Table 19 shows, [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS]

⁵⁶⁶ Third parties' allegations of tacit collusion between the Parties were not substantiated, were not confirmed by a review of the Parties' internal documents and were contradicted by the evidence on file regarding the insufficient profitability of cable overbuild.

⁵⁶⁷ Replies to questionnaire Q8, questions 62-63.

⁵⁶⁸ See replies to questionnaire Q8, question 63.

⁵⁶⁹ See for example [REFERENCE TO INTERNAL DOCUMENT]; Form CO, Annexes 6.C.IV.40 and 6.C.IV.42; Response to the Article 6(1)(c) Decision, Annexes C.V.1 – C.V.3.

⁵⁷⁰ [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].

⁵⁷¹ [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].

⁵⁷² This can refer to cable fill-in, expansion to new housing formations in close proximity, expansion of the cable network to existing units in close proximity or expansion to new areas at a larger distance which may benefit from the nearby Level 3 network infrastructure.

Table 19: Homes passed by Unitymedia's network (MDU)
[DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS]
Source: Parties' reply to RFI 22, question 9.

- (760) Like Vodafone, Unitymedia considers that [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY]
- (761) Unitymedia [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] based on an assessment of different options to grow the Unitymedia business in Germany outside its existing footprint [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁵⁷³ [...].
- (762) [...], it is important to stress that Unitymedia's modelling explicitly took into account the best-case scenario of connecting MDU customers and the upselling of additional fixed services to tenants in MDU buildings. A review of the model confirmed the aggressive underlying assumptions with regard to obtainable market shares, costs and revenues.
- (763) The other factors discussed in section VIII.C.2.4.2.3.(i). with respect to Vodafone also hold with respect to Unitymedia. In particular:
- (a) There is no evidence that the economics of overbuild will improve;
 - (b) Unitymedia is also a diversified internationally and considers the profitability of any investments in Germany in the context of its broader portfolios and investment opportunities. There is no reason to believe that in order to achieve growth in Germany Unitymedia would at some point seek to invest in overbuild projects which do not meet its investment criteria;
 - (c) [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY]
 - (d) Unitymedia's investment criteria [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY]
 - (e) Unitymedia [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY]
 - (f) [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS], Unitymedia has a strategy to serve customers based on its own Level 3 infrastructure as this allows them to provide a uniform product offering and to cross-sell additional services to tenants in the MDU buildings.
- (764) In summary, Unitymedia currently does not exert a competitive constraint in or on Vodafone's footprint. No evidence in the Commission's file suggests that its competitive constraint would expand to Vodafone's footprint absent the Transaction.
- (iii) Competitive constraint exerted by the Parties on each other**
- (765) The Commission investigated the scope of competition between the Parties in the market for the supply of retail TV signal transmission to MDU customers.
- (a) *No actual direct competition*
- (766) Based on the market share data presented in Table 16, the Commission notes that the Parties supply retail TV signal transmission to MDU customers almost exclusively within the Parties' respective geographic footprints in Germany, which do not overlap. Accordingly, no direct customer switching can take place between the

⁵⁷³

See Response to the Article 6(1) (c) Decision, Annex C.V.1.

Parties. Consequently, the Parties are not in direct competition with one another and the Transaction does not lead to the elimination of a direct competitive constraint between the Parties.

- (767) As also depicted in the market share tables, there is a negligible amount of out-of-footprint contracts representing an extremely small proportion of the total households served by the Parties. For Vodafone, these units represent less than [INFORMATION CONCERNING SALES] and for Unitymedia less than [INFORMATION CONCERNING SALES] of total households served.
- (768) According to the Parties, none of the out-of-footprint contracts is the result of active competition for customers located in the other Party's footprint. Instead, the small number of households exceptionally served by one Party in the other Party's footprint are generally part of a few very specific legacy contracts⁵⁷⁴ or wider "split contract", that is to say a large housing association customer owns MDUs spread across both Parties' footprints but prefers to contract with a single cable TV provider for all of its properties. [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS] Contracts outside the footprint are only entered into on an ad hoc and exceptional basis, where there is an existing customer relationship between the operator and the housing association.⁵⁷⁵ [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS]
- (769) That the Parties do not actively compete against each other is also confirmed by competitors' and housing associations' replies to the market investigation as well as the Parties' bidding data.
- (770) Firstly, the large majority of respondents to the market investigation confirm that they are not aware of any MDU tenders in Germany where both Vodafone and Unitymedia participated in the last two to three years.⁵⁷⁶ The few examples that are given concern the above-stated split contracts where Vodafone and Unitymedia had originally competed for different geographic areas. Deutsche Telekom's view on Vodafone's and Unitymedia's behaviour in MDU tenders confirms the Parties' description: *"When dealing with housing companies that own real estate in the footprints of Vodafone and Unitymedia and request a nationwide supply, Vodafone and Unitymedia "strongly recommend" customers to conclude two regional MDU contracts, one for Vodafone's footprint with Vodafone, another one with Unitymedia for Unitymedia's footprint. It is when customers like Wohnbau Bonn, which owns real estate in Vodafone's and Unitymedia's footprint, insist on being served and invoiced by one single supplier, that Vodafone has in the past purchased TV signals on network level 3 from Unitymedia and acted as a retailer in Unitymedia's footprint."*⁵⁷⁷
- (771) Secondly, the Parties' bidding data confirms that the Parties are not a constraint on each other.⁵⁷⁸ [DETAILS OF CUSTOMERS]/[DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS]. In all cases, Unitymedia and Vodafone had only actively competed for the units in their respective footprints but accommodated the subsequent requests of the concerned housing associations.

⁵⁷⁴ [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS].

⁵⁷⁵ See Form CO, paragraph 6.544 ff.

⁵⁷⁶ Replies to questionnaire Q11, question 52; replies to questionnaire Q12, question 14.

⁵⁷⁷ Deutsche Telekom's reply to questionnaire Q11, question 52 [ID 3946].

⁵⁷⁸ See Form CO, paragraph 6.499 ff.

- (772) Therefore, the Commission concludes that the Transaction does not lead to a loss of direct competition between the Parties in the market for the supply of retail TV signal transmission to MDU customers.
- (b) *No actual indirect competition*
- (773) Several respondents to the market investigation explained that the Transaction would lead to the loss of the indirect competitive pressure between the Parties. In particular, both of the Parties' main competitors, Tele Columbus and Deutsche Telekom, as well as several housing associations refer to the existence of indirect competitive pressure between the Parties, and more generally, between non-overlapping cable network operators in Germany.⁵⁷⁹
- (774) While these third party complainants claim that the indirect competitive pressure concerns infrastructure and service level requirements as well as technical parameters included in MDU contracts, they acknowledge that pricing is in any event not affected as pricing of MDU contracts is specific to local factors and cannot be compared across areas (see also section VIII.C.2.4.2.1.(iii)). [CONFIDENTIAL CONTRACT DETAILS].⁵⁸⁰
- (775) The following possible transmission mechanisms were stated during the market investigation.
- (a) The first possible transmission mechanism would result from the Parties' two main competitors, Tele Columbus and Deutsche Telekom, who are active across Germany and, hence, in the footprints of both Vodafone and Unitymedia. If the competition for MDU contracts in the Vodafone footprint resulted in certain terms and conditions (for example, in terms of network quality), its nationwide competitors would likely apply the same standards also when bidding for contracts in the footprint of Unitymedia and similarly, vice versa. Tele Columbus and Deutsche Telekom confirmed that this mechanism would result in an alignment of conditions across Germany.⁵⁸¹
 - (b) The second possible transmission mechanism would result from certain larger housing associations which are active across Germany. Such nationally operating housing associations would use their knowledge about Vodafone's competitive behaviour in their negotiations on MDU contracts with Unitymedia and vice-versa.⁵⁸² For example, if one Party offered FTTH build-out in its footprint, a nationwide MDU customer would likely expect the same or at least a similar network quality also for its units in the other Party's footprint.
 - (c) The third possible transmission mechanism would result from intermediaries such as specialised law firms and technical consultancies advising housing associations on their MDU contracts and organising the tenders as well as industry associations providing information material.⁵⁸³

⁵⁷⁹ Replies to questionnaire Q11, questions 15, 59.1.2 and 103; replies to questionnaire Q12, question 18.

⁵⁸⁰ See Response to the Article 6(1)(c) Decision, p. 78.

⁵⁸¹ Replies to questionnaire Q11, question 59.1.2.

⁵⁸² Tele Columbus, submission of 12 November 2018, EU Competitive Assessment Vodafone Unitymedia, page 28 [ID 2974].

⁵⁸³ Tele Columbus, Meeting presentation of 28 February 2019, page 10, [ID 4522]; GdW's non-confidential reply to RFI 22 [ID 4315].

- (776) Accordingly, the Commission has assessed whether the Parties, despite their different geographic footprints, still take account of each other's actions when making their commercial decisions. If such indirect constraints are significant, constituting key competitive pressure, the Transaction, which would remove such an indirect constraint between the Parties and on the remaining competitors, could result in negative competitive effects even if direct customer switching between Vodafone and Unitymedia is not possible. However, the Commission recognises that in order to give rise to a significant impediment to effective competition, any existing indirect competitive pressure that would be removed as a result of the Transaction would have to be particularly strong. In addition, for the Transaction to potentially lead to non-coordinated effects due to the elimination of an indirect competitive constraint between the Parties, a systematic transmission mechanism for this constraint should be identified.
- (777) The Commission has analysed the evidence on the indirect competitive pressure between the Parties. However, the Commission has not identified supporting evidence regarding plausible transmission mechanisms or regarding the existence of actual indirect competition between the Parties in the retail market for the supply of TV signal transmission to MDU customers pre-Transaction. In conclusion, the evidence on file does not support third parties' claims of a meaningful actual indirect competitive interaction between the Parties for the following reasons.
- (778) Only few respondents to the market investigation confirmed the importance of an indirect competitive constraint between the Parties. In fact, the majority of housing associations responding to the market investigation stated that they never use indirect competitive benchmarking in their negotiations with cable network operators on MDU contracts based on experiences with or knowledge on other non-overlapping cable network operators.⁵⁸⁴ This includes many of the housing associations that are not active nationwide and that would need to rely mainly on the third possible transmission mechanism, which they do not according to the results of the market investigation.
- (779) The majority of nationally operating housing associations responding to the market investigation stated that they rarely use indirect competitive benchmarking. Only Vonovia stated that it often uses it. In any case, there are only about six nationally operating housing associations: Vonovia, Deutsche Wohnen, TAG Immobilien, Covivio, Patrizia, Grand City out of over 230 000 housing associations in total.⁵⁸⁵ In addition, there are several housing associations which are at least active in several Federal States, for instance LEG which is active in both North-Rhine Westphalia and Lower Saxony.⁵⁸⁶
- (780) With regard to competing cable network operators, the majority stated that it was never confronted with indirect competitive benchmarking while the two nationally operating Deutsche Telekom and Tele Columbus stated that it happened often.⁵⁸⁷
- (781) Secondly, none of those respondents emphasizing the importance of indirect competition was able to provide any concrete and coherent examples of a meaningful indirect competition between the Parties or in the market as a whole or evidence of an alignment of conditions across Germany.

⁵⁸⁴ Replies to questionnaire Q12, question 18.

⁵⁸⁵ See Response to the Article 6(1)(c) Decision, page 76.

⁵⁸⁶ GdW's non-confidential reply to RFI 22 [ID 4315].

⁵⁸⁷ Replies to questionnaire Q11, question 59.

- (a) Deutsche Telekom, when asked to provide examples, replied: “*Bigger housing associations with apartments in different regions or even being active nationwide often confront us with contractual terms, that have been agreed with their actual cable TV provider or which were offered to them by competing bidders.*”⁵⁸⁸ The example provided does not directly refer to one of the possible transmission mechanisms but rather refers to actual direct competition between the local cable network operator and Deutsche Telekom. In particular, the example does not provide evidence that Deutsche Telekom serves as competitive link between conditions offered by Vodafone and Unitymedia.
- (b) Equally, Tele Columbus did not provide evidence of indirect competitive pressure resulting from benchmarking, it simply states: “*Tele Columbus can only provide examples from transfer of conditions from Vodafone to TC [Tele Columbus]. TC is less active in the Unitymedia footprint*”.⁵⁸⁹ Again, the example does not provide any evidence that Tele Columbus transfers conditions taken over from Vodafone to Unitymedia’s footprint. To the contrary, in a different context, Tele Columbus provided conflicting evidence claiming that Vodafone is only willing to carry out FTTB build out if it faces Tele Columbus directly in a tender: “*In the DEGEWO tender (which concerned approx. 52 000 homes in Berlin), FTTB with a 32 homes per node ratio was requested in the tender. This involved a heavy investment for the build-out and upgrade of the infrastructure. Tele Columbus fulfilled that requirement, while Vodafone was very hesitant to offer this network quality. Only because of the competitive pressure of Tele Columbus with its FTTB offer, Vodafone changed its standard network construction concept for the preservation of the DEGEWO units by offering the construction of a complete FTTB network with a 32 node ratio.*”⁵⁹⁰ According to the information from Tele Columbus, as of today, FTTB with 32 homes per node is not offered by Vodafone if it does not compete directly with other market players like Tele Columbus. Tele Columbus explains that Vodafone does not offer this network quality outside Tele Columbus’ footprint which suggests that the direct competitive interaction is the most relevant determinant of the terms and conditions offered in negotiations on MDU contracts.
- (c) Housing associations did not provide any concrete examples except for Vonovia.⁵⁹¹ However, the examples provided by Vonovia remain very vague or refer to very particular cases with limited relevance for the usual course of negotiations. For instance, Vonovia pointed Vodafone to an investigation of the Bundeskartellamt⁵⁹² regarding the length of Unitymedia’s MDU contracts in order to prematurely start negotiations on a new contract.⁵⁹³ Vonovia claims that, due to the reference to this decision, Vonovia was able to convince Vodafone to start negotiations.

⁵⁸⁸ Deutsche Telekom’s reply to questionnaire Q11, question 59.1.2 [ID 3946].

⁵⁸⁹ Tele Columbus, Meeting presentation of 28 February 2019 [ID 4522].

⁵⁹⁰ Tele Columbus, submission of 12 November 2018, EU Competitive Assessment Vodafone Unitymedia, page 9 [ID 2974].

⁵⁹¹ Replies to questionnaire Q12, question 18.1.3.

⁵⁹² See Bundeskartellamt, Bericht des Bundeskartellamtes über seine Tätigkeit in den Jahren 2013/2014 sowie über die Lage und Entwicklung auf seinem Aufgabengebiet ID [3299].

⁵⁹³ Vonovia’s reply to questionnaire Q12, question 18.1.3 [ID 4029].

- (782) Thirdly, the review of the Parties' internal documents provided no evidence suggesting that the Parties take into account each other's terms and conditions in their respective negotiations on MDU contracts. [CONFIDENTIAL CONTRACT DETAILS].⁵⁹⁴ [...] ⁵⁹⁵
- (783) Fourthly, to the contrary, the Parties submitted convincing evidence disputing the claim that MDU contracts are aligned across Germany. [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS], illustrating that neither Party is constrained by the terms offered by the other Party in its cable footprint.⁵⁹⁶
- (784) Fifthly, from a general perspective, it is highly implausible that this sort of cross-region benchmarking could be an effective lever in negotiations given that the Parties are not actual competitors and housing associations are therefore unable to switch between them.
- (785) Therefore, the Commission concludes that the Transaction does not lead to a loss of indirect competition between the Parties in the market for the supply of retail TV signal transmission to MDU customers.

2.4.2.4. Competitive constraint from competitors

- (786) The Parties' competitors active in the market for the supply of retail TV signal transmission to MDU customers are presented in the following.

(i) Competitive constraint pre-Transaction

(a) Tele Columbus

- (787) As explained in section VIII.C.2.4.2.2., Tele Columbus has a nationwide market share of about [10-20]%.
- (788) Tele Columbus and its predecessors started as Level 4 cable network operators after the lifting of Deutsche Telekom's (or its predecessor Deutsche Bundespost) monopoly regarding the Level 4 network.⁵⁹⁷ Due to this lifting of the monopoly on the Level 4, cable network operators emerged and – over several years – also built up own Level 3 infrastructure in order to become independent from intermediary signal delivery of Level 3 operators.
- (789) Tele Columbus grew out of the acquisition and consolidation of numerous local Level 4 operators, which traditionally served housing associations using the Level 3 TV signal purchased from regional cable operators. At the time, the business was exclusively focused on the provision of TV services. Over time, Tele Columbus connected clusters of buildings to a satellite head-end, creating island networks, and subsequently connected some of these island networks through Level 3 infrastructure connected to a national backbone ("ladder of investment" growth model).
- (790) Following this strategy, Tele Columbus now has its own Level 3 network spread out across Germany, but with high coverage mainly in bigger cities in Eastern Germany (for example, Berlin, Leipzig, Dresden). In other areas, Tele Columbus' network coverage is low. In particular, Tele Columbus has limited existing infrastructure in

⁵⁹⁴ See Response to the Article 6(1)(c) Decision, page 77.

⁵⁹⁵ See Response to the Article 6(1)(c) Decision, Annexes C.V.11-C.V.13; Response to the Statement of Objections, Annexes D.2-D.6; [REFERENCE TO INTERNAL DOCUMENT].

⁵⁹⁶ See Response to the Article 6(1)(c) Decision, page 77.

⁵⁹⁷ Tele Columbus' reply to questionnaire Q11, question 8.1 [ID 4020].

the Unitymedia footprint or federal states. Overall, Vodafone estimates that Tele Columbus' cable network currently covers [5-10]% of homes (in other words, homes passed) in Germany.⁵⁹⁸

- (791) According to the Notifying Party, it is likely that Tele Columbus' investment decision to build out own Level 3 infrastructure was driven, at least in part, by a need to respond to increasing demand from housing associations for an offering that includes broadband services in order to retain its existing contracts with housing associations, and the additional revenues that Tele Columbus could expect to generate from broadband. Connecting to its own Level 3 infrastructure allowed Tele Columbus to start offering broadband services at a time when demand for these services was growing.
- (792) Tele Columbus explains that it still employs a similar business model today. Over time, Tele Columbus – step by step – plans to upgrade the infrastructure (Level 4-Network) and to build its own Level 3 network to provide TV signal and additional fixed services to MDU customers.⁵⁹⁹ Besides intermediary TV signal delivery, Tele Columbus also still employs some satellite solutions outside its own cable footprint.⁶⁰⁰ Tele Columbus explains that this is possible in circumstances where only cable TV is required in a particular tender or when the number of homes connected is small (and satellite is far cheaper than FTTH build out).⁶⁰¹
- (793) Tele Columbus describes its investment strategy as follows: *“TC [Tele Columbus] can and does (in the right circumstances) make investments outside its existing footprints. Based on TC's experience, the profitability of an investment outside the footprint depends on the service requirements (only CATV [cable TV] or also additional services such as telephone and internet), on the number of homes to be connected, the local situation of the buildings, the distance between the buildings and the CNO [cable network operator]'s existing own backbone, etc. Additionally, as mentioned under section 2, the profitability – in some cases – also depends on the wholesale conditions in case third-party CATV [cable TV] signal (wholesale) is used for a transitional period, while building proprietary L3 infrastructure.”*⁶⁰²
- (794) Tele Columbus submits that it currently significantly increases its fibre network both inside and outside its current network footprint.⁶⁰³ As evidence for its current investment activity, Tele Columbus provided figures on its accelerating total CAPEX investments.⁶⁰⁴

⁵⁹⁸ [REFERENCE TO INTERNAL DOCUMENT].

⁵⁹⁹ Tele Columbus, submission of 12 November 2018, EU Competitive Assessment Vodafone Unitymedia, page 11 [ID 2974].

⁶⁰⁰ Tele Columbus has submitted to the Commission that it has [...] million homes connected, of which [...] million are connected to its own backbone infrastructure (see agreed minutes of the meeting of 12 October 2018 with Tele Columbus, page 2 [ID 3128]). About [...] units are connected via either the Unitymedia or Vodafone networks (Response to the Statement of Objections). That leaves about [...] homes, or [...] of Tele Columbus' total homes connected, that must be connected either to satellite or to another wholesale TV signal delivery provider.

⁶⁰¹ Tele Columbus submission, 12 November 2018, page 18, footnote 11 [ID 2974]; Tele Columbus's reply to RFI 12, question 4(iii) [ID 4657].

⁶⁰² Tele Columbus, submission of 12 November 2018, EU Competitive Assessment Vodafone Unitymedia, page 18 [ID 2974].

⁶⁰³ See for example <https://www.telecolumbus.com/press/glasfasernetz-von-pyur-calau-geht-betrieb/> [ID 4953], <https://www.telecolumbus.com/press/tele-columbus-nimmt-neues-glasfasernetz-lenzkirch-und-saig-betrieb/> [ID 5077].

⁶⁰⁴ Tele Columbus, Meeting presentation of 28 February 2019, page 8 [ID 4522].

- (795) Tele Columbus' growth strategy is also confirmed in very recent internal documents of the Parties. For instance, Vodafone notes with regard to Tele Columbus: [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁶⁰⁵
- (796) In the Response to the Statement of Objections, the Parties point out that the CAPEX figures submitted by Tele Columbus are highly misleading given that, in the same period covered by the figures (2014 to 2018), the Tele Columbus network more than doubled in size following the acquisitions of Primacom and Pepcom in 2015. It is therefore no surprise that total CAPEX increased by [...] % in the same period, in fact, it is surprising that it did not increase further. Moreover, based on Tele Columbus' statements, a significant portion of the CAPEX is spent on network upgrades rather than network expansion.
- (797) Accordingly, the Parties explain that they are not aware of many recent examples where Tele Columbus overbuilt the Parties' infrastructure, in particular not in Unitymedia's territory. The quoted example of Viernheim⁶⁰⁶ in Hesse was in fact supported by public subsidies.⁶⁰⁷ [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS]⁶⁰⁸ [...]. In total, Unitymedia is only aware of Tele Columbus building a Level 3 network in areas where Unitymedia's Level 3 network was already present in relation to about [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS] units over the past seven to eight years (an average of [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS] units per year, or [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS] of the 7.7 million households in the Unitymedia footprint), and in none of these cases was it reliant on Unitymedia's Level 3 signal prior to the overbuild.
- (798) Lastly, contrary to the observation in Vodafone's document, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] infrastructure suggests that in reality it has engaged in very limited Level 3 infrastructure expansion in recent years, as demonstrated by Figure 20 (taken from Tele Columbus' own reported figures).

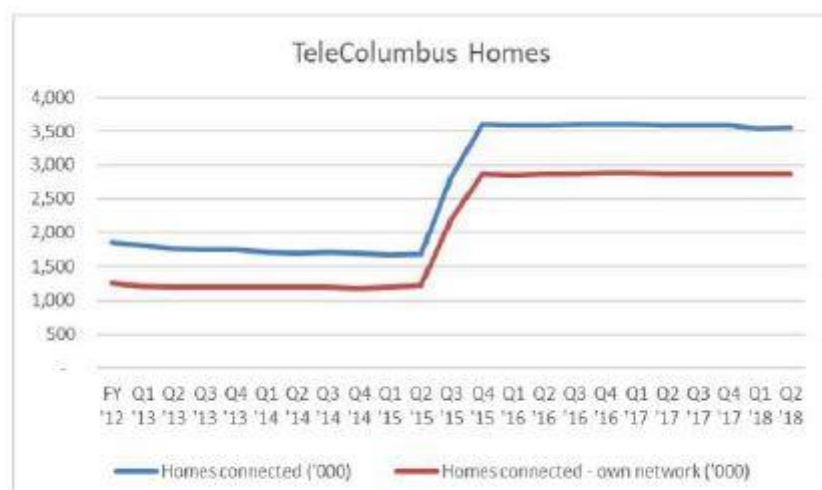
⁶⁰⁵ [REFERENCE TO INTERNAL DOCUMENT].

⁶⁰⁶ See for example <http://www.digitalfernsehen.de/Tele-Columbus-baut-Glasfasernetz-in-Viernheim-aus.152830.0.html> [ID 5083].

⁶⁰⁷ See https://www.bundesbaublatt.de/news/bbb_Tele_Columbus_Fernsehen_Telefon_und_Internet_fuer_1.800_Haushalte_in_2820984.html [ID 6823].

⁶⁰⁸ [REFERENCE TO INTERNAL DOCUMENT].

Figure 20: Tele Columbus Level 3 infrastructure



Source: Tele Columbus Investor Relations Analyst Toolkit, Q3 2018.

Source: Response to the Statement of Objections, page 158.

- (799) As is clear from the figure, there was a large step change in homes connected on Tele Columbus' own network in 2015 – this corresponds to Tele Columbus' acquisition of PrimaCom and PepCom, and hence the takeover of their Level 3 assets. However in the last three years, the number of homes connected to its own network has not materially increased, suggesting that Tele Columbus has not carried out any significant investment in expanding its Level 3 network as this would result in a significant increase in homes connected on its own network.
- (800) Tele Columbus expects that the Transaction will negatively affect its network evolution due to Vodafone's less favourable than Unitymedia's terms and conditions for intermediary TV signal delivery. This will be specifically assess in section VIII.C.4.3.
- (801) Respondents to the market investigation see Tele Columbus currently as strongest competitor of the Parties. However, due to its business model and the merged entity's size advantage, respondents consider that its competitive position is at risk through the Transaction.⁶⁰⁹ In particular, several large housing associations responding to the market investigation believe that the merged entity would be large enough to marginalise smaller and more innovative players in the market, in particular Tele Columbus leading to less choice and higher prices.
- (a) FRK: *"After the merger, the next "biggest" market player, Tele Columbus, will face the unbelievably strong "competitor" (not to say monopolist) New Vodafone, with an estimated market share of approx. 80- 85%. In consequence New Vodafone will not only have a very dominant but also a very comfortable market position, because no potential competitor, capable to engage in serious competition, is left. Any engagements by either Tele Columbus or one of the other small and medium sized cable network operators will be pinpricks, at the best, without any competitively relevant impacts."*⁶¹⁰
- (b) Gewobag: *"In our view, competition should not come to a standstill or be limited. The merger would risk driving PYUR also out of the Berlin market. If*

⁶⁰⁹ Replies to questionnaire Q12, question 25.

⁶¹⁰ FRK, submission of 10 December 2018, page 6 [ID 3100].

that were the case, prices would go up due to the lessening of competition. In addition, the expansion of the network would probably drag on significantly, because Vodafone is already very active in its HFC roll-out concept and it is difficult to be convinced to also expand FTTB/FTTH. In particular, the sluggish FTTB/FTTH roll-out would put at risk the long-term strategy of Gewobag (and other Berlin-based housing associations) to develop fibre.”⁶¹¹

- (c) LEG: *“The concerns of LEG on the forthcoming merger are, in particular, that this creates a too ‘big’ supplier of broadband cable products and transmission networks. As a result, we believe that there is a risk that other, innovative suppliers, such as Tele Columbus or regional suppliers, are increasingly being driven out and competition coming to a standstill in the medium term.”*⁶¹²
- (d) Stadt und Land Netze: *„As explained above, in our view the transaction has an impact on competition between Vodafone and Pyur. If the merger were to be cleared, there would be a risk that a merged Vodafone/Unitymedia could offer attractive prices and supply conditions in the short term, but that in the medium to long term other competitors such as Pyur would be forced out of the market, and that there would then be significant price increases and sensitive losses in terms of business models and contractual clauses in the (MDU) housing market.”*⁶¹³

(802) These concerns are discussed in section VIII.C.2.4.2.4.(ii)..

(b) Deutsche Telekom

(803) As explained in section VIII.C.2.4.2.2., Deutsche Telekom has a nationwide market share of about [0-5]%.

(804) Deutsche Telekom entered the MDU market in 2011 with its business unit “Competence Center Wohnungswirtschaft” (“CC WoWi”). CC WoWi offers Cable TV services via DVB-C technology to MDUs which is not equivalent to Deutsche Telekom’s regular IPTV product.⁶¹⁴ Before Deutsche Telekom concludes a contract with an MDU customer, it examines the costs to connect the potential MDU customer’s premises to the core network via FTTB (potentially overbuilding the

⁶¹¹ Original German version of the reply: *“Der Wettbewerb sollte aus unserer Sicht nicht zum Erliegen kommen/ eingeschränkt werden. Durch die Fusion bestünde die Gefahr, das[s] PYUR auch auf dem Berliner Markt verdrängt wird. Wenn das der Fall wäre, würden durch den geringeren Wettbewerb die Preise steigen. Außerdem würde sich der Netzausbau wahrscheinlich deutlich verschleppen, weil Vodafone schon jetzt stark auf sein HFC-Ausbaukonzept setzt und nur schwer zu überzeugen ist, auch FTTB/FTTH auszubauen. Insbesondere der schleppende FTTB/FTTH-Ausbau würde die langfristige Strategie der Gewobag (und anderer Berliner Wohnungsbauunternehmen) zum Glasfaserausbau gefährden.”*

⁶¹² Original German version of the reply: *“Die Sorge der LEG in Bezug auf das anstehende Zusammenschlussvorhaben ist insbesondere, dass dadurch ein zu “großer” Anbieter von Breitbandkabelprodukten und Versorgungsstrukturen entsteht. Dadurch besteht aus unserer Sicht die Gefahr, dass andere, innovative Anbieter, wie z.B. Tele Columbus oder regionale Anbieter, zunehmend verdrängt werden und der Wettbewerb mittelfristig zum Erliegen kommt.”*

⁶¹³ Original German version of the reply: *„Wie bereits dargelegt, hat die Transaktion aus unserer Sicht Auswirkungen auf den Wettbewerb zwischen Vodafone und Pyur. Bei einer Freigabe der Fusion besteht damit das Risiko, dass eine fusionierte Vodafone/Unitymedia zwar kurzfristig attraktive Preise und Versorgungskonditionen anbieten kann, mittel- bis langfristig aber andere Wettbewerber wie Pyur vom Markt drängt und es dann zu erheblichen Preissteigerungen und empfindlichen Einbußen an Flexibilität bezüglich Geschäftsmodellen und Vertragsklauseln im wohnungswirtschaftlichen (MDU-) Markt kommt.“*

⁶¹⁴ Deutsche Telekom’s reply to questionnaire Q11, question 8.1 [ID 3971].

Parties' existing cable network) or FTTH (additionally replacing the existing Level 4 in-house coaxial wiring with fibre).⁶¹⁵

- (805) Deutsche Telekom describes its market entry as follows: Deutsche Telekom was able to win Deutsche Annington (now Vonovia), a large German Housing Association, as an important reference customer in 2011. However, the winning of Deutsche Annington as a reference customer shortly after market entry remained singular. In the following period, CC WoWi participated in tenders and negotiations for the supply of retail TV signal transmission. Despite intensive marketing efforts and tightly calculated offer prices, which were regularly significantly lower than the respective existing prices of Unitymedia and Kabel Deutschland/Vodafone, CC WoWi was nevertheless unable to win MDU contracts on a large scale in competition with Unitymedia and Kabel Deutschland/Vodafone. In total, CC WoWi was only able to win a few smaller and medium-sized contracts. Deutsche Telekom estimates that its market share is at most [0-5]%.⁶¹⁶
- (806) In summary, Deutsche Telekom attributes its failed market expansion to (i) high market entry barriers and (ii) the Parties' strategy to foreclose the market by selecting offering retail TV signal services to MDU customers at prices which are not covering actual costs. In addition, Deutsche Telekom submits that (iii) the Parties' ability to charge feed-in fees to TV broadcasters provides them with a competitive advantage that further marginalises smaller competitors (see section VIII.C.2.4.2.4.(ii)).⁶¹⁶
- (807) Deutsche Telekom's weak position in the MDU market is confirmed by several market participants.
- (a) GdW questions the role of Deutsche Telekom in the MDU market explaining that it is not a strong competitor and is not very successful with its cable TV product. GdW explained this to the fact that Deutsche Telekom does not understand the product market and that it is not a natural competitor in this market. The cable market is different from the telecommunications market. In particular, Deutsche Telekom is not willing to use existing Level 4 infrastructure (it rather builds its own infrastructure) and to hand over infrastructure at the end of the contractual period. Despite being a new entrant, Deutsche Telekom is not flexible and not particularly aggressive. GdW expects that Deutsche Telekom has won only a small number of tenders.⁶¹⁷
- (b) Deutsche Wohnen, the second largest housing association in Germany, confirms Deutsche Telekom's marginal market presence and explains that it does not have any contracts with Deutsche Telekom: *"At the same time, Deutsche Telekom is also active throughout Germany, but it has so far only a very limited market presence regarding cable and corresponding supply*

⁶¹⁵ Deutsche Telekom's non-confidential reply to RFI 20, question 1 [ID 4325].

⁶¹⁶ Deutsche Telekom's non-confidential reply to RFI 20, question 5 [ID 4325].

⁶¹⁷ Agreed minutes of meeting of 17 January 2019 with GdW, para 5 [ID 4652]. Original version of the German statement: „Bzgl. der Deutschen Telekom (\"DTAG\") erklärte der GdW, dass diese keinen starken Wettbewerber darstelle und mit ihrem Kabel TV Produkt nicht sehr erfolgreich sei. Der GdW führte dies darauf zurück, dass die DTAG den Gestattungsmarkt nicht verstehen würde und als Telekommunikationsunternehmen kein natürlicher Wettbewerber in diesem Markt sei. Der Kabelmarkt unterscheide sich vom Telekommunikationsmarkt. Insbesondere sei die DTAG nicht bereit vorhandene Infrastruktur zu nutzen oder auszubauen (und baue stattdessen eigene Infrastruktur) und Infrastruktur ab Ende der Vertragsperiode abzugeben. Als Markteinsteiger im Gestattungsmarkt sei die DTAG nicht flexibel und nicht besonders aggressiv und nimmt bundesweit nur selektiv an Ausschreibungen teilnehmen. Insgesamt habe die DTAG nur eine geringe Anzahl an Ausschreibungen gewonnen.“

*models to the housing industry. Deutsche Telekom appears rather as a nationwide provider of telephony and internet (DSL) through its own copper network, but has less presence in terms of cable supply. Deutsche Wohnen itself has not concluded any framework or supply contracts with Deutsche Telekom concerning the supply for its housing stock.*⁶¹⁸

(808) Moreover, housing associations from Vodafone's and Unitymedia's footprint state that Deutsche Telekom is not as price aggressive as the Parties.

- (a) Gewobag, active in Berlin, states that Deutsche Telekom is not as price aggressive as Vodafone or Pyur: *"In the area of provision of basic TV via cable, although Telekom is active, but its presence in the housing sector is much smaller than in other areas. Deutsche Telekom's core business is still internet and telephony over DSL. In this respect, Telekom is a major competitor, but not as price aggressive as the other two major competitors. Vodafone and PYUR regularly compete, with PYUR tending to be slightly more flexible than Vodafone, presumably with the intention of market penetration/retaining or expanding shares."*⁶¹⁹ Moreover, Gewobag explains that Deutsche Telekom is reluctant to use Level 4 network if owned by a different entity: *"According to our experience and the experience of individual sister companies, Telekom, in particular, has difficulties in developing the network when it is asked to use foreign networks, for example when developing its own NE3."*⁶²⁰
- (b) LEG, active in North-Rhine Westphalia, confirms that Unitymedia is much more price aggressive than Deutsche Telekom, and also than Tele Columbus and NetCologne: *"From our experience in calls for tenders, we know that Unitymedia is generally much more aggressive in terms of pricing than its direct competitors Tele Columbus, Deutsche Telekom and Net Cologne."*⁶²¹

⁶¹⁸ Agreed minutes of call of 23 August 2018 with Deutsche Wohnen, para 3.1. [ID 2579]. Original German version of the statement: *„Daneben sei bundesweit noch die Deutsche Telekom tätig, die aber beim Kabelanschluss und den in diesem Zusammenhang stehenden Versorgungsmodellen gegenüber der Wohnungswirtschaft bislang nur eine sehr geringe Marktpräsenz habe. Die Deutsche Telekom sei insofern eher als bundesweiter Anbieter von Telefonie und internet (DSL) über die eigenen Kupferdoppeladernetze aufgetreten, habe aber weniger Präsenz bei der Kabelversorgung. Die Deutsche Wohnen selbst hat keinerlei Rahmen- oder Versorgungsverträge mit der Deutsche Telekom über die Versorgung ihrer Bestände abgeschlossen.“*

⁶¹⁹ Gewobag's reply to questionnaire Q12, question 22.11 [ID 4003]. Original German version of the reply: *„Im Bereich der TV-Grundversorgung über Breitbandkabel ist die Telekom zwar aktiv, der wohnungswirtschaftliche Bereich ist aber gegenüber den übrigen Bereichen deutlich kleiner. Kerngeschäft der Deutsche Telekom ist nach wie vor internet und Telefonie über DSL. Insofern ist die Telekom zwar ein großer Wettbewerber, aber nicht so preisaggressiv wie die anderen beiden großen Wettbewerber. Vodafone und PYUR konkurrieren regelmäßig, wobei PYUR in der Tendenz etwas flexibler als Vodafone ist, vermutlich mit der Absicht der Marktdurchdringung / Anteile zu halten und ggfs. auszubauen.“*

⁶²⁰ Gewobag's reply to questionnaire Q12, question 11.3 [ID 4003]. Original German version of the reply: *„Die Telekom hat nach unserer Erfahrung und der Erfahrung einzelner Schwestergesellschaften insbesondere dann Schwierigkeiten beim Netzausbau, wenn sie fremde Netze mitnutzen soll, so z.B. beim Ausbau eigener NE3.“*

⁶²¹ LEG's reply to questionnaire Q12, question 22.11 [ID 4035]. Original German version of the reply: *„Aus unserer Ausschreibungserfahrung ist uns bekannt, dass Unitymedia grundsätzlich deutlich preisaggressiver auftritt als die unmittelbaren Wettbewerber Tele Columbus, die Deutsche Telekom und Net Cologne.“*

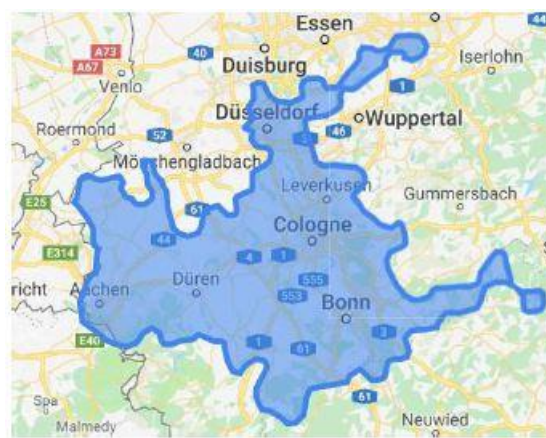
- (809) This is in line with Deutsche Telekom's view on its own limited price aggressiveness.⁶²² In contrast to the Parties, Deutsche Telekom needs to carry out significant investments in order to connect MDU premises to a newly build FTTB/FTTH network. According to Deutsche Telekom, the Parties' fend off competition by constantly increasing prices for SDUs while reducing prices for MDUs. This led to individual tenders where the bidding price per unit for MDU customers was even below EUR 1 while the price for uncontestable SDU customers exceeds EUR 20. This kind of predatory pricing and/or cross subsidization makes a market expansion for (smaller) competitors almost impossible as Deutsche Telekom and other competitors regularly need to invest in a new fibre infrastructure to connect the MDU customers to their backbone while the Parties' can rely on their existing cable network.
- (810) In the Response to the Statement of Objections, the Parties acknowledge that Deutsche Telekom has been relatively unsuccessful in winning MDU contracts as it is unwilling to agree terms with MDU customers regarding build out and ownership of the Level 4 network. However, the Parties also point to evidence that suggests that Deutsche Telekom's competitive strength is larger than its market share would suggest.
- (a) Housing associations' responses to the market investigation suggest that they see Deutsche Telekom, besides its shortcomings, as relevant competitor. The responses frequently mention Deutsche Telekom and Tele Columbus alongside and refer to Deutsche Telekom as suitable supplier, safe and good alternative, established contract partner and credible competitor.
 - (b) The Parties point out that Deutsche Telekom's limited scale is also due to the nature of the MDU market. MDU contracts of the size of Deutsche Telekom's first MDU customer Vonovia are rare. Most housing associations and the size of their contracts are significantly smaller. Therefore, it takes time to build up a certain scale in this market.
 - (c) The Parties provided several examples where Vodafone or Unitymedia unsuccessfully bid against Deutsche Telekom and lost an opportunity or a renewal of a contract to Deutsche Telekom. [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS] further evidence based on their internal documents relating to specific contractual negotiations that shows that the Parties see Deutsche Telekom as important and credible competitor.
- (811) Moreover, the Parties explain that Deutsche Telekom's participation in tenders has a significant impact on competition and drives down prices. [INFORMATION ON PRICING ARRANGEMENTS]. This is also in line with Deutsche Telekom's complaint about the Parties' strategy to lower prices if faced with competition.
- (c) *Other players*
- (812) Besides the Parties, Tele Columbus and Deutsche Telekom, there are several smaller operators active in the market. Jointly, they have a market share of [10-20]% only.
- (813) On the one hand, there are city carriers, such as NetCologne, EWE and M-Net, whose activities are constrained by the limited geographic scope of their Level 3 networks.

⁶²²

Deutsche Telekom's non-confidential reply to RFI 20, question 5 [ID 4793].

- (814) Housing associations responding to the market investigation explain that such players are strong regarding infrastructure modernization, in particular the upgrade to FTTB/FTTH.⁶²³ While cable operators are often reluctant to replace coaxial cables with fibre, small- and medium-sized operators readily offer this service.
- (815) In the Response to the Statement of Objections, the Parties point to further evidence [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]. Moreover, the Parties refer to the fact that negotiations and tenders for MDU contracts tend to be mostly regional in scope. Therefore, city carriers are often well-placed for such tenders and not constrained by the limited geographic scope of their networks.
- (816) Moreover, the Parties point out that city carriers are often active and expanding in neighbouring areas. For instance, NetCologne is not only active in Cologne area but also in areas such as Aachen, Bonn and Mechenheim. Figure 21 shows NetCologne's network coverage.

Figure 21: NetCologne Coverage Map



Source: Response to the Statement of Objections, page 135.

- (817) NetCologne itself points to the competitiveness of city carriers in the MDU market.⁶²⁴ Given the market size of 13 million households, [CONFIDENTIAL]⁶²⁵ Other city carriers such as M-net, EWE Tel, and Wilhelm.tel would also be strong competitors according to NetCologne.
- (818) On the other hand, small- and medium-sized Level 4 are active in the market based on the intermediary TV signal supply of cable network operators. Several Level 4 operators explain that they are active in a niche segment of the market. For instance, Cable4 states that it competes based on its individualised high-standard infrastructure, maintenance and service solutions while it cannot compete based on price.⁶²⁶
- (819) Housing associations responding to the market investigation explain that Level 4 operators can only upgrade the in-house wiring as they do not have their own Level 3 infrastructure.⁶²⁷ Moreover, very small Level 4 operators do not meet the service

⁶²³ Replies to questionnaire Q12, question 11.

⁶²⁴ NetCologne's comments on the Statement of Objections, page 6 [ID 5854].

⁶²⁵ [CONFIDENTIAL]

⁶²⁶ Cable4's reply to questionnaire Q11, question 68.3 [ID 3531]; Agreed minutes of call of 14 February 2019 with Cable4, para 1.2 [ID 4752].

⁶²⁷ Replies to questionnaire Q12, question 11.

level requirements, for instance in terms of reaction time in case of technical failures and on-call services.⁶²⁸

- (820) More fundamentally, Level 4 operators, just like Tele Columbus is in certain areas, are fully dependent on the Parties' willingness to offer intermediary TV signal transmission services at competitive terms and conditions.

(ii) Competitive constraint post-Transaction

- (821) Respondents to the market investigation claim that the Transaction would have a negative impact on competitors in the MDU market. In particular, competitors fear that the merged entity would benefit from (i) economies of scale in terms of lower project-specific costs, (ii) its ability to cross-subsidise, (iii) its financial advantages through feed-in fees, (iv) its advantages in terms of TV content and (v) its ability to offer product bundles, in particular FMC bundles.⁶²⁹
- (822) The Commission has investigated whether the Transaction would have any negative merger-specific effects on competitors active in the retail supply of TV signal transmission to MDU customers. However, the Commission does not observe any significant merger-specific changes for the following reasons.
- (823) Firstly, it has to be noted that, as described in section VIII.C.2.4.2.3.(i). and VIII.C.2.4.2.3.(ii)., Vodafone and Unitymedia are both diversified internationally. In Germany, both have a strong market position not only in the market for the retail supply of TV signal transmission to MDU customers but also with regard to the provision of retail TV signal transmission to SDU customers, fixed internet access and fixed telephony services. Therefore, already pre-Transaction, both Parties enjoy certain economies of scale in project-specific costs and possibly abilities to cross-subsidise. However, it is unlikely that the Transaction would lead to any significant economies of scale or change their incentives to cross-subsidise. Given that there is no overlap in the Parties' activities, the competitive situation of the merged entity and its pricing incentives remain structurally unchanged.
- (824) For instance, a city carrier specifically refers to the Parties' ability to compete based on the principle "land subsidised city" whereby the Parties would undercut prices in competitive MDU tenders in urban areas based on the higher revenues they are able to extract in MDU tenders in less competitive rural areas.⁶³⁰ Moreover, this complainant refers to the Parties' financial resources and access to financial markets. While this description is true for both Vodafone and Unitymedia, there is no merger-specific change resulting from the Transaction.
- (825) Deutsche Telekom complained about Vodafone's and Unitymedia's strategy to foreclose the market by selectively offering retail TV signal supply services to MDU customers at prices which are not covering the actual costs according to them.⁶³¹ [CONFIDENTIAL].⁶³² [CONFIDENTIAL]. Pre-Transaction, both Parties have the ability to cross-subsidise. According to the information provided by Deutsche Telekom and other competitors, both Parties make use cross-subsidisation

⁶²⁸ Agreed minutes of call of 23 August 2018 with Deutsche Wohnen, para 3.5 [ID 2579].

⁶²⁹ See for example Replies to questionnaire Q11, question 62, 65; NetCologne's comments on the Statement of Objections [ID 5854]; FRK, Meeting presentation of 21 November 2018, page 28 [ID 4712]; Cable4's reply to questionnaire Q11, question 103 [ID 3531].

⁶³⁰ NetCologne's comments on the Statement of Objections, page 4 [ID 5854].

⁶³¹ Deutsche Telekom's non-confidential reply to RFI 20, question 5 [ID 4793].

⁶³² [CONFIDENTIAL]

techniques.⁶³³ But most importantly, the Parties' competitive situation and its pricing incentives remain structurally unchanged post-Transaction.

- (826) Secondly, competitors also claim that Vodafone would foreclose competitors by starting to offer bundles products and in particular fixed-mobile convergence offers to tenants in MDU buildings in Unitymedia's footprint.⁶³⁴ Post-Transaction, Vodafone would have a unique market position, as no other provider in Germany would be equally able to combine the supply of TV signal transmission to MDU customers with the supply of mobile subscriptions to the tenants.
- (827) These effects are assessed in section VIII.C.5 on the potential conglomerate effects of the Transaction. Nevertheless, the Commission sets out the main arguments, specifically with regard to the MDU market below.
- (828) With regard to fixed product bundles:
- (a) Already pre-Transaction, both Vodafone and Unitymedia offer fixed internet access, fixed telephony and premium TV services to tenants in MDU buildings and such offers are not facilitated or improved by the Transaction.
 - (b) The data provided by the Parties shows that the current penetration rate of broadband customers in their TV footprint (that is to say for those MDU households where the relevant Party provides the basic TV service, the proportion of those households who also purchase a retail broadband or retail fixed voice service from that Party) is the range of [INFORMATION CONCERNING SALES] and [INFORMATION CONCERNING SALES]. Therefore, bundled offers are not more popular or more easily marketable to tenants living in MDU buildings than to SDU customers. Moreover, [INFORMATION CONCERNING SALES].
 - (c) In any case, the Parties have no competitive advantage in the provision of fixed product bundles to tenants in MDU buildings compared to their main competitors Tele Columbus, Deutsche Telekom and the various city carriers as these also offer additional fixed telecommunications services. Solely Level 4 operators may not be able to offer additional fixed services. However, the competitive constraint exerted by Level 4 operators is in any case constrained by their dependence on intermediary TV signal delivery.
- (829) With regard to FMC bundles:
- (a) Pre-Transaction, with regard to the supply of mobile telecommunications services, Vodafone is an MNO whereas Unitymedia is active as service provider only. Post-Transaction, the merged entity will be active as MNO both in Vodafone's as well as in Unitymedia's footprint.
 - (b) Vodafone has not historically engaged in cross-selling mobile services to MDU tenants in the same way as it does for broadband and premium TV services.⁶³⁵ [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].
 - (c) This can also be seen by the market position of Vodafone's competitors. On the one hand, Deutsche Telekom had a relatively unsuccessful market entry in the retail supply of TV signal transmission to MDU customers. If FMC bundles

⁶³³ See for example Deutsche Telekom's non-confidential reply to RFI 20, question 5 [ID 4793].

⁶³⁴ See for example NetCologne's comments on the Statement of Objections, page 11 [ID 5854]; Tele Columbus, Meeting presentation of 28 February 2019, page 20 [ID 4522].

⁶³⁵ See Response to the Statement of Objections, Annex C.V.1., page 73.

were of relevance in the MDU market, Deutsche Telekom could have benefitted from its competitive advantage as one of the leading mobile operators. On the other hand, Unitymedia is a strong competitor in the MDU market despite its lack of a comprehensive mobile offering.⁶³⁶

- (d) For completeness, Vodafone offers a “BewohnerPlus” discount to tenants of certain (mainly large) housing associations and, [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS].⁶³⁷
- (e) Overall, the market for FMC offers still seems to be in a nascent phase in Germany, the first FMC bundles having been offered in Germany only in 2014 by Vodafone and Deutsche Telekom. Predicted FMC penetration in Germany in 2022 is 21% as a proportion of households, ranking Germany second to last of the ten European countries covered by the data provided by the Notifying Party. Even if the Transaction might accelerate the trend towards FMC, however, this does not undermine the ability of competitors to effectively compete for the largest part of the market on the basis of fixed bundles only.
- (f) For Vodafone, only [INFORMATION CONCERNING SALES] of households purchasing any form of cable-based fixed product from Vodafone also have a post-pay mobile contract with Vodafone, despite the fact that the possible integration of cable and MNO mobile offers has been on the market for several years.⁶³⁸ Given that Vodafone does not actively cross-sell mobile services to MDU tenants, there is no reason to believe that this proportion would be higher among its MDU customers than among its SDU customers.⁶³⁹
- (g) As Vodafone does not specifically cross-sell mobile services to tenants in MDUs supplied by Vodafone with basic cable TV, individuals would have to purchase mobile through the same sales channels as SDU customers. If there is a potential difference, it is more likely that the proportion would be lower among MDU customers as SDU customers will necessarily have an existing direct relationship with Vodafone which Vodafone could potentially use to try to cross-sell other services (whereas MDU tenants may not have a direct relationship with Vodafone if they only take the basic TV service under the housing association contract).
- (h) The ability to offer FMC bundles is unlikely to become an important competitive parameter in tenders or negotiations with MDU customers for the retail supply of TV signal transmission services in the future. Contrary to SDU customers, MDU customers are private landlords and housing associations. While they are responsible to provide retail TV signal transmission services and possibly further fixed telecommunications services linked to the infrastructure of the building, they are unlikely to take into account bidders’ offers for tenant’s mobile subscriptions. This is also reflected in the Parties’

⁶³⁶ For Unitymedia, [DETAILS OF COMMERCIAL STRATEGY]/[DETAILS OF CUSTOMERS] (See Parties’ reply to RFI 24, question 31).

⁶³⁷ See Parties’ reply to RFI 24, question 31; RFI 35, question 2.

⁶³⁸ See Response to the Article 6(1)(c) Decision, footnote 447.

⁶³⁹ If there is a potential difference, it is more likely that the proportion would be lower among MDU customers as SDU customers will necessarily have an existing direct relationship with Vodafone which Vodafone could potentially use to try to cross-sell other services (whereas MDU tenants may not have a direct relationship with Vodafone if they only take the basic TV service under the housing association contract).

business forecasts [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁶⁴⁰

(830) Thirdly, competitors raised concerns with regard to the potential effects of the Transaction in the MDU market due to the merged entity's increased market power vis-à-vis broadcasters. Competitors fear that this increased market power could lead to the merged entity obtaining better conditions, such as exclusive content and/or higher feed-in fees, which would in turn translate into a foreclosure of retail competitors. These effects are assessed in section VIII.C.2.11. on the potential effects of the Transaction in the wholesale market for TV signal transmission. In conclusion, the Commission found that the Transaction is unlikely to translate into a foreclosure of retail competitors.

(831) In light of the above, the Commission considers that, the competitive constraint exerted by the merged entity's competitors is likely to remain unchanged post-Transaction.^{641,642}

2.4.2.5. Likely overall effect of the Transaction

(832) While the market for the retail TV signal transmission to MDU customers is highly concentrated and each of the Parties has a dominant position in its respective footprint, there is no merger-specific change as the Parties do not directly compete with each other in this market. In particular, based on the evidence on file, the Commission concludes that there is no loss of direct, indirect or potential competition as a result of the Transaction.

(833) For the reasons explained in section VIII.2.4.2.4.(ii)., the Commission considers that the Transaction will not lead to a weakening of the competitive constraint exerted by the Parties' competitors.

(834) Therefore, the Commission considers that the Transaction will not lead to anticompetitive horizontal non-coordinated effects in the retail market for the supply of TV signal transmission to MDU customers in Germany.

2.4.3. Conclusion

(835) In light of the foregoing, the Commission concludes that the Transaction is not likely to significantly impede effective competition in the market for the retail supply of TV signal transmission to MDU customers in Germany as a result of horizontal non-coordinated effects.

2.5. Horizontal non-coordinated effects in the retail supply of TV signal transmission to SDU customers

2.5.1. The Notifying Party's view

(836) The Notifying Party submits that the Transaction does not give rise to any horizontal concerns in relation to the retail supply of TV signal transmission to SDU customers.

⁶⁴⁰ See Parties' reply to RFI 24, question 31.

⁶⁴¹ In the market investigation, complaints have been raised regarding the foreclosure of retail providers of TV signal transmission to the detriment of MDU customers. These effects are assessed in section VIII.4.3. on the potential vertical effects of the Transaction.

⁶⁴² For the sake of clarity, antitrust rules, in particular article 102 TFEU will continue to apply to the merged entity after the closing of the Transaction, regardless of the outcome of the present assessment under the Merger Regulation.

- (837) Firstly, the Notifying Party points out that actual direct competition between the Parties arises only in the Unitymedia footprint where Vodafone is active in supplying SDUs on the basis of its [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS] IPTV product. This overlap is extremely small, with the Transaction resulting in an increment of only [0-5]%.
- (838) Secondly, [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].
- (839) The Notifying Party submits that the introduction of GigaTV OTT is unlikely to significantly increase the overlap in Unitymedia's footprint [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS].
- (840) Thirdly, the Parties' are not close competitors in the supply of retail TV signal transmission to SDU customers as evidenced by the Parties' very different market position with regard to market share and product characteristics.
- (841) Fourthly, post-Transaction Vodafone would continue to face a number of strong retail TV competitors both nationally and in the Unitymedia footprint, competing based on a range of transmission technologies, including services provided by Deutsche Telekom, Tele Columbus, city carriers as well as satellite, terrestrial and OTT services.
- (842) With regard to indirect competition, the Notifying Party explains that there is no significant indirect competition between the Parties that would be lost as a result of the Transaction. In its Response to the Article 6(1)(c) Decision, the Notifying Party sets out in detail why there is no mechanism by which such indirect competition would materialise with regard to SDU contracts. Firstly, there is no evidence of sequential pricing which would lead to the transmission of competitive conditions between non-overlapping cable footprints. Secondly, there is no evidence that the Parties benchmark their products in such a way as to give rise to any significant competitive pressure.

2.5.2. *The Commission's assessment*

2.5.2.1. The German market for the retail TV signal transmission to SDU customers

- (843) As already discussed in section VIII.C.2.2. regarding the supply of fixed internet access services, there are three main networks in Germany, Deutsche Telekom's copper network and the Parties' cable networks. These also serve as basis for the provision of retail TV signal transmission services to SDU customers. Next to the Parties and Deutsche Telekom's network, in Germany there are a number of other small regional or local city carriers. Fibre infrastructure is currently very limited in Germany.
- (844) With regard to the supply of retail TV signal transmission to SDU customers, satellite, terrestrial and OTT services are potentially part of the relevant product market.
- (845) The satellite signal in Germany is transmitted by satellite operators Astra or Eutelsat which operate transponders but do not have direct end customer relationships. Satellite reception equipment (satellite dish and a set-top box if the television set has no integrated DVB-S tuner) and associated cabling are generally offered by electronics retailers and installed by local electricians. This allows subscribers to

receive FTA channels of public and private broadcasters in SD, and in HD for public broadcasters only, free of charge.⁶⁴³

- (846) The DVB-T infrastructure in Germany is operated by Media Broadcast, which was acquired by Freenet in 2016. In Germany, the latest generation of digital terrestrial transmission standard (DVB-T2) has been deployed in conjunction with High Efficiency Video Coding, a new video compression standard. This new transmission technology known as DVB-T2 HD offers improved quality (in HD – standard definition channels are not available) and expanded programming capacity (around 40 channels in metropolitan areas). This allows them to receive the SD and HD versions of the public broadcasters' channels as well as the SD versions of private broadcasters for free. However, depending on the location of the TV customer, the required equipment and the number of available channels varies.
- (847) Moreover, in terms of recent market developments, provided that customers already have a fixed internet access connection, there are a number of OTT providers (such as Zattoo, waipu.tv or TV Spielfilm live) that offer basic TV subscriptions with a comparable number of channels as traditional operators.⁶⁴⁴ Moreover, traditional retail TV providers have recently started offering their services via OTT, such as Deutsche Telekom and Vodafone.⁶⁴⁵
- (848) The Commission has investigated the relative importance of different parameters of competition in the retail market for TV signal transmission to SDU customers in Germany. On the basis of the Parties' competitors responding to the market investigation, the Commission has identified the most important parameters of competition: price, ability to offer fixed bundles and customer service quality. Other commercial aspects of the TV product (for example, channel diversity, product innovations or additional VOD content) or the contract (for example, contract length) are also important.⁶⁴⁶ However, respondents also explain that with regard to basic TV subscriptions, the included content does not significantly vary across operators.

2.5.2.2. Market shares and concentration levels

(i) National market shares

- (849) Based on the information provided by the Notifying Party, Table 20 sets out the market shares of the Parties and their largest competitors in the market for the retail supply of TV signal transmission to SDU customers in terms of households connected. As the Commission left open the market definition with regard to distribution technology, Table 20 shows the merged entity's upper and lower bound market shares depending on the precise market definition.
- (850) As preliminary remark, the market share information provided by the Notifying Party has some important limitations. The Notifying Party was not able to provide the market shares of OTT providers, such as Zattoo and waipu.tv which also offer basic TV subscriptions.⁶⁴⁷ Moreover, the market share information does not include recent

⁶⁴³ See Form CO, Annex 6.C.IV.14.

⁶⁴⁴ See Form CO, paragraph 6.677.

⁶⁴⁵ [INFORMATION ON PRICING STRUCTURE].

⁶⁴⁶ Replies to questionnaire Q11, question 62.

⁶⁴⁷ Table 20 below does not yet include Vodafone's GigaTV OTT product which was only launched in March 2019.

entrants, such as United Internet, which launched its IPTV services in December 2017.⁶⁴⁸

Table 20: Market shares for the retail supply of TV signal transmission to SDUs (subscribers)⁶⁴⁹

Nationwide 2017/2018	Including cable, IPTV, satellite and DVB-T		Only Cable and IPTV	
	M	%	M	%
Vodafone	[...]	[10-20]%	[...]	[20-30]%
of which only IPTV	[...]	[0-5]%	[...]	[0-5]%
of which only cable	[...]	[10-20]%	[...]	[20-30]%
Unitymedia	[...]	[10-20]%	[...]	[20-30]%
Combined	[...]	[20-30]%	[...]	[40-50]%
Satellite	[...]	[40-50]%	-	-
Deutsche Telekom	[...]	[10-20]%	[...]	[20-30]%
Tele Columbus	[...]	[5-10]%	[...]	[10-20]%
Others (cable)	[...]	[5-10]%	[...]	[10-20]%
Total	[...]	100%	[...]	100%

Source: Form CO (Table 6.27); Parties' reply to RFI 33, question 2, Table 2.6.

(851) When including all distribution technologies, Table 20 shows that satellite is the most widely used means of television access for SDU customers in Germany. Satellite accounts for almost half of households connected ([40-50]% compared to a market share of Vodafone, Unitymedia and Deutsche Telekom of each around [10-20]%. Post-Transaction, the merged entity's market share increases to [20-30]%.

(852) When focussing on cable and IPTV, the Parties have a combined market share of [40-50]% post-Transaction, followed by Deutsche Telekom ([20-30]%) and Tele Columbus ([10-20]%) as well as a number of smaller cable operators (jointly [10-20]%).

(ii) Shares in cable footprints

(853) Table 21 sets out the shares of the Parties and their main competitors in the supply of retail TV signal transmission to SDU customers in, respectively, Vodafone's and Unitymedia's cable footprints, in the business year 2017-2018.

⁶⁴⁸ In addition, as explained in section VIII.C.2.4.2.2. above regarding the retail supply of TV signal transmission to MDU customers, the market shares provided by the Notifying Party have several important limitations. Importantly, the Notifying Party overestimated the total TV market size in relation to MDU contracts by including customers that do not have the specific demand requirements of MDU customers and that will most likely have concluded SDU contracts. The total market size in relation to SDU contracts may therefore be underestimated with regard to the customer groups included. However, this would, if anything, lead to an overestimation of the Parties' market share in the retail supply of TV signal transmission to SDU customers.

⁶⁴⁹ The Notifying Party was not able to provide gross adds or revenue shares for the retail TV signal transmission to SDU customers. However, in light of the clear conclusions that can be drawn from the subscriber market shares (that is to say, depending on the market definition, possibly a highly concentrated market with high market shares of the Parties but no overlap between them) more market share information would be of limited additional value.

Table 21: Shares for the retail supply of TV signal transmission to SDUs (subscribers)

2017/2018	Vodafone footprint				Unitymedia footprint			
	Including cable, IPTV, satellite and DVB-T		Only Cable and IPTV		Including cable, IPTV, satellite and DVB-T		Only Cable and IPTV	
	M	%	M	%	M	%	M	%
Vodafone	[...]	[30-40] %	[...]	[50-60] %	[...]	[0-5]%	[...]	[0-5]%
Unitymedia	[...]	[0-5]%	[...]	[0-5]%	[...]	[30-40] %	[...]	[60-70] %
Combined	[...]	[30-40] %	[...]	[50-60] %	[...]	[30-40] %	[...]	[60-70] %
Satellite	[...]	[30-40] %	[...]	-	[...]	[30-40] %	-	-
Tele Columbus	[...]	[10-20] %	[...]	[20-30] %	[...]	[0-5]%	[...]	[5-10]%
Deutsche Telekom	[...]	[5-10]%	[...]	[5-10]%	[...]	[10-20] %	[...]	[20-30] %
Others (cable)	[...]	[5-10]%	[...]	[10-20] %	[...]	[0-5]%	[...]	[5-10]%
Total	[...]	100%	[...]	100%	[...]	100%	[...]	100%

Source: Commission calculation based on the Form CO (Table 6.27).

(854) As shown in Table 21, there is no overlap in the Vodafone footprint as Unitymedia does not compete for SDU customers outside its footprint. Vodafone is the market leader with a market share of at least [30-40]% followed by satellite with a market share of [30-40]%. When focussing on cable and IPTV, Vodafone's market share is [50-60]%. The next largest competitors are Tele Columbus and Deutsche Telekom.

(855) In Unitymedia footprint, there is a small overlap arising from Vodafone's IPTV product. Unitymedia is the market leader with a market share of [30-40]% closely followed by satellite ([30-40]%). When focussing on cable and IPTV, Unitymedia's market share is [60-70]%. The next largest competitors are Deutsche Telekom and Tele Columbus. Vodafone has a marginal market share of [0-5]% or [0-5]% when focussing on cable and IPTV in Unitymedia's footprint.

(iii) Concentration levels

(856) Table 22 sets out the national level of HHI pre-Transaction, post-Transaction and the change in HHI, based on the market shares in the business years 2017-2018, as reported in Table 22.

Table 22: HHI (2017-2018)

	Pre-Transaction	Post-Transaction	Change in HHI
Subscribers (incl. cable, IPTV, satellite and DVB-T)			
Nationwide	[2000-3000]	[3000-4000]	[0-500]
Vodafone footprint	[2000-3000]	[2000-3000]	0
Unitymedia footprint	[3000-4000]	[3000-4000]	[0-500]
Subscribers (only Cable and IPTV)			
Nationwide	[2000-3000]	[3000-4000]	[1000-2000]
Vodafone footprint	[4000-5000]	[4000-5000]	0
Unitymedia footprint	[4000-5000]	[...]	[...]

Source: Commission's computation.

- (857) Pre-Transaction the retail market for the retail TV signal transmission to SDU customers is concentrated, with concentration levels around [2000-3000]. When focussing on cable and IPTV, the concentration level is even above [4000-5000] in the Parties' respective footprints.
- (858) Post-Transaction, nationwide concentration levels will increase slightly to above [3000-4000], with change in HHI above [0-500]. When focussing on cable and IPTV, the change in HHI will be above [1000-2000].
- (859) However, on regional level, there is only minor change in HHI below [0-500] in Unitymedia's footprint.

(iv) Conclusion

- (860) Based on the above, the Commission observes that, while the market for the retail TV signal transmission to SDU customers is concentrated, there is no significant merger-specific change as the Parties directly compete with each other in this market to a very limited extent only.
- (861) If the market is regional in scope, it follows that there is no meaningful horizontal overlap between the Parties.
- (862) Even if the market is national in scope, the Transaction does not lead to an increase in market power as there is no meaningful overlap in the activities of the Parties.

2.5.2.3. Competitive constraint exerted by the Parties

- (863) In this section, the Commission assesses in detailed the competitive constraints exerted by the Parties, which will be removed by the Transaction, as well as their likely evolution absent the Transaction.
- (864) The assessment is undertaken, firstly, in relation to the constraints that each of the Parties has played, and it is likely to play absent the Transaction, in the market for the retail supply of TV signal transmission to SDU customers (sections VIII.C.2.5.2.3.(i). and VIII.C.2.5.2.3.(ii).), and then in relation to the constraint that the Parties have exerted on each other (section VIII.C.2.5.2.3.(iii).).

(i) Vodafone

- (865) As explained in section VIII.C.2.5.2.2., depending on the exact product market definition, Vodafone has a nationwide market share of [10-20]% to [20-30]% almost exclusively resulting from its position within its cable footprint.
- (866) Within its cable footprint, Vodafone has a market share of [40-50]% to [60-70]%.

- (867) Some respondents to the market investigation expect Vodafone to expand its network to Unitymedia's footprint in the future.⁶⁵⁰ While the majority of respondents believes that Vodafone's investment incentive will be triggered by the MDU market, these respondents explain that by expanding its network in the context of MDU contracts, Vodafone would also be able to start serving SDU customers in Unitymedia's footprint.
- (868) As explained in section VIII.C.2.4.2.3.(i), the Commission has assessed whether the Transaction would remove Vodafone as competitor in Unitymedia's footprint with regard to the supply of retail TV signal transmission to MDU customers and concluded that the evidence of file does not support third parties' claims of a loss of potential competition from Vodafone. [DETAILS OF SALES]/[DETAILS OF COMMERCIAL ACTIVITIES]
- (869) [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].⁶⁵¹

Table 23: Homes passed by Vodafone's network (SDU)

		2014/15	2015/16	2016/17	2017/18
Vodafone SDU	Homes passed	2 973 760	2 972 546	2 972 635	2 969 890
	Net increase	2 467	- 1 214	89	- 2 745
	Increase in %	0.08	0.04	0.00	- 0.09

Source: Annex C.V.1 of Response to the Article 6(1)(c) Decision.

- (870) While the majority of respondents to the market investigation acknowledged Vodafone's limited current activities outside its cable footprint, some respondents submitted that Vodafone is also a successful IPTV and OTT TV provider stressing that Vodafone's IPTV and OTT products are available nationwide including in Unitymedia's footprint.⁶⁵²
- (871) With regard to Vodafone's IPTV product, the evidence on the Commission's file suggests that Vodafone's IPTV product has a very limited market position.
- (872) Firstly, Vodafone's IPTV product has a marginal market share of [0-5]% to [0-5]% on national level and [0-5]% to [0-5]% within Unitymedia's footprint. Nationwide, Vodafone had about [...] subscribers in the business year 2017/2018 of which only [...] subscribers were situated in Unitymedia's footprint.
- (873) [INFORMATION CONCERNING SALES]

Table 24: Development of Vodafone's IPTV subscriber base
[INFORMATION CONCERNING SALES]

	2015	2016	2017	2018
Subscribers ('000)	[...]	[...]	[...]	[...]
Change in %	[...]	[...]	[...]	[...]

Source: Form CO, Table 6.33.

- (874) [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].
- (875) [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS].
- (876) With regard to Vodafone's OTT TV product, the evidence on the Commission's file also suggests that Vodafone's OTT TV product has a very limited market position.

⁶⁵⁰ Replies to questionnaire Q8, question 64.

⁶⁵¹ [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY].

⁶⁵² Replies to questionnaire Q8, questions 64, 69-70, and 74, replies to questionnaire Q11, question 63.

- (877) Firstly, the current total number of Vodafone's OTT TV subscribers is only [INFORMATION CONCERNING SALES].^{653,654}
- (878) Secondly, even if, as the Notifying Party submits, OTT TV is expected to grow and there are several providers, including Telefónica, which has recently launched OTT services, Vodafone does not stand out as a particularly successful player in that respect. [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY]. Consequently, there is no indication that Vodafone's OTT TV product plays a special role in the market or that, absent the Transaction, it might be expected to play such a role in the foreseeable future.
- (879) This is also confirmed by respondents to the market investigation. While they point to the existence of Vodafone's nationwide TV offer, they generally acknowledge its limited market position. One respondent explains that Vodafone's OTT TV product is "*the same as other IPTV products*".⁶⁵⁵ Another respondent states that Vodafone's non-cable TV services have a "*limited relevance in the market*".⁶⁵⁶ One respondent points out that "*Vodafone's DSL and OTT products have a very low market share*".⁶⁵⁷
- (880) It is therefore clear that Vodafone is not a significant player in Unitymedia's footprint and neither its legacy IPTV offer nor its new OTT platform poses a competitive constraint to Unitymedia.
- (ii) Unitymedia**
- (881) As explained in section VIII.C.2.5.2.2., depending on the exact product market definition, Vodafone has a nationwide market share of [10-20]% to [20-30]% exclusively resulting from its position within its cable footprint.
- (882) Unitymedia is only active based on and within its cable footprint where it has a market share of [40-50]% to [60-70]%.
- (883) Some respondents to the market investigation expect Unitymedia to expand its network to Vodafone's footprint in the future.⁶⁵⁸ While the majority of respondents believes that Unitymedia's investment incentive will be triggered by the MDU market, these respondents explain that by expanding its network in the context of MDU contracts, Unitymedia would also be able to start serving SDU customers in Vodafone's footprint.
- (884) As explained in section VIII.C.2.4.2.3.(ii), the Commission has assessed whether the Transaction would remove Unitymedia as competitor in Vodafone's footprint with regard to the supply of retail TV signal transmission to MDU customers and concluded that the evidence of file does not support third parties' claims of a loss of potential competition from Unitymedia. [DETAILS OF SALES]/[DETAILS OF COMMERCIAL ACTIVITIES]
- (885) [DETAILS OF CUSTOMERS]/[DETAILS OF COMMERCIAL ACTIVITIES]

⁶⁵³ See Parties' reply to RFI 33, question 4.

⁶⁵⁴ Vodafone has no insights on whether its OTT TV customers live in SDUs or MDUs, [DETAILS OF CUSTOMERS]/[DETAILS OF COMMERCIAL ACTIVITIES] (see Parties' reply to RFI 37, question 2).

⁶⁵⁵ United Internet's reply to questionnaire Q11, question 63 [ID 4041].

⁶⁵⁶ Freenet's reply to questionnaire Q11, question 63 [ID 3998].

⁶⁵⁷ M7's reply to questionnaire Q11, question 63 [ID 3620].

⁶⁵⁸ Replies to questionnaire Q8, questions 63 and 74; replies to questionnaire Q11, question 55.

Table 25: Homes passed by Unitymedia's network (SDU)

		2014/15	2015/16	2016/17	2017/18
Unitymedia SDU	Homes passed	[...]	[...]	[...]	[...]
	Net increase	[...]	[...]	[...]	[...]
	Increase in %	[...]	[...]	[...]	[...]

Source: Parties' reply to RFI 22, question 9.

(iii) Competitive constraint exerted by the Parties on each other

(886) The Commission investigated the scope of competition between the Parties in the market for the supply of retail TV signal transmission to SDU customers.

(a) No actual direct competition

(887) Based on the market share data presented in Table 21, the Commission notes that the Parties supply retail TV signal transmission to SDU customers almost exclusively within the Parties' respective geographic footprints in Germany, which do not overlap. Accordingly, no direct customer switching can take place between the Parties. Consequently, the Parties are not in direct competition with one another and the Transaction does not lead to the elimination of a direct competitive constraint between the Parties.

(888) In Unitymedia's footprint, there is a small overlap arising from Vodafone's IPTV and OTT TV products. However, in light of the limited market position of Vodafone's IPTV and OTT TV products, there is no significant loss of actual direct competition between the Parties.

(889) Firstly, the overlap is extremely small with the Transaction resulting in an increment of about [0-5]% only.

(890) Secondly, the Parties are not close competitors. In Unitymedia's footprint, Vodafone and Unitymedia compete based on different transmission technologies. Moreover, while Unitymedia is the market leader, Vodafone is a marginal player. However, if Vodafone's IPTV and OTT TV products were a close competitor of Unitymedia's cable TV product, there would be more switching between the two and Vodafone would have a more significant share. According to respondents to the market investigation, Deutsche Telekom, which also offers an IPTV and OTT product line, is Vodafone's closest competitor in this respect.⁶⁵⁹

(891) Thirdly, there is nothing special or unique about Vodafone's IPTV and OTT TV products, as confirmed by the majority of respondents to the market investigation.⁶⁶⁰ In fact, Vodafone's IPTV and OTT TV products could be easily replicated by other access-based competitors or providers of OTT TV services.

(b) No actual indirect competition

(892) As regards the competitive interaction between the Parties' cable businesses, the Commission notes that the Parties do not directly compete against each other to capture each other's customers.

(893) In this respect, with regard to the supply of fixed internet access services, in the Statement of Objections the Commission identified a number of internal documents suggesting that the Parties benchmark themselves against each other nationwide. In particular, the Commission found documents suggesting that both Parties track the market performance [REFERENCE TO CONTENTS OF INTERNAL

⁶⁵⁹ Replies to questionnaire Q11, question 65.2 and 65.3.

⁶⁶⁰ Replies to questionnaire Q11, question 64.

DOCUMENTS] (see section VIII.C.2.2.3.(iii)). To some extent, these documents also related to the market for the retail supply of TV signal transmission to SDU customers or bundles of containing both fixed internet access and TV services.⁶⁶¹

- (894) In the Response to the Statement of Objections, the Parties provided detailed clarifications about the documents at stake. They provided evidence that those documents only show how the Parties benchmark each other's business as they represent each other's best comparator, alongside with other international examples contained in similar internal documents. Moreover, the Parties provided evidence that the depicted email correspondence only involved public affairs, communication and investor relations teams within each of the Parties, which were in charge of press and marketing efforts but did not have any influence on the commercial or investment strategy of either of the Parties.
- (895) On the basis of the explanations provided by the Parties, the Commission considers that insufficient evidence exist to suggest that the evidence of direct benchmarking between the Parties exceeded "*simple commercial benchmarking aimed at monitoring and possibly imitating best practices in the industry*".⁶⁶²
- (896) Furthermore, an analysis of retail prices did not indicate that price element changes in the German retail market for the supply of retail TV signal transmission to SDU customers were consistently initiated by Vodafone or Unitymedia, sufficiently close in time to each other and in the same sequence, as would have been required for the two firms to indirectly constrain each other via a sequential pricing mechanism that transmits price changes of one firm to the territory of the other via national price responses of other players, such as Deutsche Telekom.⁶⁶³

2.5.2.4. Competitive constraint from competitors

- (897) Moreover, post-Transaction, a number of competitors would continue to operate on this market, notably in Unitymedia's footprint, where the limited overlap between the Parties arises.
- (898) Deutsche Telekom has a market share of [10-20]-[10-20]% nationwide and in Unitymedia's footprint. When focussing on cable and IPTV, Deutsche Telekom has a market share of [20-30] to [20-30]%. Tele Columbus, the next largest competitor, has a market share of around [0-5]-[5-10]% nationwide and in Unitymedia's footprint. When focussing on cable and IPTV, Tele Columbus has a market share of [5-10]-[10-20]%. While Deutsche Telekom is stronger in Unitymedia's footprint, Tele Columbus is stronger in Vodafone's footprint where it has its own network infrastructure. Deutsche Telekom has been marketing its IPTV product (and more recently also OTT product), branded MagentaTV (formerly EntertainTV), since 2006. Historically, Tele Columbus served SDU customers only occasionally as add-

⁶⁶¹ No finding in this respect was contained in the Statement of Objections for the retail supply of TV signal transmission to SDU customers, as the evidence on benchmarking with regard to the retail supply of fixed internet access services was only relevant as to corroborate other stronger pieces of evidence regarding the loss of direct competition in that market in Unitymedia's footprint.

⁶⁶² Commission decision of 30 May 2018 in Case M.7000 – *Liberty Global/Ziggo*, paragraphs 667 and 694 to 695.

⁶⁶³ No finding in this respect was contained in the Statement of Objections.

on to its MDU-focused infrastructure roll out and its customer base continues to be focused on MDU customers.^{664,665}

- (899) Other competitors include city carriers (for example, NetCologne, M-Net, EWE Tel) that are active in their respective network footprints and have a joint market share of almost [5-10]% (and [10-20]% when focussing on cable and IPTV). These competitors rely to some extent on the services of M7 that offers wholesale television services in Germany. The M7 platform offers TV products, including FTA, pay TV and international channels, to cable and IPTV providers. M7 Deutschland's customers receive a white label solution which they sell on to their end customers, remaining in full control of their customer relationships. Cable and IPTV providers can either configure their own digital TV packages, including channels in HD quality, or choose pre-configured TV packages.⁶⁶⁶ BrightBlue, in cooperation with Deutsche Glasfaser, has also recently launched a wholesale white label IPTV product.⁶⁶⁷
- (900) The market share information does not include United Internet and Telefónica that have also recently started to offer basic TV subscriptions as part of their fixed product portfolio. While United Internet offers an IPTV product since December 2017⁶⁶⁸, Telefónica launched an OTT TV product in cooperation with waipu.tv in May 2019.⁶⁶⁹ More generally, OTT TV providers are not reflected in the market share information (for example, waipu.tv, Zattoo, TV Spielfilm live).
- (901) Finally, satellite services are a large constraint in the German market for the retail supply of TV signal transmission to SDU customers. [40-50]% households in Germany use satellite to access television and about [40-50]% of households in Unitymedia's footprint. Satellite services offer the channel line up that is typically included in basic TV subscriptions of cable and IPTV providers. Like cable and IPTV customers, households using satellite services can also purchase additional content through other means such as Sky or OTT services.
- (902) Respondents to the market investigation raised concerns that the Transaction would have a negative impact on competitors in the SDU market. Firstly, these competitors fear that the merged entity would benefit from its size and ability to offer bundled products. These effects are assessed in section VIII.C.5 on the potential conglomerate effects of the Transaction. The Commission considers that there is no likelihood of conglomerate effects resulting from the Transaction. Secondly, competitors fear that this increased market power could lead to the merged entity obtaining better conditions, such as exclusive content and/or higher feed-in fees, which would in turn translate into a foreclosure of retail competitors. These effects

⁶⁶⁴ In this regard, the market share estimates provided by the Notifying Party are likely to slightly overestimate Tele Columbus' position in the SDU market, as the Notifying Party allocated almost [...] of Tele Columbus' volumes to the SDU market.

⁶⁶⁵ Replies to questionnaire Q11, question 16.

⁶⁶⁶ According to its website, M7 has contracts with with large, medium and small network operators ranging from private commercial operators like Deutsche Telekom, Wilhelm.tel, Tele Columbus, Net Cologne and Deutsche Glasfaser to municipalities in many German Federal States as well as small Level 4 operators (<https://www.meinfernsehen.de/partner/> [ID 6782]).

⁶⁶⁷ See <https://presse.deutsche-glasfaser.de/pressreleases/tv-der-zukunft-ist-brightblue-neuer-iptv-qualitaetsstandard-auf-dem-markt-white-label-produkt-fuer-alle-breitbandnetze-2537466> [ID 6778].

⁶⁶⁸ See <https://www.united-internet.de/en/brands/brandnews-detail/news/smarter-fernsehen-11-startet-iptv-aus-der-cloud.html> [ID 6789]; United Internet's reply to questionnaire Q11, question 16 [ID 4041].

⁶⁶⁹ See <https://www.broadbandtvnews.com/2019/04/09/o2-germany-launches-tv-service-with-waipu-tv/> [ID 6773].

are assessed in section VIII.C.2.11. on the potential effects of the Transaction in the wholesale market for TV signal transmission. The Commission found that the Transaction is unlikely to translate into a foreclosure of retail competitors.

- (903) No evidence in the Commission's file suggests that, absent the Transaction, the competitive constraint exerted by the Parties' competitors is likely to deteriorate. To the contrary, the evidence on file suggests that the established competitors face increasing competitive pressure from telecommunications operators entering the TV market (for example, United Internet, Telefónica) as well as a several OTT TV providers.

2.5.2.5. Likely overall effect of the Transaction

- (904) While the market for the retail TV signal transmission to SDU customers is concentrated, there is no merger-specific change as the Parties directly compete with each other in this market to a very limited extent only. In particular, based on the evidence on file, the Commission concludes that there is a very limited loss of direct competition between the Parties and no loss of indirect or potential competition as a result of the Transaction.
- (905) For the reasons explained in section VIII.C.2.5.2.4., the Commission considers that the Transaction will not lead to a weakening of the competitive constraint exerted by the Parties' competitors.
- (906) Therefore the Commission considers that the Transaction will not lead to anticompetitive horizontal non-coordinated effects in the retail market for the supply of TV signal transmission to SDU customers in Germany.

2.5.3. Conclusion

- (907) In light of the foregoing, the Commission concludes that the Transaction is not likely to significantly impede effective competition in the market for the retail supply of TV signal transmission to SDU customers in Germany as a result of horizontal non-coordinated effects.

2.6. Horizontal non-coordinated effects in the retail supply of TV services in Germany

2.6.1. The Notifying Party's view

- (908) The Notifying Party submits that the Transaction does not give rise to any horizontal concerns in relation to the retail supply of TV services in Germany.
- (909) Firstly, the Notifying Party points out that actual direct competition between the Parties arises only in the Unitymedia footprint where Vodafone is active in the supply of TV services on the basis of its [DETAILS OF COMMERCIAL ACTIVITIES] IPTV product. This overlap is extremely small, with the Transaction resulting in an increment of only [0-5]%.
(910) [DETAILS OF COMMERCIAL OR INVESTMENT STRATEGY]
- (911) Thirdly, the Parties' are not close competitors in the supply of retail TV services.
- (912) Fourthly, post-Transaction Vodafone would continue to face a number of strong retail TV competitors both nationally and in the Unitymedia footprint, competing based on a range of transmission technologies, including services provided by Sky, Deutsche Telekom, OTT providers (such as Netflix, Amazon, Zattoo, waipu.tv) as well as satellite services.
- (913) With regard to indirect competition, the Notifying Party explains that there is no significant indirect competition between the Parties that would be lost as a result of

the Transaction. In its Response to the Article 6(1)(c) Decision, the Notifying Party sets out in detail why there is no mechanism by which such indirect competition would materialise with regard to retail TV services. Firstly, there is no evidence of sequential pricing which would lead to the transmission of competitive conditions between non-overlapping cable footprints. Secondly, there is no evidence that the Parties benchmark their products in such a way as to give rise to any significant competitive pressure.

2.6.2. *The Commission's assessment*

2.6.2.1. The German market for retail TV services

- (914) The available infrastructures and basic TV subscriptions available in Germany are set out in sections VIII.C.2.4.2.1. and VIII.C.2.5.2.1. regarding the provision of retail TV signal transmission to MDU and SDU customers.
- (915) Historically, the German retail TV services market is focussed on basic rather than premium TV subscriptions.⁶⁷⁰ In particular, this is because the available FTA TV services in Germany are more extensive than in other countries. While public broadcasters' FTA channels are financed through mandatory contributions from all German households with TV access, private broadcasters offer advertisement-financed FTA channels.⁶⁷¹
- (916) With regard to premium TV services, the following additional services are available in Germany. With regard to satellite, a subscription is required to access private broadcasters' channels in HD as well as additional channels. Satellite-based TV platforms are operated by, for example, HD+ (an affiliate of Astra), Freenet and M7/Diveo. With regard to terrestrial, a subscription is required to access private broadcasters' channels in HD as well as additional channels. Such subscription is available via Freenet.⁶⁷² Cable and IPTV providers offer additional packages that offer more than a basic TV channel line-up, including German and international pay TV channels. In addition, premium content is distributed by Sky, which can be accessed through satellite, cable, IPTV or OTT, and by various OTT players, such as Netflix. In general, for cable, IPTV providers and OTT TV providers, all premium TV subscribers are basic TV subscribers because they must purchase a basic TV subscription in order to access premium content.⁶⁷³

2.6.2.2. Market shares and concentration levels

(i) **National market shares**

- (917) Based on the information provided by the Notifying Party, Table 26 sets out the market shares of the Parties and their largest competitors in the national market for the retail supply of TV services in terms of households connected. As the Commission left open the market definition with regard to distribution technology,

⁶⁷⁰ Basic TV services (essentially offering all German FTA channels) can be accessed for free via satellite or terrestrial or via a paid basic subscription with cable, IPTV or OTT providers.

⁶⁷¹ Replies to questionnaire Q11, question 21.

⁶⁷² The additional content beyond basic channel line-up that is available via terrestrial and satellite services is relatively limited (besides Sky's services which are available via satellite).

⁶⁷³ Level 3 cable operators may sell their premium TV products to tenants in MDUs which are supplied with basic cable TV services by another Level 4 operator to whom the Level 3 operator supplies wholesale intermediary TV signal. In such cases, although there is a direct relationship between the Level 3 operator and the tenant only for premium TV and not for basic TV services, the Level 3 operator is supplying its TV signal to the Level 4 operator so the basic TV services received by the tenants are essentially those of the Level 3 operator See Parties' reply to RFI 40, question 3.

Table 26 shows the merged entity's upper and lower bound market shares depending on the precise market definition.⁶⁷⁴

Table 26: Market shares for the retail supply of basic TV services (subscribers)

Nationwide 2017/2018	Including cable, IPTV, satellite and DVB-T		Only Cable and IPTV	
	M	%	M	%
Vodafone	[...]	[10-20]%	[...]	[30-40]%
of which only IPTV	[...]	[0-5]%	[...]	[0-5]%
of which only cable	[...]	[10-20]%	[...]	[30-40]%
Unitymedia	[...]	[10-20]%	[...]	[20-30]%
Combined	[...]	[30-40]%	[...]	[60-70]%
Satellite	[...]	[40-50]%	-	-
Terrestrial	[...]	[5-10]%	-	-
Deutsche Telekom	[...]	[5-10]%	[...]	[10-20]%
Tele Columbus	[...]	[5-10]%	[...]	[10-20]%
Others	[...]	[0-5]%	[...]	[5-10]%
Total	[...]	100%	[...]	100%

Source: Commission calculation based on the Form CO (Table 6.22), Parties' reply to RFI 33, question 2 (Table 2.2).

- (918) Those market shares are provided for completeness only as the Parties' respective activities with respect to MDU and SDU customers were already discussed in sections VIII.C.2.4.2.2. and VIII.C.2.5.2.2.. The following discussion focusses on a hypothetical overall market for retail TV services encompassing both MDU and SDU customers.⁶⁷⁵
- (919) Based on the information provided by the Notifying Party, Table 27 sets out the market shares of the Parties and their largest competitors in the national market for the retail supply of premium TV services in terms of households connected and revenues.
- (920) As preliminary remark regarding the market share methodology for the premium TV segment, the Notifying Party was not able to estimate premium TV offers of some competitors, including city carriers. Although many city carriers are active in the premium segment, they do not tend to report detailed subscriber and revenue information. As such, it is possible that the shares in Table 27 may be over-estimated for the players that are included. [INFORMATION ON PRICING STRUCTURE]⁶⁷⁶

Table 27: Market shares for the retail supply of premium TV services (2017-2018)

Nationwide 2017/2018	Including cable, IPTV, satellite, DVB-T and OTT		Only Cable and IPTV	
	M	%	M	%
Subscribers				
Vodafone	[...]	[5-10]%	[...]	[20-30]%
of which only IPTV	[...]	[0-5]%	[...]	[0-5]%

⁶⁷⁴ [INFORMATION CONCERNING SALES].

⁶⁷⁵ Based on a market definition in line with non-Germany specific Commission precedents with regard to retail TV markets.

⁶⁷⁶ [DETAILS OF MARKET SHARE CALCULATIONS].

Nationwide 2017/2018	Including cable, IPTV, satellite, DVB-T and OTT		Only Cable and IPTV	
of which only cable	[...]	[5-10]%	[...]	[20-30]%
Unitymedia	[...]	[5-10]%	[...]	[10-20]%
Combined	[...]	[10-20]%	[...]	[40-50]%
Deutsche Telekom	[...]	[10-20]%	[...]	[30-40]%
Sky (incl. Sky Go & Ticket)	[...]	[20-30]%	[...]	[10-20]%
Tele Columbus	[...]	[0-5]%	[...]	[5-10]%
OTT	[...]	[30-40]%	-	-
o/w Amazon	[...]	[10-20]%	-	-
o/w Netflix	[...]	[10-20]%	-	-
o/w Maxdome	[...]	[0-5]%	-	-
o/w other OTT	[...]	[0-5]%	-	-
Others	[...]	[10-20]%	-	-
o/w Astra/HD+	[...]	[10-20]%	-	-
o/w Freenet	[...]	[0-5]%	-	-
Total	[...]	[90-100]%	[...]	[90-100]%
Revenues				
Vodafone	[...]	[5-10]%	[...]	[20-30]%
of which only IPTV	[...]	[0-5]%	[...]	[0-5]%
of which only cable	[...]	[5-10]%	[...]	[10-20]%
Unitymedia	[...]	[5-10]%	[...]	[20-30]%
Combined	[...]	[10-20]%	[...]	[40-50]%
Deutsche Telekom	[...]	[5-10]%	[...]	[20-30]%
Sky	[...]	[50-60]%	[...]	[30-40]%
Tele Columbus	[...]	[0-5]%	[...]	[0-5]%
OTT	[...]	[10-20]%	-	-
Others	[...]	[5-10]%	-	-
o/w Astra/HD+	[...]	[0-5]%	-	-
o/w Freenet	[...]	[0-5]%	-	-
Total	[...]	100%	[...]	100%

Source: Commission calculation based on Parties' reply to RFI 33, question 2 (Tables 2.9, 2.10, 2.16 and 2.17) and Parties' reply to RFI 36, question 2.

- (921) In the premium TV segment, the Parties' combined market share is below [20-30]% when including all transmission technologies ([10-20]% in terms of subscribers and [10-20]% in terms of revenues). Sky is the single largest competitor with a market share of [20-30]% and [50-60]% in terms of subscribers and revenues, respectively. Taken together, OTT providers represent [30-40]% (subscribers) and [10-20]% (revenues) of the market. Other competitors include Deutsche Telekom, Tele Columbus and providers of premium satellite and terrestrial services.
- (922) When focussing on cable and IPTV, the merged entity is the largest competitor (around [40-50]%) post-Transaction followed by Deutsche Telekom ([30-40]%) in terms of subscribers and followed by Sky ([30-40]%) in terms revenues. Tele Columbus' market share is [5-10]% in terms of subscribers and [0-5]% in terms of

revenues. Sky's market position is smaller when focussing on cable and IPTV because Sky distributes parts of its subscriptions via satellite and OTT.⁶⁷⁷

(ii) Shares in cable footprints

(923) Table 28 sets out the shares of the Parties and their main competitors in the supply of retail TV services in, respectively, Vodafone's and Unitymedia's cable footprints, in the business year 2017-2018.

Table 28: Shares for the retail supply of Basic TV services (subscribers)

2017/2018	Vodafone footprint				Unitymedia footprint			
	Including cable, IPTV, satellite and DVB-T		Only Cable and IPTV		Including cable, IPTV, satellite and DVB-T		Only Cable and IPTV	
	M	%	M	%	M	%	M	%
Vodafone	[...]	[40-50] %	[...]	[60-70] %	[...]	[0-5]%	[...]	[0-5]%
of which only IPTV	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%
of which only cable	[...]	[40-50] %	[...]	[60-70] %	[...]	[0-5]%	[...]	[0-5]%
Unitymedia	[...]	[0-5]%	[...]	[0-5]%	[...]	[40-50] %	[...]	[70-80] %
Combined	[...]	[40-50] %	[...]	[60-70] %	[...]	[40-50] %	[...]	[70-80] %
Satellite	[...]	[20-30] %	-	-	[...]	[30-40] %	-	-
Terrestrial	[...]	[0-5]%	-	-	[...]	[5-10]%	-	-
Tele Columbus	[...]	[10-20] %	[...]	[20-30] %	[...]	[5-10]%	[...]	[5-10]%
Deutsche Telekom	[...]	[5-10]%	[...]	[5-10]%	[...]	[5-10]%	[...]	[10-20] %
Others (cable)	[...]	[0-5]%	[...]	[0-5]%	[...]	[0-5]%	[...]	[5-10]%
Total	[...]	100%	[...]	100%	[...]	100%	[...]	100%

Source: Commission calculation based on the Form CO (Table 6.26); Parties' reply to RFI 33, question 2 (Table 2.3).

(924) With regard to premium TV services, there is no data available on which to calculate a regional breakdown of the market shares. However, with respect to the Parties' position, the situation in the premium TV segment mirrors the situation with respect to basic TV subscription in the sense that the Parties' activities based on their respective cable networks do not overlap and Vodafone's presence based on its IPTV product is marginal. In total, Vodafone has about [...] premium IPTV customers, [...] of which are situated in Unitymedia's footprint.^{678,679}

⁶⁷⁷ The split of Sky's subscribers/revenues by distribution technology is not readily available to the Parties and therefore these figures are based on Vodafone's best estimates.

⁶⁷⁸ See Parties' reply to RFI 36, question 2.

⁶⁷⁹ [INFORMATION CONCERNING SALES]

(iii) Concentration levels

- (925) Table 29 sets out the national level of HHI pre-Transaction, post-Transaction and the change in HHI, based on the market shares in the supply of retail TV services in the business years 2017-2018, as reported in Table 26 and Table 28.

Table 29: HHI (2017-2018)

	Pre-Transaction	Post-Transaction	Change in HHI
Subscribers (incl. cable, IPTV, satellite and DVB-T)			
Nationwide	[2000-3000]	[3000-4000]	[0-500]
Vodafone footprint	[3000-4000]	[3000-4000]	0
Unitymedia footprint	[3000-4000]	[3000-4000]	[0-500]
Subscribers (only Cable and IPTV)			
Nationwide	[2000-3000]	[4000-5000]	[1000-2000]
Vodafone footprint	[5000-6000]	[5000-6000]	0
Unitymedia footprint	[5000-6000]	[5000-6000]	[0-500]

Source: Commission's computation.

- (926) Pre-Transaction the retail market for retail TV services is concentrated, with concentration levels above [3000-4000]. When focussing on cable and IPTV, the concentration level is even above [5000-6000] in the Parties' respective footprints. Post-Transaction, nationwide concentration levels will increase slightly by about [0-500] to [1000-2000] depending on the product market definition.
- (927) However, on regional level, there is only a minor change in HHI of below [0-500] in Unitymedia's footprint.
- (928) Table 30 sets out the national level of HHI pre-Transaction, post-Transaction and the change in HHI, based on the market shares in the supply of retail premium TV services in the business years 2017-2018, as reported in Table 27.

Table 30: HHI (2017-2018)

	Pre-Transaction	Post-Transaction	Change in HHI
Subscribers (incl. cable, IPTV, satellite and DVB-T)			
Nationwide	[500-1000]	[1000-2000]	[0-500]
Vodafone footprint	-	-	-
Unitymedia footprint	-	-	-
Subscribers (only Cable and IPTV)			
Nationwide	[2000-3000]	[3000-4000]	[500-1000]
Vodafone footprint	-	-	-
Unitymedia footprint	-	-	-

Source: Commission's computation.

- (929) When including all transmission technologies, the change in HHI is below [0-500]. When focussing on cable and IPTV only, pre-Transaction the retail market for retail premium TV services is concentrated with concentration levels above [2000-3000]. Post-Transaction, concentration levels will increase to almost [3000-4000] with change in HHI above [0-500].
- (930) While regional footprint shares are not available, it is clear from Vodafone's very limited number of subscribers in Unitymedia's footprint that there is no significant overlap.

(iv) Conclusion

- (931) Based on the above, the Commission observes that, while the national market for retail TV services is concentrated, there is no significant merger-specific change as the Parties directly compete with each other in this market to a very limited extent only.

- (932) The Transaction does not lead to an increase in market power as there is no meaningful overlap in the activities of the Parties.

2.6.2.3. Assessment

(i) Basic retail TV services

- (933) With regard to basic retail TV services, the Commission refers to sections VIII.C.2.4. and VIII.C.2.5. where the supply of retail TV signal transmission is discussed in detail taking into account the specific demand patterns of MDU and SDU customers.
- (934) The Commission considers that the Transaction would equally not raise concerns on a hypothetical overall market for retail TV services encompassing both MDU and SDU customers.⁶⁸⁰
- (935) Based on the market share data presented in Table 28, the Commission notes that the Parties supply retail TV services almost exclusively within the Parties' respective geographic footprints in Germany, which do not overlap. Accordingly, no direct customer switching can take place between the Parties. Consequently, the Parties are not in direct competition with one another and the Transaction does not lead to the elimination of a direct competitive constraint between the Parties.
- (936) In Unitymedia's footprint, there is a small overlap arising from Vodafone's IPTV and OTT TV products. However, in light of the limited market position of Vodafone's IPTV and OTT TV products, there is no significant loss of actual direct competition between the Parties (see section VIII.C.2.5.2.3.).
- (937) In an overall market for retail TV services, in addition to the arguments set out in section VIII.C.2.5.2.3., the Parties would also not be particularly close competitors for the following reason: While more than [...] of Unitymedia's customers are MDU customers, Vodafone does not serve this customer group [...] in Unitymedia's footprint. Therefore, even on such a hypothetical market, the Commission would need to make its competitive assessment on the two segments, namely retail TV services supplied to MDU and SDU customers.
- (938) The Commission has also investigated and dismissed concerns of a loss of potential and indirect competition between the Parties or a weakening of competitors both with respect to retail TV signal transmission to MDU and SDU customers. For all the reasons outlined in sections VIII.C.2.4.2.3. and VIII.C.2.5.2.3., the Transaction does not raise competition concerns on each of the two market segments in this respect. Therefore, this is also true on the hypothetical overall market combining the two segments.

(ii) Premium retail TV services

- (939) With regard to premium retail TV services, the Commission considers that the Transaction would equally not raise concerns for the following reasons.
- (940) It holds that the potential loss of direct competition is restricted to Unitymedia's footprint where Vodafone is active based on its IPTV and OTT TV products. However, there is no significant loss of actual direct competition between the Parties in this respect.
- (941) Firstly, Vodafone has only [...] premium retail IPTV subscribers⁶⁸¹ in Unitymedia's footprint while Vodafone's number of OTT TV subscribers, which could also partly

⁶⁸⁰ Based on a market definition in line with non-Germany specific Commission precedents with regard to retail TV markets.

be considered to be premium customers, is currently marginal.⁶⁸² While exact market shares on footprint level are not available, based on the Parties' best estimates, this corresponds to a market share of about [0-5]% in terms of subscribers and [0-5]% in terms of revenues.⁶⁸³ Even when focussing on cable and IPTV only, Vodafone's market share in Unitymedia's footprint would be about [0-5]% in terms of subscribers and [0-5]% in terms of revenues.

- (942) Secondly, the Parties are not close competitors. In Unitymedia's footprint, Vodafone and Unitymedia compete based on different transmission technologies. Moreover, while Unitymedia has almost [...] premium TV subscribers, Vodafone is a marginal player. However, if Vodafone's IPTV and OTT TV premium products were a close competitor of Unitymedia's cable TV product, there would be more switching between the two and Vodafone would have a more significant share.
- (943) Thirdly, there is nothing special or unique about Vodafone's IPTV and OTT TV premium products. In fact, Vodafone's IPTV and OTT TV premium products could be easily replicated by other access-based competitors or providers of OTT TV services.
- (944) Fourthly, post-Transaction, a number of other competitors would continue to operate on this market, notably also in Unitymedia's footprint, where the limited overlap between the Parties arises.
- (945) Sky Deutschland is the largest pay TV provider in Germany, offering premium pay TV services direct to consumers. Sky has a subscriber market share of [20-30]% and revenue market share of [50-60]% ([10-20]% and [30-40]%, respectively, when focussing on cable and IPTV). Sky offers a range of sport, film and entertainment channels and content (and packages thereof) that consumers can purchase once they have a TV access platform such as satellite, cable or IPTV or through Sky's own OTT offering.⁶⁸⁴ Notably, Sky holds the rights for the German Bundesliga. Sky is in a different position from typical broadcasters and does not generally sell its programme content to third party TV platforms for distribution, but rather offers its own pay TV services direct to consumers without owning the required infrastructure, that is to say a "self-retail model" rather than wholesale supply.⁶⁸⁵ In the vast majority of cases, Sky holds the customer relationship with the end customer, even where Sky is provided through a third party platform such as Vodafone's or Unitymedia's cable network.⁶⁸⁶
- (946) Deutsche Telekom is also an important competitor in the premium TV segment. In terms of the market shares provided by the Parties, it is larger than each of the Parties. Even if the provided shares slightly overestimate Deutsche Telekom's position, Deutsche Telekom remains an important competitor in this segment based on its "Magenta TV" premium packages. As stated in recital (898), Deutsche Telekom has also recently started offering its TV packages via OTT, including for customers without fixed internet access from Deutsche Telekom. In addition, Deutsche Telekom offers its own premium TV sports channels "Magenta Sport",

⁶⁸¹ [INFORMATION CONCERNING SALES]

⁶⁸² The difference in the number of IPTV and OTT TV customers stems from the fact that Vodafone launched OTT TV services only in March 2019.

⁶⁸³ See Parties' reply to RFI 33, question 2.

⁶⁸⁴ See Form CO, paragraph 6.360, 6.414.

⁶⁸⁵ Commission decision of 7 April 2017 in case M.8354 – *Fox / Sky*, paragraph 172.

⁶⁸⁶ [INFORMATION ON SALES CHANNELS]. (See Form CO, paragraph 6.417)

showing exclusive content such as the national league and international basketball and ice hockey matches, third league and female national league football matches, FC Bayern documentaries and boxing and other martial arts live events.⁶⁸⁷ Moreover, Deutsche Telekom offers non-linear content via its streaming platform Videoland.⁶⁸⁸

- (947) Tele Columbus and city carriers also offer premium TV subscriptions, though city carriers are not included in the provided market share information.⁶⁸⁹ Neither does the market share information reflect recent entrants' premium TV offers, such as those of United Internet and Telefónica.
- (948) Traditional retail TV providers increasingly offer linear (basic and premium) TV services via OTT. Vodafone (Giga TV OTT), Deutsche Telekom (Magenta TV) and Telefónica (O2 TV) offer each a standalone OTT TV offer. Other players offer an OTT TV product as a complementary add-on for their existing TV subscribers only, including Unitymedia (Hoirzon Go), United Internet (1&1 TV app), Tele Columbus (Advance TV app), NetCologne (NetGo app) and M-Net (M-Net TV Plus App).⁶⁹⁰ These offerings also include the option to access the full or at least parts of the retailers' pay TV package.
- (949) As regards satellite and terrestrial services, private channels in HD are available via Astra or Freenet subscriptions. With Astra's HD+ Premium platform viewers gain access to extra Eurosport products in addition to the basic channel package. In addition, M7's Diveo, which was launched in February 2018, targets German satellite households, combining the satellite TV infrastructure with the strengths of an internet-based offering via a hybrid TV platform. The new hybrid satellite TV platform offers access to up to 70 HD TV channels, catch up libraries, and a VOD library.⁶⁹¹ Finally, Sky's premium pay TV services can be accessed via satellite.
- (950) In addition to linear TV products, retail TV providers compete with providers of non-linear OTT services. These play a large role in the German market for the retail supply of premium TV services as part of the relevant market or important constraint. VOD providers such as Amazon Prime⁶⁹² and Netflix already have large subscriber bases in Germany, with each reportedly having (at least) over 3 million subscribers in Germany⁶⁹³ and Netflix expected to grow by more than 20% this year. The latest Digitisation report further suggests that around one-fifth of the German population aged 14 and over regularly use Netflix (19.2%) or Amazon Prime (19.5%) although the reliability of this data is complicated by shared subscriptions and free trial products.⁶⁹⁴ Other OTT platforms offering film and series content are iTunes and Google Play.

⁶⁸⁷ See <https://www.telekom.de/entertainment/sport> [ID 6786].

⁶⁸⁸ See <https://www.videoload.de/> [ID 6791].

⁶⁸⁹ See Form CO, paragraph 6.672 ff.

⁶⁹⁰ See Parties' reply to RFI 36, question 5.

⁶⁹¹ See Form CO, Annex 6.C.IV.10; M7's reply to questionnaire Q11, question 16 [ID 3620].

⁶⁹² Amazon Channels is now available in Germany. The offer comprises linear Pay TV channels which can individually be added in exchange for a monthly subscription price (<https://www.broadbandtvnews.com/2019/01/30/amazon-channels-germany-full-list-of-available-services-2/> [ID 6771]).

⁶⁹³ Some reports put the number of subscribers even higher (see, for example, <http://www.sueddeutsche.de/wirtschaft/streaming-dienst-so-erfolgreich-ist-netflix-in-deutschland-wirklich-1.4005932> [ID 6785] which refers to estimates that Netflix already has over 4 million subscribers in Germany), although the market shares are based on more conservative estimates.

⁶⁹⁴ Die Medienanstalten, Digitisation (See Form CO, Annex C.IV.9)

- (951) Specialist OTT services are also increasingly prevalent in Germany: for example, DAZN and Eurosport Player (Discovery) which stream live sports events via an OTT platform rather than via traditional transmission technologies.⁶⁹⁵
- (952) Several broadcasters have also started offering their own OTT services. Maxdome is private broadcaster ProSiebenSat1's own VOD offering, which offers the content of ProSiebenSat1's channels as well as additional film content. Discovery and ProSiebenSat1 founded a joint venture in October 2017 to offer a joint entertainment streaming service (which used to be branded as 7TV and was recently rebranded to Joyn), also inviting other broadcasters to join their platform.⁶⁹⁶ TV Now is private broadcaster RTL's own VOD offering, including its own channels and additional film content. New OTT applications have also been announced by content holders such as Disney.⁶⁹⁷
- (953) Respondents to the market investigation raised concerns that the Transaction would have a negative impact on competitors with respect to the provision of premium TV content. Firstly, these competitors fear that the merged entity would benefit from its size and ability to offer bundled products. These effects are assessed in section VIII.C.5 on the potential conglomerate effects of the Transaction. The Commission considers that there is no likelihood of conglomerate effects resulting from the Transaction. Secondly, competitors fear that this increased market power could lead to the merged entity obtaining better conditions, such as exclusive premium content, which would in turn translate into a foreclosure of retail competitors. These effects are assessed in section VIII.C.2.11. on the potential effects of the Transaction in the wholesale market for TV signal transmission. The Commission found that the Transaction is unlikely to translate into a foreclosure of retail competitors.
- (954) No evidence in the Commission's file suggests that, absent the Transaction, the competitive constraint exerted by the Parties' competitors is likely to deteriorate. To the contrary, the evidence on file suggests that the established competitors face increasing competitive pressure from telecommunications operators entering the TV market (for example, United Internet, Telefónica) as well as an increasing number of non-linear OTT services (for example, Netflix, Amazon Prime).
- (955) Besides the potential direct loss of competition or a weakening of competitors, the Commission has also investigated and dismissed concerns of a loss of potential and indirect competition between the Parties. For all the reasons outlined in in sections VIII.C.2.4.2.3. and VIII.C.2.5.2.3., the Transaction does not raise competition concerns in this respect. [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] With regard to indirect competition, the presented analysis in section VIII.C.2.5.2.3.(iii).(b). also holds for premium TV services.⁶⁹⁸ In particular, based on the explanations provided by the Parties, the Commission considers that

⁶⁹⁵ See Form CO, paragraph 6.453, 8.62.

⁶⁹⁶ See <https://www.digitaltveurope.com/2019/03/07/prosiebensat-1-to-turn-full-focus-on-discovery-jv-streaming-launch-after-tough-year/> [ID 6779], <https://www.broadbandtvnews.com/2018/11/14/prosiebensat-1-and-discovery-win-zdf-for-german-hulu/> [ID 6774]. On 12 June 2016, the joint venture between ProSiebenSat.1 and Discovery announced the launch of a new OTT streaming platform. This OTT platform, which will have more than 50 channels, is targeting 10 million users in 2 years. See <https://www.prosiebensat1.com/en/press/welcome-to-joyn-streaming-platform-with-the-largest-free-tv-and-video-on-demand-offering-for-germany-to-start-in-june-2019> [ID 6975].

⁶⁹⁷ See <https://www.moviepilot.de/news/disneys-streaming-dienst-kosten-angebot-alles-was-ihr-wissen-musst-1113531> [ID 6783].

⁶⁹⁸ See Parties' reply to RFI 36, question 4.

insufficient evidence exist to suggest that the evidence of direct benchmarking between the Parties exceeded “*simple commercial benchmarking aimed at monitoring and possibly imitating best practices in the industry*”.⁶⁹⁹ Furthermore, an analysis of retail prices did not indicate that price element changes in the German retail market for the supply of premium TV services were consistently initiated by Vodafone or Unitymedia, sufficiently close in time to each other and in the same sequence, as would have been required for the two firms to indirectly constrain each other via a sequential pricing mechanism that transmits price changes of one firm to the territory of the other via national price responses of other players, such as Deutsche Telekom.⁷⁰⁰

2.6.3. Conclusion

(956) In light of the foregoing, the Commission concludes that the Transaction is not likely to significantly impede effective competition in the market for the retail supply of TV services in Germany as a result of horizontal non-coordinated effects.

2.7. Horizontal non-coordinated effects in the retail supply of multiple play 2P bundles including fixed telephony services and fixed internet access services in Germany

2.7.1. The Notifying Party’s view

(957) In the Response to the Statement of Objections, while the Parties contest the Commission's preliminary findings as to the effects of the Transaction in the market for the retail supply of 2P bundles including fixed telephony services and fixed internet access service in Germany, they do agree that the dynamics of competition in such market would be the same as in the market for the retail supply of fixed internet access services.

2.7.2. The Commission’s assessment

(958) As explained in section VII.6, there is a strong overlap between the markets for the retail supply of internet access services and a potential market for the supply of multiple play 2P bundles including fixed telephony services and fixed internet access services. Indeed, based on BNetzA data, 70% of fixed broadband customers are in fact purchasers of a 2P product.

(959) In this context, while the Parties were not able to submit market data for multiple play markets, including 2P, the Commission considers that the dynamic of competition in the potential market for the supply of 2P bundles including fixed telephony services and fixed internet access services are equivalent to those for the supply of retail internet access services standalone. In fact, as explained in section VII.6.1, within 2P products, the main driver of product differentiation and customers’ choice is fixed internet access services.

(960) In particular, the Commission notes that over [...] of new Vodafone broadband customers and [...] of new Unitymedia broadband customers also purchased fixed voice in a multiple play 2P bundle.⁷⁰¹ Therefore, the competitive constraint exerted by the Parties in the retail market for the supply of fixed internet services is likely to be very similar to that which they exert in the retail market for the supply of 2P

⁶⁹⁹ Commission decision of 30 May 2018 in Case M.7000 – *Liberty Global/Ziggo*, paragraphs 667 and 694 to 695.

⁷⁰⁰ No finding in this respect was contained in the Statement of Objections.

⁷⁰¹ See Form CO, paragraph 6.769.

bundles including fixed telephony services and fixed internet access services. In fact, all the evidence presented in section VIII.C.2.2 in relation to the effects of the Transaction in the retail market for the supply of fixed internet services can also be considered applicable to 2P bundles.

- (961) On this basis, the Commission considers that the findings in relation to the effects of the Transaction in the market for the retail supply of fixed internet services are likely to apply also to the potential market for the retail supply of 2P bundles including fixed telephony services and fixed internet access services.

2.7.3. *Conclusion*

- (962) In light of the foregoing, the Commission that the Transaction would significantly impede effective competition in the market for the retail supply of 2P bundles including fixed telephony services and fixed internet access service in Germany as a result of horizontal non-coordinated effects.

2.8. **Horizontal non-coordinated effects in the retail supply of multiple play 3P bundles including fixed telephony services, fixed internet access services and mobile telecommunications services in Germany**

2.8.1. *The Notifying Party's view*

- (963) According to the Notifying Party, the Transaction does not give rise to a significant impediment of effective competition in any hypothetical market for multiple play, since there are only limited increments in retail mobile and retail fixed services as a result of the Transaction. Furthermore, there will continue to be a number of actual and potential competitors who can or do already fixed-mobile multi-play services, including Deutsche Telekom, the merged United Internet/Drillisch and Telefónica, as well as strong competitive constraints from standalone fixed and mobile players.

2.8.2. *The Commission's assessment*

- (964) As explained in section VII.6, a study submitted by EWE, based on BNetzA data, reports that, among 3P products, only 7% of the bundles sold included mobile instead of TV services.⁷⁰² In fact, the 3P bundles including fixed telephony services, fixed internet access services and mobile telecommunications services appears to be still in a nascent phase in Germany, the first FMC bundles having been offered in Germany only in 2014 by Vodafone and Deutsche Telekom.
- (965) In the market investigation a concern has been raised as regards the potential effects of the Transaction in relation to the supply of FMC bundles, including 3P bundles. The Commission has therefore assessed the impact of the Transaction into the hypothetical retail market for the supply of 3P bundles including fixed telephony services, fixed internet access services and mobile telecommunications services.
- (966) The Parties were not able to submit market data for multiple play markets. The Commission has therefore conducted a market reconstruction based on the data on the number of 3P customers including mobile services in the first and second half of 2017 and in the first half of 2018 of the Parties and Deutsche Telekom.⁷⁰³ As complainants assume that the three MNOs would have a competitive advantage in

⁷⁰² WIK-Consulting study, annex to EWE's comments on the Statement of Objections [ID 5872].

⁷⁰³ See Vodafone's reply to data RFI 17, Unitymedia's reply to data RFI 7 and Deutsche Telekom's confidential reply to data RFI 1 [ID 3640]. The data includes both 3P bundles based on the sale of the three components on the basis of a single contracts and 3P bundles offered on the basis of multiple contracts.

the supply of 3P products including mobile services, due to their ownership of mobile network infrastructure, the Commission considers this limited dataset to provide a sufficiently conservative overview of the pre- and post-Transaction market structure, which is likely to highly overestimate the market position of the Parties and the merged entity. The results of the Commission's market reconstruction is illustrated in Table 31 and Table 32.

Table 31: Market shares for the retail supply of 3P bundles including fixed telephony services, fixed internet access services and mobile telecommunications services

[CONFIDENTIAL]

Nationwide	H1 2017		H2 2017		H1 2018	
	Number	%	Number	%	Number	%
Subscribers						
Vodafone	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
of which only DSL	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
of which only cable	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Unitymedia	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Combined	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Deutsche Telekom	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Total	[CONF]	100%	[CONF]	100%	[CONF]	100%

Source: Commission's computation.

Table 32: Net additions and growth rates for the retail supply of 3P bundles including fixed telephony services, fixed internet access services and mobile telecommunications services

[CONFIDENTIAL]

Nationwide	H2 2017 over H1 2017			H1 2018 over H2 2017		
	Number	Growth rate %	Share %	Number	Growth rate %	Share %
Subscribers						
Vodafone	[...]	[...]	[CONF]	[...]	[...]	[CONF]
of which only DSL	[...]	[...]	[CONF]	[...]	[...]	[CONF]
of which only cable	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Unitymedia	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Combined	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Deutsche Telekom	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Total	[CONF]	[CONF]	100%	[CONF]	[CONF]	100%

Source: Commission's computation.

(967) Based on its market reconstruction the Commission notes that, in the nascent market for the supply of 3P bundles including mobile services, pre-Transaction the number

of Vodafone' customers of these 3P products is [INFORMATION CONCERNING SALES] with an average growth rate of [INFORMATION CONCERNING SALES] from the first semester of 2017 to the second of the same year and [INFORMATION CONCERNING SALES] from the second semester of 2017 to the first semester of 2018. [INFORMATION CONCERNING SALES], Unitymedia's number of customers of 3P bundles including mobile services has [INFORMATION CONCERNING SALES] from the second semester of 2017 to the first semester of 2018. As regards Deutsche Telekom, [CONFIDENTIAL].

- (968) In terms of market share, pre-Transaction, [CONFIDENTIAL]. As regards net additions, [CONFIDENTIAL].
- (969) Post-Transaction, [CONFIDENTIAL].⁷⁰⁴
- (970) In this context, the Commission considers that the Transaction is unlikely to significantly impede effective competition in the relevant market.
- (971) Firstly, as stated, the market position of the Parties, and in particular of Vodafone, is likely to be highly overestimated due to the exclusion from the data set of Telefónica and other players that reportedly also offers 3P bundles including mobile services, albeit to a limited extent.⁷⁰⁵
- (972) Secondly, while Vodafone could be considered an important competitor in the supply of 3P bundles including mobile services, this is certainly not the case with respect to Unitymedia, whose number of customers of this product is very limited and [INFORMATION CONCERNING SALES]. This is due to its limited market position in the supply of mobile telecommunications services, which is not likely to increase absent the Transaction.⁷⁰⁶
- (973) Finally, due to the pro-competitive nature of 3P bundles including mobile services, which typically afford discounts or other benefits to consumers with respect to the conditions that they would have when purchasing the various components on a standalone basis, the Commission considers that the combination of Vodafone with a small player in the market, such as Unitymedia, is only likely to have positive effects on competition in the market, [CONFIDENTIAL].

2.8.3. Conclusion

- (974) In light of the foregoing, the Commission concludes that the Transaction would not significantly impede effective competition in the market for the retail supply of 3P bundles including fixed telephony services, fixed internet access services and mobile telecommunications services in Germany as a result of horizontal non-coordinated effects. This is without prejudice to the assessment of the conglomerate effects of the Transaction in relation to the supply of the various components of the bundles, which is discussed in section VIII.C.5.

⁷⁰⁴ Due to the limited scope of the dataset, the Commission has not computed concentrations levels.

⁷⁰⁵ WIK-Consulting study, annex to EWE's comments on the Statement of Objections [ID 5872].

⁷⁰⁶ See Form CO, paragraph 6.1226 (iii).

2.9. Horizontal non-coordinated effects in the retail supply of multiple play 3P bundles including fixed telephony services, fixed internet access services and TV services in Germany

2.9.1. The Notifying Party's view

(975) According to the Notifying Party, the Transaction does not give rise to a significant impediment of effective competition in any hypothetical market for multiple play, since there are only limited increments in retail fixed services as a result of the Transaction. Furthermore, there will continue to be a number of actual and potential competitors who can or do already fixed multi-play services, including Deutsche Telekom as well as strong competitive constraints from standalone fixed players.

2.9.2. The Commission's assessment

(976) As explained in section VII.6, 3P bundles including fixed telephony services, fixed internet access services and pay TV services account for the largest part of the 3P multiple-play products, corresponding to 31.5% of the fixed broadband internet customer base and 36.4% of pay TV subscribers.

(977) In the market investigation, a concern has been raised as regards the potential effects of the Transaction in relation to the supply of fixed bundles, including 3P bundles. The Commission has therefore assessed the impact of the Transaction into the hypothetical retail market for the supply of 3P bundles including fixed telephony services, fixed internet access services and TV services.

(978) The Parties were not able to submit market data for multiple play markets. The Commission has therefore conducted a market reconstruction based on the data on the number of 3P customers including TV services in the first and second half of 2017 and in the first half of 2018 of the Parties and Deutsche Telekom.⁷⁰⁷ The Commission notes that other players with non-negligible presence in the supply of TV and/or fixed internet services offer 3P bundles including fixed telephony services, fixed internet access services and TV services. This is the case of Tele Columbus and United Internet. In this context, the dataset available to the Commission is extremely limited and likely to highly overestimate the market position of the Parties and the merged entity. The results of the Commission's market reconstruction is illustrated in Table 33 and Table 34.

Table 33: Market shares for the retail supply of 3P bundles including fixed telephony services, fixed internet access services and TV services

[CONFIDENTIAL]

Nationwide	H1 2017		H2 2017		H1 2018	
	Number	%	Number	%	Number	%
Subscribers						
Vodafone	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
of which only DSL	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
of which	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]

⁷⁰⁷

See Vodafone's reply to data RFI 17, Unitymedia's reply to data RFI 7 and Deutsche Telekom's confidential reply to data RFI 1 [ID 3640]. The data includes both 3P bundles based on the sale of the three components on the basis of a single contracts and 3P bundles offered on the basis of multiple contracts.

Nationwide	H1 2017		H2 2017		H1 2018	
	Number	%	Number	%	Number	%
only cable						
Unitymedia	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Combined	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Deutsche Telekom	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Total	[CONF]	100%	[CONF]	100%	[CONF]	100%

Source: Commission's computation.

Table 34: Net additions and growth rates for the retail supply of 3P bundles including fixed telephony services, fixed internet access services and TV services

[CONFIDENTIAL]

Nationwide	H2 2017 over H1 2017			H1 2018 over H2 2017		
	Number	Growth rate %	Share %	Number	Growth rate %	Share %
Subscribers						
Vodafone	[...]	[...]	[CONF]	[...]	[...]	[CONF]
of which only DSL	[...]	[...]	[CONF]	[...]	[...]	[CONF]
of which only cable	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Unitymedia	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Combined	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Deutsche Telekom	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Total	[CONF]	[CONF]	100%	[CONF]	[CONF]	100%

Source: Commission's computation.

- (979) Based on its market reconstruction the Commission notes that pre-Transaction the number of Vodafone's customers of these 3P products, after [INFORMATION CONCERNING SALES] in the second half of 2017, has been [INFORMATION CONCERNING SALES] in the first half of 2018. The [INFORMATION CONCERNING SALES] is driven by customers of 3P products served with DSL fixed internet access services. In this respect, the [INFORMATION CONCERNING SALES], in the range of [INFORMATION CONCERNING SALES] bpth from the first semester of 2017 to the second of the same year and from the second semester of 2017 to the first semester of 2018. To the contrary, Unitymedia's number of customers of 3P bundles including TV services has been [INFORMATION CONCERNING SALES]. As regards Deutsche Telekom, [CONFIDENTIAL].
- (980) In terms of market share, pre-Transaction, at national level, [CONFIDENTIAL] As regards net additions, [CONFIDENTIAL].

- (981) Post-Transaction, [CONFIDENTIAL].⁷⁰⁸
- (982) Despite the high combined market shares of the Parties at national level, the Commission considers that the Transaction is unlikely to significantly impede effective competition in the relevant market.
- (983) This is because, when considering bundles including TV, the specific dynamics characterising the TV markets in Germany discussed in sections VIII.C.2.4 to VIII.C.2.6 should be taken into account. This means, firstly, that the Parties do compete against each other only in the Unitymedia's footprint where the only TV service offered by Vodafone is its IPTV/OTT product. Such product is not available on a stand alone basis and no discount is offered by Vodafone to include this product in the bundle.⁷⁰⁹
- (984) Secondly, the scope of competition between the Parties is limited to customers in SDUs because, as set out in section VIII.C.2.5.2.3., Vodafone does not serve at all customers in MDUs in Unitymedia's footprint.
- (985) Thirdly, as shown in Table 24, the IPTV product of Vodafone has been [INFORMATION CONCERNING SALES]. As explained at recitals (876) to (879), no evidence in the file suggest that the OTT product of Vodafone would have [INFORMATION CONCERNING SALES].
- (986) Finally, the Commission notes that the above findings would not change even if, to duly take into account the specific characteristics of the TV markets, a distinction between basic and premium subscription is made. Indeed, as shown in Tables 35 and 36, the market position of Vodafone's IPTV/OTT product would not change even if this distinction were to be considered.

Table 35: Shares for the retail supply of 3P bundles including fixed telephony services, fixed internet access services and TV services (basic subscriptions)

[CONFIDENTIAL]

Nationwide	H1 2017		H2 2017		H1 2018	
	Number	%	Number	%	Number	%
Subscribers (assuming all Deutsche Telekom's TV subscriptions are basic)						
Vodafone	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
of which only DSL	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
of which only cable	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Unitymedia	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Combined	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Deutsche Telekom	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Total	[CONF]	100%	[CONF]	100%	[CONF]	100%
Subscribers (assuming none of Deutsche Telekom's TV subscriptions are basic)						
Vodafone	[...]	[...]	[...]	[...]	[...]	[...]

⁷⁰⁸ Due to the limited scope of the dataset, the Commission has not computed concentrations levels.
⁷⁰⁹ See Form CO, footnote 948.

Nationwide	H1 2017		H2 2017		H1 2018	
	Number	%	Number	%	Number	%
of which only DSL	[...]	[...]	[...]	[...]	[...]	[...]
of which only cable	[...]	[...]	[...]	[...]	[...]	[...]
Unitymedia	[...]	[...]	[...]	[...]	[...]	[...]
Combined	[...]	100%	[...]	100%	[...]	100%
Deutsche Telekom	0	0%	0	0%	[...]	0%
Total	[...]	100%	[...]	100%	[...]	100%

Source: Commission's computation.

Table 36: Shares for the retail supply of 3P bundles including fixed telephony services, fixed internet access services and TV services (premium subscriptions)

[CONFIDENTIAL]

Nationwide	H1 2017		H2 2017		H1 2018	
	Number	%	Number	%	Number	%
Subscribers (assuming all Deutsche Telekom's TV subscriptions are premium)						
Vodafone	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
of which only DSL	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
of which only cable	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Unitymedia	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Combined	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Deutsche Telekom	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Total	[CONF]	100%	[CONF]	100%	[CONF]	100%
Subscribers (assuming none of Deutsche Telekom's TV subscriptions are premium)						
Vodafone	[...]	[...]	[...]	[...]	[...]	[...]
of which only DSL	[...]	[...]	[...]	[...]	[...]	[...]
of which only cable	[...]	[...]	[...]	[...]	[...]	[...]
Unitymedia	[...]	[...]	[...]	[...]	[...]	[...]
Combined	[...]	100%	[...]	100%	[...]	100%
Deutsche	0	0%	0	0%	0	0%

Nationwide	H1 2017		H2 2017		H1 2018	
	Number	%	Number	%	Number	%
Telekom						
Total	[...]	100%	[...]	100%	[...]	100%

Source: Commission's computation.

(987) Tables 35 and 36 illustrate the Parties' and Deutsche Telekom's shares in hypothetical segments for the supply of 3P bundles including fixed telephony services, fixed internet access services and TV services, consisting, respectively, of basic and premium subscriptions. The underlying data are those used to compile Table 33, but Unitymedia's data have been updated to distinguish between basic and premium TV subscriptions.⁷¹⁰ Furthermore, the Commission has compiled shares assuming, both for 3P bundles including basic TV subscriptions and for 3P bundles including premium TV subscriptions, that all sales of Deutsche Telekom consisted of either basic or premium subscriptions. This dataset provides a very conservative measure of the relevance of the constraint exerted by Vodafone's IPTV/OTT product over Unitymedia and in the market. [CONFIDENTIAL].

(988) Similar considerations applies with respect to the net adds. As shown by Tables 37 and 38, under any possible market reconstruction scenario the performance of Vodafone's IPTV/OTT product does not change.

Table 37: Net additions and growth rates for the retail supply of 3P bundles including fixed telephony services, fixed internet access services and TV services (basic subscriptions)

[CONFIDENTIAL]

Nationwide	H2 2017 over H1 2017			H1 2018 over H2 2017		
	Number	Growth rate %	Share %	Number	Growth rate %	Share %
Subscribers (assuming all Deutsche Telekom's TV subscriptions are basic)						
Vodafone	[...]	[...]	[CONF]	[...]	[...]	[CONF]
of which only DSL	[...]	[...]	[CONF]	[...]	[...]	[CONF]
of which only cable	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Unitymedia	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Combined	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Deutsche Telekom	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Total	[CONF]	[CONF]	100%	[CONF]	[CONF]	100%
Subscribers (assuming none of Deutsche Telekom's TV subscriptions are basic)						
Vodafone	[...]	[...]	[...]	[...]	[...]	[...]
of which only DSL	[...]	[...]	[...]	[...]	[...]	[...]
of which only cable	[...]	[...]	[...]	[...]	[...]	[...]
Unitymedia	[...]	[...]	[...]	[...]	[...]	[...]

⁷¹⁰ See Parties' reply to RFI 36, Annex 3.1. Vodafone was not able to provide the split between basic and premium subscriptions.

Nationwide	H2 2017 over H1 2017			H1 2018 over H2 2017		
	Number	Growth rate %	Share %	Number	Growth rate %	Share %
Combined	[...]	[...]	100%	[...]	[...]	100%
Deutsche Telekom	0	0%	0%	0	0%	0%
Total	[...]	[...]	100%	[...]	0%	100%

Source: Commission's computation.

Table 38: Net additions and growth rates for the retail supply of 3P bundles including fixed telephony services, fixed internet access services and TV services (premium subscriptions)

[CONFIDENTIAL]

Nationwide	H2 2017 over H1 2017			H1 2018 over H2 2017		
	Number	Growth rate %	Share %	Number	Growth rate %	Share %
Subscribers (assuming all Deutsche Telekom's TV subscriptions are premium)						
Vodafone	[...]	[...]	[CONF]	[...]	[...]	[CONF]
of which only DSL	[...]	[...]	[CONF]	[...]	[...]	[CONF]
of which only cable	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Unitymedia	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Combined	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Deutsche Telekom	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Total	[CONF]	[CONF]	100%	[CONF]	[CONF]	100%
Subscribers (assuming none of Deutsche Telekom's TV subscriptions are premium)						
Vodafone	[...]	[...]	[...]	[...]	[...]	[...]
of which only DSL	[...]	[...]	[...]	[...]	[...]	[...]
of which only cable	[...]	[...]	[...]	[...]	[...]	[...]
Unitymedia	[...]	[...]	[...]	[...]	[...]	[...]
Combined	[...]	[...]	100%	[...]	[...]	100%
Deutsche Telekom	0	0%	0%	0	0%	0%
Total	[...]	[...]	100%	[...]	[...]	100%

Source: Commission's computation.

2.9.3. Conclusion

(989) In light of the foregoing, the Commission concludes that the Transaction would not significantly impede effective competition in the market for the retail supply of 3P bundles including fixed telephony services, fixed internet access services and TV services in Germany as a result of horizontal non-coordinated effects. This is without prejudice to the assessment of the conglomerate effects of the Transaction in relation to the supply of the various components of the bundles, which is discussed in section VIII.C.5.

2.10. Horizontal non-coordinated effects in the retail supply of multiple play 4P bundles in Germany

2.10.1. The Notifying Party's view

(990) According to the Notifying Party, the Transaction does not give rise to a significant impediment of effective competition in any hypothetical market for multiple play, since there are only limited increments in retail mobile and retail fixed services as a result of the Transaction. Furthermore, there will continue to be a number of actual and potential competitors who can or do already fixed-mobile multi-play services, including Deutsche Telekom, the merged United Internet/Drillisch and Telefónica, as well as strong competitive constraints from standalone fixed and mobile players.

2.10.2. The Commission's assessment

(991) As explained in section VII.6, a study submitted by EWE, based on BNetzA data, reports that 4P products have been purchased, on the basis of a single contract, only by a few thousand customers in Germany.⁷¹¹ In fact, the 4P market appears to be still in a nascent phase in Germany, the first FMC bundles having been offered in Germany only in 2014 by Vodafone and Deutsche Telekom.

(992) In the market investigation a concern has been raised as regards the potential effects of the Transaction in relation to the supply of FMC bundles, including 4P bundles. The Commission has therefore assessed the impact of the Transaction into the hypothetical retail market for the supply of 4P bundles.

(993) The Parties were not able to submit market data for multiple play markets. The Commission has therefore conducted a market reconstruction based on the data on the number of 4P customers in the first and second half of 2017 and in the first half of 2018 of the Parties and Deutsche Telekom.⁷¹² As complainants assume that the three MNOs would have a competitive advantage in the supply of 4P products, due to their ownership of mobile network infrastructure, the Commission considers this limited dataset to provide a sufficiently conservative overview of the pre- and post-Transaction market structure, which is likely to highly overestimate the market position of the Parties and the merged entity. The results of the Commission's market reconstruction is illustrated in Table 39 and Table 40.

Table 39: Market shares for the retail supply of 4P bundles

[CONFIDENTIAL]

Nationwide	H1 2017		H2 2017		H1 2018	
	Number	%	Number	%	Number	%
Subscribers						
Vodafone	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
of which only DSL	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
of which	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]

⁷¹¹ WIK-Consulting study, annex to EWE's comments on the Statement of Objections [ID 5872].

⁷¹² See Vodafone's reply to data RFI 17, Unitymedia's reply to data RFI 7 and Deutsche Telekom's confidential reply to data RFI 1 [ID 3640]. The data includes both 4P bundles based on the sale of the four components on the basis of a single contracts and 4P bundles offered on the basis of multiple contracts.

Nationwide	H1 2017		H2 2017		H1 2018	
	Number	%	Number	%	Number	%
only cable						
Unitymedia	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Combined	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Deutsche Telekom	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Total	[CONF]	100%	[CONF]	100%	[CONF]	100%

Source: Commission's computation.

Table 40: Net additions and growth rates for the retail supply of 4P bundles
[CONFIDENTIAL]

Nationwide	H2 2017 over H1 2017			H1 2018 over H2 2017		
	Number	Growth rate %	Share %	Number	Growth rate %	Share %
Subscribers						
Vodafone	[...]	[...]	[CONF]	[...]	[...]	[CONF]
of which only DSL	[...]	[...]	[CONF]	[...]	[...]	[CONF]
of which only cable	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Unitymedia	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Combined	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Deutsche Telekom	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Total	[CONF]	[CONF]	100%	[CONF]	[CONF]	100%

Source: Commission's computation.

(994) Based on its market reconstruction the Commission notes that, in the nascent market for the supply of 4P bundles, pre-Transaction the number of Vodafone' customers of 4P products is [INFORMATION CONCERNING SALES] from the first semester of 2017 to the second of the same year and [INFORMATION CONCERNING SALES] from the second semester of 2017 to the first semester of 2018. Importantly, [INFORMATION CONCERNING SALES] of Vodafone's 4P customers are also cable customers and [INFORMATION CONCERNING SALES]. [INFORMATION CONCERNING SALES], Unitymedia's number of 4P customers has been [INFORMATION CONCERNING SALES] from the first semester of 2017 to the second of the same year and by [INFORMATION CONCERNING SALES] from the second semester of 2017 to the first semester of 2018. As regards Deutsche Telekom, [CONFIDENTIAL].

(995) In terms of market share, pre-Transaction, [CONFIDENTIAL]. As regards net additions, [CONFIDENTIAL].

(996) Post-Transaction, [CONFIDENTIAL].⁷¹³

⁷¹³ Due to the limited scope of the dataset, the Commission has not computed concentrations levels.

- (997) In this context, the Commission considers that the Transaction is unlikely to significantly impede effective competition in the relevant market.
- (998) Firstly, as stated, the market position of the Parties, and in particular of Vodafone, is likely to be highly overestimated due to the exclusion from the data set of Telefónica and other players that reportedly also offers 4P bundles, albeit to a limited extent.⁷¹⁴
- (999) Secondly, while Vodafone could be considered an important competitor in the supply of 4P bundles, this is certainly not the case with respect to Unitymedia, whose number of customers of this product is [INFORMATION CONCERNING SALES]. This is due to its limited market position in the supply of mobile telecommunications services, which is not likely to increase absent the Transaction.⁷¹⁵
- (1000) Thirdly, the considerations in relation the relevance of the specific dynamics characterising the TV markets in Germany in the assessment of the impact of the Transaction in a bundle market including TV services made at recital (983) and following for 3P bundles also apply to 4P bundles. Those considerations further reduce the likelihood that the Transaction would significantly impede effective competition in the relevant market.
- (1001) In particular, the Commission notes that the above findings would not change even if, to duly take into account the specific characteristics of the TV markets, a distinction between basic and premium subscription is made. Indeed, as shown in Tables 41 and 42, the market position of Unitymedia would not change even if this distinction were to be considered.

Table 41: Shares for the retail supply of 4P bundles including basic TV subscriptions

[CONFIDENTIAL]

Nationwide	H1 2017		H2 2017		H1 2018	
	Number	%	Number	%	Number	%
Subscribers (assuming all Deutsche Telekom's TV subscriptions are basic)						
Vodafone	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
of which only DSL	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
of which only cable	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Unitymedia	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Combined	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Deutsche Telekom	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Total	[CONF]	100%	[CONF]	100%	[CONF]	100%
Subscribers (assuming none of Deutsche Telekom's TV subscriptions are basic)						
Vodafone	[...]	[...]	[...]	[...]	[...]	[...]

⁷¹⁴ WIK-Consulting study, annex to EWE's comments on the Statement of Objections [ID 5872].

⁷¹⁵ See Form CO, paragraph 6.1226 (iii).

Nationwide	H1 2017		H2 2017		H1 2018	
	Number	%	Number	%	Number	%
of which only DSL	[...]	[...]	[...]	[...]	[...]	[...]
of which only cable	[...]	[...]	[...]	[...]	[...]	[...]
Unitymedia	[...]	[...]	[...]	[...]	[...]	[...]
Combined	[...]	100%	[...]	100%	[...]	100%
Deutsche Teleko m	0	0%	0	0%	0	0%
Total	[...]	100%	[...]	100%	[...]	100%

Source: Commission's computation.

Table 42: Shares for the retail supply of 4P bundles including premium TV subscriptions

[CONFIDENTIAL]

Nationwide	H1 2017		H2 2017		H1 2018	
	Number	%	Number	%	Number	%
Subscribers (assuming all Deutsche Telekom's TV subscriptions are premium)						
Vodafone	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
of which only DSL	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
of which only cable	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Unitymedia	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Combined	[...]	[CONF]	[...]	[CONF]	[...]	[CONF]
Deutsche Teleko m	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Total	[CONF]	100%	[CONF]	100%	[CONF]	100%
Subscribers (assuming none of Deutsche Telekom's TV subscriptions are premium)						
Vodafone	[...]	[...]	[...]	[...]	[...]	[...]
of which only DSL	[...]	[...]	[...]	[...]	[...]	[...]
of which only cable	[...]	[...]	[...]	[...]	[...]	[...]
Unitymedia	[...]	[...]	[...]	[...]	[...]	[...]

Nationwide	H1 2017		H2 2017		H1 2018	
	Number	%	Number	%	Number	%
Combined	[...]	100%	[...]	100%	[...]	100%
Deutsche Telekom	0	0%	0	0%	0	0%
Total	[...]	100%	[...]	100%	[...]	100%

Source: Commission's computation.

- (1002) Tables 41 and 42 illustrate the Parties' and Deutsche Telekom's shares in hypothetical segments for the supply of 4P bundles including TV services, consisting, respectively, of basic and premium subscriptions. The underlying data are those used to compile Table 39, but Unitymedia's data have been updated to distinguish between basic and premium TV subscriptions.⁷¹⁶ Furthermore, the Commission has compiled shares assuming, both for 4P bundles including basic TV subscriptions and for 4P bundles including premium TV subscriptions, that all sales of Deutsche Telekom consisted of either basic or premium subscriptions. This dataset provides a very conservative measure of the relevance of the constraint exerted by Unitymedia over Vodafone and in the market. [CONFIDENTIAL].
- (1003) Similar considerations applies with respect to the net adds. As shown by Tables 43 and 44, under any possible market reconstruction scenario the performance of Unitymedia does not change.

Table 43: Net additions and growth rates for the retail supply of 4P bundles including basic TV subscriptions
[CONFIDENTIAL]

Nationwide	H2 2017 over H1 2017			H1 2018 over H2 2017		
	Number	Growth rate %	Share %	Number	Growth rate %	Share %
Subscribers (assuming all Deutsche Telekom's TV subscriptions are basic)						
Vodafone	[...]	[...]	[CONF]	[...]	[...]	[CONF]
of which only DSL	[...]	[...]	[CONF]	[...]	[...]	[CONF]
of which only cable	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Unitymedia	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Combined	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Deutsche Telekom	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Total	[CONF]	[CONF]	100%	[CONF]	[CONF]	100%
Subscribers (assuming none of Deutsche Telekom's TV subscriptions are basic)						
Vodafone	[...]	[...]	[...]	[...]	[...]	[...]
of which only DSL	[...]	[...]	[...]	[...]	[...]	[...]
of which only cable	[...]	[...]	[...]	[...]	[...]	[...]

⁷¹⁶

See Parties' reply to RFI 36, Annex 3.1. Vodafone was not able to provide the split between basic and premium subscriptions.

Nationwide	H2 2017 over H1 2017			H1 2018 over H2 2017		
	Number	Growth rate %	Share %	Number	Growth rate %	Share %
Unitymedia	[...]	[...]	[...]	[...]	[...]	[...]
Combined	[...]	[...]	100%	[...]	[...]	[...]
Deutsche Telekom	0	0%	0%	0	0%	0%
Total	[...]	[...]	100%	[...]	0	100%

Source: Commission's computation.

Table 44: Net additions and growth rates for the retail supply of 4P bundles including premium TV subscriptions

[CONFIDENTIAL]

Nationwide	H2 2017 over H1 2017			H1 2018 over H2 2017		
	Number	Growth rate %	Share %	Number	Growth rate %	Share %
Subscribers (assuming all Deutsche Telekom's TV subscriptions are premium)						
Vodafone	[...]	[...]	[CONF]	[...]	[...]	[CONF]
of which only DSL	[...]	[...]	[CONF]	[...]	[...]	[CONF]
of which only cable	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Unitymedia	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Combined	[...]	[...]	[CONF]	[...]	[...]	[CONF]
Deutsche Telekom	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Total	[CONF]	[CONF]	100%	[CONF]	[CONF]	100%
Subscribers (assuming none of Deutsche Telekom's TV subscriptions are premium)						
Vodafone	[...]	[...]	[...]	[...]	[...]	[...]
of which only DSL	[...]	[...]	[...]	[...]	[...]	[...]
of which only cable	[...]	[...]	[...]	[...]	[...]	[...]
Unitymedia	[...]	[...]	[...]	[...]	[...]	[...]
Combined	[...]	[...]	100%	[...]	[...]	100%
Deutsche Telekom	0	0%	0%	0	0%	0%
Total	[...]	[...]	100%	[...]	[...]	100%

Source: Commission's computation.

(1004) Finally, due to the pro-competitive nature of 4P bundles, which typically afford discounts or other benefits to consumers with respect to the conditions that they would have when purchasing the various components on a standalone basis, the Commission considers that the combination of Vodafone with a [INFORMATION CONCERNING SALES] player in the market, such as Unitymedia, is only likely to have positive effects on competition in the market, [CONFIDENTIAL].

2.10.3. Conclusion

(1005) In light of the foregoing, the Commission concludes that the Transaction would not significantly impede effective competition in the market for the retail supply of 4P bundles in Germany as a result of horizontal non-coordinated effects. This is without prejudice to the assessment of the conglomerate effects of the Transaction in relation to the supply of the various components of the bundles, which is discussed in section VIII.C.5.

2.11. Horizontal non-coordinated effects in the market for the wholesale supply and acquisition of TV channels and in the market for the wholesale TV signal transmission in Germany

2.11.1. Introduction

- (1006) The Transaction would combine the Parties' activities in the wholesale supply and acquisition of TV channels and in the wholesale TV signal transmission in Germany.
- (1007) The Notifying Party has submitted that the market for the wholesale supply and acquisition of TV channels and the market for the wholesale TV signal transmission would represent two different sides of the same market. In particular, in the wholesale supply and acquisition of TV channels market, TV broadcasters would be active on the supply side whilst providers of retail TV services would be active on the demand side; in the wholesale TV signal transmission market TV broadcasters would be active on the demand side, whilst providers of retail TV services would be active on the supply side. In light of this close interconnection, the Notifying Party has submitted a single analysis of the competitive conditions, encompassing both sides of the relationship.
- (1008) The Commission acknowledges that the market for the wholesale supply and acquisition of TV channels and the market for the wholesale TV signal transmission are closely interconnected, as the negotiations between TV broadcasters and TV platforms normally cover both aspects (signal transmission and channels acquisition). Therefore, the Commission will analyse the effects of the Transaction on these two markets in the same section of this Decision. However, considering the previous Commission practice in this area and that in the two markets the demand and supply sides are reversed, the Commission considers it more appropriate to conceptually distinguish the competitive conditions in the two markets, while taking into account the interrelations between them. As it will be demonstrated in the following sections, the main competition concerns in the Transaction derive from the infrastructural side of the relationship, namely from the specific position of the Parties and of the merged entity as providers of signal transmission capacity to TV broadcasters. Therefore, the remainder of the analysis will primarily focus on the wholesale TV signal transmission market. In any case, considering the close interconnection between the two markets and that the negotiation for the transmission capacity includes generally also the content aspect, in the competitive analysis the Commission will also take into account all the relevant aspect connected to the content side of the commercial relationship.

2.11.2. The Notifying Party's views

- (1009) The Notifying Party submits that the Transaction would not have any substantial negative effect on the wholesale TV markets (the market for the wholesale supply and acquisition of TV channels and the market for the wholesale supply of TV signal transmission), as there is a limited overlap in the Parties' activities on the wholesale market for the acquisition of TV channels and on the "reverse" market for wholesale access to TV signal transmission.
- (1010) Firstly, the Parties' overall viewership share, including on any possible segmentation, would be [...] below the level that would ordinarily be expected to result in concerns arising from buyer power – particularly in markets involving large, powerful sellers – in particular given the alternative distribution channels offered by satellite, terrestrial and other cable operators and OTT and IPTV providers. The merged entity would have a viewership share of around [20-30]%, similar to the share in other cases where no concerns were considered to arise. Moreover, in the wholesale TV markets

Vodafone would continue to be constrained by a set of competitors ([ASSESSMENT OF COMPETITORS]), which would continue to provide routes to market and therefore would constrain Vodafone in its negotiation with broadcasters. This would be true in all possible markets or market segments: FTA vs. Pay TV, linear vs. non-linear, different genres. With regard to a possible segmentation by infrastructure, the Notifying Party states that if the market were to be limited to cable, the Transaction would have no negative impact on competition, as by definition the market would be limited to each Party's cable network footprint. As the Parties' cable networks do not overlap, the Parties do not compete and no negative effect would ensue.

- (1011) Secondly, the Notifying Party adds that the Transaction would not result in any material change to the bargaining position of the Parties as it would combine cable networks that are not alternative distribution platforms to one another given that they do not overlap geographically:
- (a) The Parties' cable networks are not horizontal substitutes, and so the standard mechanism by which mergers strengthen bargaining power does not apply in this case. Without this substitution effect, the merged entity is simply equal to the sum of its parts in a negotiation with a broadcaster;
 - (b) Broadcasters value the widest possible distribution, and so face "increasing returns to scale" from dealing with more TV platforms. This means that mergers of non-overlapping TV platforms will not strengthen their bargaining position – which, as the Commission has found in previous cases, would require that broadcasters instead face "decreasing returns to scale";
 - (c) The merged entity will not become an indispensable trading partner for broadcasters, without whom they are unable to survive, considering that broadcasters have access to several other TV distribution platforms – including satellite, terrestrial and OTT, which combined command over [70-80]% of the TV viewer share in Germany. In the alternative, even if cable distribution were seen to be considered an essential route to market for broadcasters, then there would be no change as a result of the merger, since both cable businesses would already be essential trading partners pre-merger; and in any event, the significant fixed costs involved in producing TV channels mean that a merger which creates an indispensable trading partner would tend to weaken rather than strengthen that partner's bargaining position, in accordance with a "pivotal buyer" theory.⁷¹⁷
- (1012) Thirdly, broadcasters would have strong countervailing bargaining power due to the dependency of providers of TV signal on access to channels; this will continue to increase given the growing array of distribution options available to broadcasters as the Parties cable networks do not overlap, in particular IPTV and OTT distribution. The recent evolution of the payment streams between TV broadcasters and TV distributors would reflect TV broadcasters' strong countervailing bargaining power, as in recent years the TV distributors would have become net payers to TV broadcasters.
- (1013) In any event, the current regulatory environment would protect the position of broadcasters, including smaller broadcasters. The regulation includes:
- (a) "Must-Carry" and "Can-Carry" obligations, that guarantee certain broadcasters access to one-third of the Parties' digital cable capacity and also serve to

⁷¹⁷

This theory is further explained in following section VIII.C.2.11.3.8.

protect smaller or special interest channels, given the requirement to allocate another third of capacity to a diverse channel portfolio;

- (b) Non-discrimination rules, which ensure equal treatment for smaller broadcasting companies that may not be specifically covered by the “Must-Carry” or “Can-Carry” obligations. Cable operators must treat each broadcaster equally. As such, small channels, regardless of whether those obligations specifically apply, thereby benefit from the bargaining power of the large broadcasting groups.
- (1014) Finally, the Notifying Party submits that, even if the Transaction led to an increase in the relative market power of the merged entity, this would not give rise to competition concerns, as the merged entity would not have the ability or the incentive to put in place the following possible foreclosure strategies:
- (a) Foreclose smaller rival providers of wholesale TV signal by increasing feed-in fees or decreasing payments to broadcasters;
 - (b) Foreclose rival providers of TV services through exclusive/preferential access to content or technical restrictions (on OTT providers);
 - (c) Foreclose broadcasters by refusing access to merged entity’s TV platform/customer base;
 - (d) Foreclose broadcasters by introducing new fees or by refusing to share with them relevant data for the provision of innovative and interactive services”.
- (1015) On the contrary, the mere fact that the merged entity might be able to negotiate better terms vis-à-vis broadcasters does not in itself give rise to competition concerns and can in fact be pro-competitive.
- (1016) In its Response to the Article 6(1)(c) Decision, the Notifying Party has submitted further arguments to confirm the absence of any negative impact of the Transaction as a consequence of increased market power in the wholesale TV markets:
- (a) It would not be appropriate to exclude satellite and IPTV as alternative routes to market for broadcasters. In particular satellite's share of transmission in Germany would be [40-50]%, similar to cable, and satellite would have a comparable offer to cable in terms of channels. Moreover, broadcasters would also be able to use terrestrial and OTT distribution as a consequence of fast-growing demand for these services. The relevant market should therefore take into account all distribution methods, and in a market including all distribution technologies the merged entity's market share would be below [30-40]% (and below [20-30]% for premium TV only);
 - (b) There would be a clear mutual dependency between broadcasters and retail providers of TV services: while broadcasters need distribution via cable (and other) distribution platforms, retail providers of TV services equally depend on a broad portfolio of attractive TV channels in order to provide a compelling offering to retail customers in a highly competitive downstream market. Furthermore, negotiations increasingly focus on reaching agreement around non-linear services and therefore there are many different types of deal that can be agreed, with a different balance of benefits to both sides. Broadcasters' strong (and increasing) bargaining position would be clearly demonstrated in practice, by the fact that [INFORMATION RELATING TO SALES AND PRICING ARRANGEMENTS]. Finally, not only the Parties would receive feed-in fees from broadcasters, but also other TV retailers;

- (c) As for the potential increase in the bargaining power of the merged entity, the Notifying Party confirms that there is no strengthening of the merged entity's bargaining position as a result of the Transaction, since the Parties' cable networks do not overlap geographically: unlike a standard horizontal merger case, where the merging parties would – at least to some extent – substitute for one another by allowing the broadcaster to reach the same downstream audience, there is no internalisation of any customer switching between the Parties. Correspondingly, regardless of the pre-merger bargaining positions, the broadcasters' post-Transaction position would be improved compared to that of the merged entity, in light of broadcasters' increasing returns to scale;
 - (d) However, if the Parties were to be considered as already indispensable to broadcasters, the Transaction would not give rise to any competition concerns, because any bargaining power resulting from the threat to exclude certain TV channels would already be present pre-merger.
 - (e) The merged entity would not have any increased relative bargaining power with respect to either "minor or niche" broadcasters or major national broadcasters: as for "minor or niche" broadcasters, FTA minor broadcasters would be protected by German regulation (can-carry obligation and non-discrimination principle) and Pay TV ones would be better served by Sky. Moreover, by definition minor broadcasters do not need ubiquitous distribution. As for major national broadcasters, mutual dependency means that the merged entity would have no incentive to cease distributing the channels of major national broadcasters, given that this would damage its competitiveness in the retail TV market. This would be evidenced by the fact that [INFORMATION RELATING TO BUSINESS STRATEGY AND CONFIDENTIAL CONTRACT INFORMATION].
 - (f) Finally, even if the Transaction (hypothetically) were to lead to an indispensable provider of cable TV signal where the Parties were not individually indispensable pre-merger, which could be the case – at most – only for a small number of TV channels, this “pivotal buyer” scenario would tend to strengthen the position of the broadcasters.
- (1017) The Notifying Party has also submitted an empirical analysis on the payments made by Unitymedia and KBW [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS AND PRICING ARRANGEMENTS]. This would show that there is not any support the allegation that the merged entity will have a stronger bargaining power as a result of the increased coverage.
- (1018) Finally, in its Response to the Article 6(1)(c) Decision the Notifying Party has submitted that the merged entity will not have the ability and/or incentive to engage in any foreclosure strategy, and in any event any such hypothetical strategy would not result in anti-competitive effect. This would apply to all the possible foreclosure strategies envisaged in the Article 6(1)(c) Decision.
- (1019) With particular reference to the market for wholesale TV signal transmission, the Notifying Party has submitted further observations in its Response to the Statement of Objections, confirming the thesis and the analysis already presented in the previous documents submitted and providing further arguments and evidence in this respect. The Commission will present in detail those further elements in the course of the competitive assessment.

2.11.3. *The Commission's assessment*

2.11.3.1. Market shares in the wholesale supply and acquisition of TV channels

- (1020) Vodafone and Unitymedia purchase both FTA and Pay TV channels to include them into the Basic and Premium TV packages that they offer to their subscribers.
- (1021) Several participants to the market investigation submitted that the Transaction would have negative effects on the market for the wholesale supply and acquisition of TV channels, in terms of price increase and/or decreases in the quality of services provided.⁷¹⁸ One participant submitted that in particular for Pay TV channels the Transaction would result in a duopoly of Vodafone and Sky as retail suppliers of Pay TV channels and that could have negative effects on the market position of Pay TV channels suppliers: currently, the minimum distribution necessary to operate a Pay TV channel would require either to become part of the Sky offer or to agree on the distribution by Unitymedia and by Deutsche Telekom or alternatively the distribution by Vodafone and Deutsche Telekom. All other German platforms combined currently would not have the revenue potential to refinance a standard quality Pay TV channel with an appropriate margin. This would mean that, pre-merger, if one could not agree on a distribution by Sky, there were two options to maintain operation of the Pay TV channel. As result of the Transaction, this minimal viable distribution combination of platforms will not exist any longer. Therefore, Pay TV channel providers will substantially lose negotiating power.⁷¹⁹ Similarly, another participant submitted that the merged entity would be a contract partner with no alternative for programme providers who want to reach as many TV households as possible and therefore it could dictate distribution conditions.⁷²⁰
- (1022) In order to assess whether the merged entity will enjoy significant market power, the starting point of the analysis is its market share. According to the Horizontal Merger Guidelines, market shares and concentration levels provide useful first indications of the market structure and of the competitive importance of both the merging parties and their competitors⁷²¹. According to well-established case law, very large market shares - 50 % or more - may in themselves be evidence of the existence of a dominant market position.⁷²² Moreover, pursuant to the Horizontal Merger Guidelines, a merger involving a firm whose market share will remain below 50 % after the merger may also raise competition concerns in view of other factors such as the strength and number of competitors that would remain after the merger. The Commission has thus in several cases considered that mergers resulting in firms holding market shares between 40 % and 50%, and in some cases below 40%, create a significant impediment to effective competition.⁷²³
- (1023) The Parties have not provided specific market shares on the market for the wholesale supply of TV channels, because, in line with previous Commission's decisions⁷²⁴, they consider as a relevant proxy the national viewership shares and the market shares of the Parties in the retail supply of TV services in Germany.

⁷¹⁸ Replies to questionnaire Q6, question 50.3 ; Replies to questionnaire Q7, question 61.3.

⁷¹⁹ RTL, Replies to questionnaire Q6, question 50.3.

⁷²⁰ QVC, Replies to questionnaire Q6, question 50.3.

⁷²¹ Horizontal Merger Guidelines, paragraph 14.

⁷²² Horizontal Merger Guidelines, paragraph 17.

⁷²³ Horizontal Merger Guidelines, paragraph 17.

⁷²⁴ Liberty/Ziggo, Vodafone KBD.

- (1024) In this respect, the Notifying Party first refers to the viewership share of each retail TV provider (the number of consumers the TV broadcaster would ultimately be able to access if its channels are made available on that provider's platform). The data would be based on the Parties' estimates and a third party survey. Considering the viewership in the overall retail TV market and including all distribution platforms, Vodafone has a market share of [10-20]% and Unitymedia of [10-20]% (combined [20-30]%).⁷²⁵ The main competitors are Deutsche Telekom ([5-10]%) and Tele Columbus ([5-10]%).
- (1025) With regard to the distinction between FTA and Pay TV channels, at the retail level the relevant distinction in Germany is between basic TV services and premium TV services (section VII.4). These categories generally coincide, from the acquisition side, respectively with FTA and Pay TV. Therefore, the Commission considers that the related market shares can be used as proxy for the wholesale market for the supply and acquisition of TV channels.
- (1026) In the basic TV services, where mainly FTA channels are distributed, in terms of subscribers at national level Vodafone has a market share of [10-20]% and Unitymedia of [10-20]% (combined [30-40]%)⁷²⁶. The main competitors are Deutsche Telekom ([5-10]%) and Tele Columbus ([5-10]%).
- (1027) With respect to premium TV (enhanced TV services that offer more than a basic TV channel line-up, including German and international Pay TV channels and/or high-value services such as digital video recording), the combined viewership share of the Parties would be lower, at [10-20]% (Vodafone [5-10]% and Unitymedia [5-10]%)⁷²⁷. The position of the Parties in the premium TV segment would be similar in terms of subscribers (Vodafone [5-10]%, Unitymedia [5-10]%, combined [10-20]%) and revenue (Vodafone [5-10]%, Unitymedia [5-10]%, combined [10-20]%)⁷²⁸. The main competitor would be Sky, with a market share of [20-30]% in terms of viewership, [20-30]% on subscribers and [50-60]% on revenues. Deutsche Telekom would have a market share of [10-20]% in viewership, [10-20]% in subscribers and [5-10]% in revenues. OTT providers would have a market share of [20-30]% in viewership, [30-40]% in subscribers and [10-20]% in revenue.
- (1028) The Notifying Party has also provided market shares at retail level of premium TV excluding those premium TV packages that were previously classified as premium just because of the inclusion of a digital video recording with the package, therefore including mainly premium TV packages with Pay TV channels. In this segment in terms of subscribers Vodafone would have a market share of [5-10]% ([5-10]% in revenues) and Unitymedia of [5-10]% ([5-10]% in revenues), combined [10-20]% ([10-20]% in revenues).⁷²⁹
- (1029) With respect to the possible segments of basic pay TV channels/premium Pay TV channels, the Notifying Party has stated that the Parties substantially do not offer, and therefore do not acquire, premium pay TV channels (Sky would be the key provider in Germany of premium pay TV channels, including sport and film). As for

⁷²⁵ See Form CO, table 6.61.

⁷²⁶ Commission calculation based on the Form CO (table 6.22), Parties' reply to RFI 33, question 2.

⁷²⁷ See Form CO, table 6.62.

⁷²⁸ Commission calculation based on Parties' reply to RFI 33, question 2 (Tables 2.9, 2.10, 2.16 and 2.17); Parties' reply to RFI 36, question 2.

⁷²⁹ Parties' reply to RFI 39, question 1.

basic Pay TV channels, the Notifying Party estimates that the Parties' market shares are comparable to the market shares in the general premium TV market.⁷³⁰

- (1030) Similarly, with respect to a possible segmentation by genre/thematic content, the Notifying Party submitted that the Parties as well as all other TV retailers in Germany offer a broad range of genres, in order to provide an attractive offering, therefore their market share would be generally the same within any possible segmentation.⁷³¹
- (1031) Considering the absence of specific data regarding the market shares of the Parties as acquirers of FTA and Pay TV channels, the Commission considers it useful to verify the market position of the Parties in the retail supply of TV services also in terms of number of households connected, because this indicator shows the actual reach of each retail TV provider.⁷³²
- (1032) At national level and considering all different distribution technologies, in terms of households connected the merged entity would have a market share of [30-40]% (Vodafone [10-20]% and Unitymedia [10-20]%).⁷³³ It is to be noted that those data do not differ substantially from the national viewership data. The difference is more relevant with respect to premium TV (see at recitals (1024) and (1027)).
- (1033) Table 45 provides the market shares of the Parties and their largest competitors with regard to households connected (retail TV).

Table 45: Market shares for access to retail TV in Germany - households connected (2017/2018)

	HH (mn)	%
Vodafone	[...]	[10-20]%
o/w cable	[...]	[10-20]%
o/w IPTV	[...]	[0-5]%
Unitymedia	[...]	[10-20]%
Combined	[...]	[30-40]%
Satellite ⁷³⁴	[...]	[40-50]%
Terrestrial	[...]	[5-10]%
Deutsche Telekom	[...]	[5-10]%
o/w cable	[...]	[0-5]%
o/w IPTV	[...]	[5-10]%
Tele Columbus	[...]	[5-10]%
Other cable	[...]	[0-5]%
Total	[...]	100.0%

Source: Form CO, Table 6.22.

- (1034) In terms of households connected, whereas the merged entity would have a market share of [30-40]%, Deutsche Telekom has a [5-10]% market share (cable and IPTV) and Tele Columbus [5-10]% (cable). Satellite accounts for [40-50]% of the total households connected in Germany. Satellite transmission is used by a series of retail

⁷³⁰ Parties' reply to RFI 24, question 10.

⁷³¹ Form CO, paragraphs 6.896-6.898.

⁷³² Commission's decision of 2 April 2003 in Case M.2876 - *Newscorp/Telepiù*, recitals 21, 42 and 186. Commission decision of 30 May 2018 in case M.7000, *Liberty Global/Ziggo*, paragraph 439.

⁷³³ Form CO, table 6.22.

⁷³⁴ The data on satellite viewers is based on a third party's survey data, wherein respondents identify the means of transmission they use.

TV providers, including Vodafone, to a very limited extent,⁷³⁵ and the Notifying Party has not provided more granular market shares.

- (1035) In light of the market share thresholds indicated in recital (1022), the Commission considers that the stated market data appears to suggest that in the German market for the wholesale acquisition of TV channels the merged entity would not enjoy significant market power. This appears to hold true in the markets for the wholesale acquisition of FTA channels, and Pay TV channels. The market share of the merged entity would be at around [30-40]% for FTA channels and at around [10-20]% for Pay TV channels. The market shares would not differ substantially should the market be segmented by premium Pay TV/basic Pay TV channels or by genre/thematic content. In particular, it does not appear that the Transaction would cause the creation of a duopoly in the wholesale supply and acquisition of Pay TV market, considering the presence of other relevant operators with similar market shares and the increasing importance of OTT Pay TV services. Based on the above, the Commission considers that the Transaction would not significantly impede effective competition in relation to market for the wholesale supply of TV channels in Germany.
- (1036) This conclusion could be different in case of a distinction of the market for the wholesale supply of TV channels between different transmission technologies (cable, satellite, IPTV, terrestrial) and in any case in a situation where the different infrastructures would show limited substitutability from the perspective of the TV broadcasters. However, as already stated in the market definition section (recital (276)), the Commission notes that this distinction is mainly relevant with respect to the other side of the contractual relation between TV broadcasters and retail TV providers, where retail TV providers active in different infrastructures sell TV signal to TV broadcasters. Due to some peculiarities of the German market, already explained at section VII.19, a specific market for the wholesale supply of TV signal transmission has been identified in that respect, where the different infrastructures are generally considered part of separate markets. Therefore, the Commission will assess the effect of the Transaction on the market power of the Parties vis-à-vis TV broadcasters taking into account a distinction of the different transmission technologies in the analysis of the market for the wholesale supply of TV signal transmission. In any case, considering that the two wholesale TV markets are closely interconnected and feature the same players, elements concerning the content side of the contractual relation will be taken into account as well.

2.11.3.2. Market shares in the wholesale TV signal transmission

- (1037) Both Vodafone and Unitymedia are active in the market for the wholesale TV signal transmission, as sellers of TV signals to TV broadcasters. Both FTA and Pay TV broadcasters acquire TV signals on the Parties' cable platforms. Differences between FTA TV and pay TV will be taken into account, where relevant.
- (1038) Furthermore, as explained at recital (1008) the market for the wholesale TV signal transmission is closely interconnected with the market for the wholesale supply and acquisition of TV channels, as they represent the two sides of the same economic and contractual relationships, where the same market players are active but the demand and supply sides are reversed. However, the main competitive concerns in the present Transaction relates to the specific position of the Parties and of the merged

⁷³⁵

See Form CO, Table 6.22

entity as providers of signal capacity to TV broadcasters. Therefore, the Commission will analyse the competitive effects of the Transaction on the market for the wholesale TV signal transmission, taking into account aspects related to the content side of the relationship where relevant, also in light of the concerns expressed by some participants in the market investigation and reported in previous recital (1022).

- (1039) As already stated at recital (1023), the Parties have not provided specific market shares on the wholesale TV signal transmission market. In line with previous Commission's decisions⁷³⁶, they consider as a relevant proxy the national viewership shares and the market shares of the Parties in the retail TV markets. However, the Commission considers that the most relevant indicator of the market position of the Parties in the wholesale market for TV signal appears to be the number of households connected, because this indicator shows the actual reach of each provider of TV signal.⁷³⁷ In this respect, the TV broadcasters, telecom operators and TV distributors participating in the market investigation have confirmed that the number of households served is the most relevant element that affects the bargaining position of providers of TV signal in the negotiations with TV broadcasters, without distinguishing between FTA and Pay TV services.⁷³⁸ Therefore, the Commission will use this indicator to assess the market position of the Parties and of the merged entity in the wholesale TV signal transmission market.
- (1040) As explained at section VII.19, with respect to the wholesale TV signal transmission market the result of the investigation on market definition suggests that, currently, the different retail infrastructures (namely cable, satellite, IPTV and terrestrial) for the distribution of TV channels are not sufficiently substitutable among each other from the point of view of TV broadcasters, considering that currently no infrastructure can reach all customers and that TV channel wholesalers need to reach a maximum number of viewers. From the point of view of TV broadcasters, the different infrastructures would be complementary rather than substitutable. Cable in particular would not be substitutable, especially for MDUs where the cable fee is part of the monthly rent and where satellite dishes are often not allowed.⁷³⁹
- (1041) Limiting the analysis to cable TV only, at national level the merged entity would enjoy a combined share of about [70-80]% in terms of households connected for the whole of Germany in 2017/18. The only relevant competitor would be Tele Columbus, with a market share of about [10-20]%. The market shares of the Parties would not be substantially different if calculated in terms of viewership, both general and limited to Pay TV. The inclusion of IPTV in the relevant product market would not modify substantially the result, considering that the merged entity would have a market share of about [60-70]%. In both cases, the merged entity would be by far the first operator in the market.
- (1042) Adopting a geographic definition of the wholesale TV signal market limited to the coverage of the specific network, Vodafone would have a market share of about [70-80]% in its footprint. Unitymedia would have a market share of about [80-90]% in its

⁷³⁶ Commission's decisions of 30 May 2018 in case No COMP/M7000 – *Liberty Global/Ziggo*, paragraph 460 and of 20 September 2013 in case M.6990, *Vodafone/Kabel Deutschland*, paragraph 275.

⁷³⁷ Commission's decision of 2 April 2003 in Case M.2876 - *Newscorp/Telepiù*, recitals 21, 42 and 186. Commission decision of 30 May 2018 in case M.7000, *Liberty Global/Ziggo*, paragraph 439.

⁷³⁸ Replies to questionnaire Q10, question 36.1 and 36.4; replies to questionnaire Q11, questions 42.1 and 42.4.

⁷³⁹ Replies to questionnaire Q6, questions 12-13; replies to questionnaire Q7, questions 13-14; Questionnaire Q8, questions 13-14. See also above, footnote 119.

footprint. The merged entity would have a market share of [70-80]% in the new, extended footprint. Tele Columbus would have a market share of about [10-20]%.

- (1043) The Notifying Party maintains that, should the relevant product market include only cable TV, there would not be any overlap between the activities of the Parties and consequently the Transaction would not have any effect on the merged entity's market position. The Commission will assess the substantive relevance of this objection – namely whether the absence of actual overlap between the two footprints has any consequence on the qualitative assessment of the effects of the Transaction – at section VIII.C.2.11.3.7. For the limited purposes of the calculation of the relevant market position as a starting point of the competitive analysis, it is to be noted that each Party has a significant market share in its own footprint, around or superior to [70-80]%. After the Transaction, the merged entity would have a market share of nearly [80-90]% in a much larger footprint. While the Commission acknowledges that the Parties' cable footprints do not overlap, the Transaction will merge the relevant position of the two Parties and extend the merged entity's coverage on a much larger, single geographic market, representing a substantial part, in terms of geographic extension and households covered, of the whole Germany. This is to be considered a first, relevant indication, of the market power of the merged entity as supplier of (cable) TV signal to broadcasters and of the effects of the Transaction.
- (1044) In the Response to the Statement of Objections, the Notifying Party has further elaborated on this point, submitting that the Commission would take an inconsistent approach between how it considers market definition and how it examines theories of harm in relation to wholesale TV signal transmission: for market definition, the Commission would exclude non-cable distribution platforms as competitively relevant because they are not considered to be horizontal substitutes for the Parties' retail TV customers, whereas for its competitive assessment, the Commission would consider the combination of the Parties' networks to be competitively relevant despite the fact that they are clearly not horizontal substitutes to one another in the downstream retail TV market. The Notifying Party adds that in order for the Commission to find that the merger will weaken the negotiating position of broadcasters, it must identify some respect in which the Parties are seen as substitutes, not complements, and that would be the case where the broadcasters, in essence, care only about reach, and not about national coverage or the network used. If this were the case, also non-cable distribution technologies would be regarded as substitutes. Therefore, any analysis of the effects of the Transaction on bargaining power should take into account the fact that broadcasters have access to multiple alternative TV distribution methods.
- (1045) The Commission has carefully assessed the Notifying Party's observations in this respect. It is to be noted that in a market including cable and IPTV, the geographic dimension would be national, the Parties' activities would overlap and are currently substitutes also at retail level. In a market including both cable TV and IPTV, the market share of the merged entity would still be superior to [60-70]% at national level, with no comparable competitors.
- (1046) Even assuming a market definition limited to cable, for the purposes of the market definition the Commission has not excluded non-cable distribution platforms only because they would not be considered horizontal substitutes for the Parties' retail TV customers. In its market investigation the Commission focused also on elements directly relevant for the TV broadcasters, such as the product characteristics and the wholesale price. As already stated in previous section VII.19:

- (1) Satellite has not been considered comparable to cable TV because cable TV would be superior in terms of additional services that request a backward channel (catch-up, instant restart, addressable TV), that satellite could offer only via an internet connection⁷⁴⁰ and in terms of wholesale price, because both of different prices and of different structures of the remuneration (payment of technical transmission services for satellite, revenue-based payments for cable);⁷⁴¹
 - (2) Terrestrial TV is not comparable to cable TV because the two products would not be comparable either in terms of coverage or of additional services, as terrestrial TV would not offer interactive TV features.⁷⁴² Furthermore, the two products would not be comparable in terms of wholesale price, as in general, payments for terrestrial TV are based on a fixed amount and considering the low penetration the average price would be higher than for cable TV;⁷⁴³
 - (3) IPTV would not be comparable in terms of take-up and could present issues of bandwidth. However, in terms of pure product characteristics, IPTV could be comparable to cable TV⁷⁴⁴ and, with sufficient speed and bandwidth, internet-based television could represent an alternative to cable TV; this is why the Commission has assessed the Transaction also in a signal market including IPTV. However, most respondents maintain that the two products would not be comparable in terms of wholesale price, mainly because IPTV transmission does not require the payment of feed-in fees.⁷⁴⁵
- (1047) In essence, from the point of view of the TV broadcasters, cable TV transmission would not be substitutable with the other transmission technologies (with the possible exception of IPTV and, considering that it has similar characteristics, OTT TV distribution) not only for its reach and for the limited substitutability for retail customers, but also for some specific technical and economic characteristics. In other words, in the necessary mix of the different transmission infrastructures, TV broadcasters need in particular the cable platform not only for its reach and national coverage (as allegedly the other platforms can have), but also for its specific characteristics that the other platforms do not have.
- (1048) Furthermore, the Commission does not exclude a certain degree of substitutability between the different infrastructures for the transmission of the TV signal. However, in light of the specific conditions of the German market, as confirmed in the market investigation, currently those alternative transmission technologies do not represent a completely viable alternative for TV broadcasters to cable TV for the transmission of the TV signal, in particular for certain MDU customers. In any case, in the competitive analysis the Commission will take into account this, albeit limited, substitutability.
- (1049) It is to be noted that, also assuming for the sake of completeness a TV signal market including all distribution technologies, an element to be taken into consideration is the geographic distribution of the Parties' cable TV activities. As explained, each of Vodafone's and Unitymedia's cable TV network is limited to a specific footprint,

⁷⁴⁰ Replies to questionnaire Q10, question 4.1; replies to questionnaire Q11, question 2.1.

⁷⁴¹ Replies to questionnaire Q10, question 5.

⁷⁴² Replies to questionnaire Q10, question 14.1; replies to questionnaire Q11, question 6.1.

⁷⁴³ Replies to questionnaire Q10, question 15.

⁷⁴⁴ Replies to questionnaire Q10, question 9.1; replies to questionnaire Q11, question 4.1.

⁷⁴⁵ Replies to questionnaire Q10, question 10.

that does not cover the entire interested Federal States. In particular, Vodafone's cable network is located in 13 of the 16 Federal States and covers approximately [50-60]% of households in these Federal States, whilst Unitymedia's cable network is located in the remaining three Federal States and covers approximately [70-80]% of households in those Federal States. Within its own footprint, Vodafone has a market share of [40-50]% in terms of households connected (all technologies included). Unitymedia has a market share of [40-50]% in its own footprint.⁷⁴⁶ After the Transaction, the merged entity's footprint will include [...] households, out of a total of [...] in Germany, that is to say about [70-80]% of the total German households. Therefore, in a footprint spread all across Germany and covering about [70-80]% of German households, the merged entity would have a market share of about [40-50]%. In other words, in [70-80]% of the German territory (in terms of households), nearly [50-60]% households (all technologies included) will be connected by the merged entity's network.

2.11.3.3. Size of cable platforms and market power

- (1050) The Commission considers that there are elements suggesting a positive relationship between the size of a supplier of TV signal transmission capacity and the prices (also including other commercial conditions) it can extract from broadcasters, for the reasons explained in this Section.
- (1051) The participants to the market investigation have stated that the degree of market power of the merged entity, and of retail TV providers in general, in the wholesale TV markets in Germany is directly linked to the number of TV households controlled in Germany and the size and importance of the cable network.⁷⁴⁷
- (1052) One respondent has specified that the larger size of the networks of Vodafone and Unitymedia is the reason why its own financial terms are less favourable with them than with the other, in particular the smaller, cable network operators in Germany.⁷⁴⁸
- (1053) The same participant has submitted an economic analysis on the effects of the Transaction on the CPS (cent or cost per subscribers) payments that it has to pay for the transmission of its TV signal. The participant mainly offers its own pay TV services directly to consumers and receives subscription payments without owning the different transmission technologies to reach the consumer. The analysis focuses on this direct distribution model and on the transmission via the cable network of different network operators. The statement therefore provides a clean like-for-like approach to compare CPS payments within this distribution model among different providers of TV signal. This analysis would confirm that the large providers of cable TV signal such as Vodafone and Unitymedia [...].
- (1054) Another respondent simply stated that the larger the number of supplied TV households by a retail provider of TV services, the bigger the bargaining power vis-à-vis TV broadcasters because TV broadcasters cannot afford to lose/lock-out a significant number of customers. This would apply particularly for advertising-sponsored TV broadcasters.⁷⁴⁹
- (1055) Another participant, a large national FTA and Premium TV broadcaster, has stated that Vodafone and Unitymedia have the strongest bargaining power and obtain prices

⁷⁴⁶ See Form CO, table 6.26.

⁷⁴⁷ Replies to questionnaire Q10, question 36; Questionnaire Q11, question 42.

⁷⁴⁸ Sky's reply to RFI 19, page 11, question 12 [ID 4173].

⁷⁴⁹ United Internet's reply to questionnaire Q11, question 42.4 [ID 4041].

(for TV content and additional features) significantly below the level of the uniform pricing scheme usually applied by the same TV broadcaster to all other retail TV providers.⁷⁵⁰ This implies that Vodafone and Unitymedia are able to obtain better conditions for additional features in the form of more extensive rights or lower prices for comparable bundles of features compared to other providers of TV signal.

- (1056) In general, the participants to the market investigation have confirmed that large TV distributors typically secure better terms and conditions than smaller TV distributors.⁷⁵¹
- (1057) During the market investigation, the Commission received data from five large German broadcasters and two international TV broadcasters on payment streams between these broadcasters and different providers of TV services, their number of subscribers, and information of feature bundles.⁷⁵² In this Decision, the Commission relies on the data for three of these broadcasters. The remaining data was excluded due to confidentiality reasons or because it does not sufficiently disentangle payment streams to and from different retailers of TV services or distinguish between different distribution models.
- (1058) The Commission sought to analyse whether the conditions obtained by different TV retailers from different broadcasters are correlated with the reach of the TV retailer. The Commission has separately analysed the data from each broadcaster. To perform, to the extent possible, a like-for-like comparison of the terms obtained by different TV retailers from a given broadcaster, the Commission has focused on three different measures: (i) feed-in fees received (or, where possible the net amount of feed-in fees and license payments) from TV retailers for the provision of basic TV channels; (ii) payments for additional features; (iii) payments for the provision of Pay TV channels. In each case, the Commission has also taken account of qualitative information obtained from broadcasters regarding the comparability of services and payments. The results of the analysis can be summarised as follows.
- (1059) Firstly, regarding payments for Basic TV channels, the data from one large broadcaster shows a clear relationship, with larger TV retailers obtaining significantly better terms than smaller TV retailers. The data from an international broadcaster that provided data on a channel-by-channel basis provides an unclear picture, with payments varying significantly over time within channels and across channels.
- (1060) Secondly, regarding payments for additional features, detailed information from one broadcaster on the different services and rights provided to different TV retailers and the costs per subscribers indicate that the Parties, as largest TV retailers, obtain either better services/more rights for similar cost per subscriber or lower costs per subscriber for similar services than smaller retailers. Data for an international broadcaster shows again an unclear relationship which varies across channel.
- (1061) Thirdly, regarding cost per subscriber (CPS) for Pay TV channels, the data from one international broadcaster indicates a size relationship, while that of another broadcaster shows an unclear picture which varies by the Pay TV channel provided.
- (1062) In its Response to the Statement of Objections, the Notifying Party submitted that even assuming a positive relationship between the size of a cable network and the

⁷⁵⁰ RTL's reply to RFI 6, page 6, question 2 [ID 3905].

⁷⁵¹ Replies to questionnaire Q10, questions 38 and 38.1.

⁷⁵² The data have been made available in a confidential annex in the data room.

terms extracted from broadcasters, this would not demonstrate any merger effect on the Parties' bargaining power. The Commission would have just relied upon the responses to the market investigation and to empirical evidence, without articulating any coherent theory to explain why the merger would increase market power. There could be different underlying reasons why there may be an observed relationship between TV platform size and buying terms, such as a size threshold, horizontal market power in the downstream retail TV market or investments in value creation, but those reasons would be unrelated to any merger effects.⁷⁵³

- (1063) The Notifying Party has also submitted that the empirical evidence relied on by the Commission would be flawed. In particular, the analysis of payment flows between TV platforms and broadcasters and the separate study just mentioned in previous recital (1053) would not be statistically robust. The analysis would not control for other important drivers of payment terms, as negotiations with broadcasters are complex, multi-faceted agreements, with many factors (such as the quantum and quality of outside options to each negotiating party, the relative skill of the negotiating parties and the value of the contract/features included within the contract) influencing the final payment terms. Moreover, the analysis could not rule out a "size threshold" effect (pivotal buyer theory), which would mean no merger effect. The analysis would be based on a very limited number of observations and finally the Commission's own results would be inconclusive and contradictory.⁷⁵⁴
- (1064) As for the results of the market investigation, the Notifying Party submitted that the statements of the respondents would be unsubstantiated and unfounded. In any case, price comparison would be difficult in complex and multi-faceted negotiations. The simple observation by respondents of a correlation between size and better contractual terms would be insufficient to establish a merger effect on bargaining power in the Transaction. Finally, the Commission would have failed to take into account responses from third parties who have not considered the Transaction to impact their negotiations with the merged entity.⁷⁵⁵
- (1065) In this respect, the Commission notes that it bases its assessment on a series of elements, considered together and in light of the entire set of information gathered in the course of the investigation. Even if some of the elements, if considered individually, would not present a completely straightforward picture, the analysis of the entire set of information gathered (response to the market investigation, economic analysis from third parties and analysis of the market data obtained from market participants) point toward a certain correlation between size and market power of cable networks. The Notifying Party tries to analyse in isolation each piece of evidence, without considering the whole picture emerging from the complete set of information.
- (1066) In any case, with respect to the absence of any theory explaining the "size effect", firstly the Commission relies on the fact that the merged entity would be a larger trading partner for TV broadcasters who have consistently voiced this as a concern. In the absence of a size effect, in particular if there was a threshold effect or an effect whereby a larger unavoidable trading partner would have less bargaining power – as claimed by the Notifying Party, TV broadcasters would have every reason to welcome, not oppose, the Transaction. Moreover, in a case where the results of the

⁷⁵³ Response to the Statement of Objections, pages 167-168.

⁷⁵⁴ Response to the Statement of Objections, pages 168-169.

⁷⁵⁵ Response to the Statement of Objections, pages 170-172.

market investigation show a general correlation between size and contractual terms (that is to say, market power), the Notifying Party has not brought forward any specific and concrete element that could justify a different conclusion, limiting to abstract claims that the size effect could be due to other, generic reasons. In fact, the only empirical analysis produced by the Notifying Party, a study on a past similar merger in Germany does not exclude the existence of a size effect, as discussed further at section VIII.C.2.11.3.4.

- (1067) With respect to the alleged unreliability of the analysis of payment flows between TV platforms and broadcasters, the Commission acknowledges that negotiations between broadcasters and TV platforms are complex and multifaceted; and that there is only a limited amount of data available. It was therefore not possible to control empirically for factors other than size that may affect outcomes in the analysis. Instead, the Commission limited itself to inspecting whether, for terms with individual broadcasters and its TV platforms, there was an apparent (cross-sectional) correlation between individual elements payments (specifically feed-in fees, license fees and payments for additional features) and the relevant measure of platform size for that payment element. The Commission found that for some broadcasters and payment elements there appeared to be correlation between platform size and the relevant payment consistent with a bargaining size effect. The Commission acknowledges that in a similar number of instances no clear correlation was apparent. However, the Commission also has indications that such an absence of correlations may indeed be due to variations in negotiation parameters (for example the extent of additional features negotiated) in the complex negotiations.⁷⁵⁶ Furthermore, the Commission acknowledges that data on existing payments can only examine the relationship between platform size and payments flows within the existing observed range of reach and therefore cannot rule out whether the merged entity, which would be far larger than any TV platform in the data, would cross a threshold beyond which no further effect would be observed. Nevertheless, the Commission considers that the empirical evidence from broadcasters, while in itself not conclusive, is in general consistent with the existence of a certain size relationship. As for the size threshold issue, the question is assessed further in section VIII.C.2.11.3.8.
- (1068) Furthermore, the purpose of the market investigation is to obtain views and information from qualified third parties, who have a direct and specific knowledge of the markets concerned and of their dynamics. The fact that the majority of the participants to the market investigation have confirmed the correlation under discussion cannot be ignored. As for the respondents who would have excluded any effect of the Transaction on the market power of the merged entity, the Commission reiterates that the vast majority has stated the opposite.⁷⁵⁷

2.11.3.4. Increase in market power following the Transaction

- (1069) The Commission considers that the Transaction will further strengthen the market power of the Parties, for the following reasons.
- (1070) Firstly, the result of the market investigation indicated that the Transaction would increase the combined market power of the Parties. One participant to the investigation in particular submitted that, due to the massive increase of Vodafone's

⁷⁵⁶

For example [CONFIDENTIAL]

⁷⁵⁷

Replies to Questionnaire Q6, Questions 34 and 34.1.

customer base, the merged entity will be able to obtain more favourable terms and prices from pay TV broadcasters.⁷⁵⁸

- (1071) The same participant started its analysis from the premise that the wholesale TV signal market is limited to the cable infrastructure. This is because TV broadcasters consider the different transmission technologies as complements, rather than as substitutes, as TV broadcasters need to reach a maximum number of viewers and every TV household has generally only one infrastructure for the reception of TV signal. This implies that TV broadcasters must use all infrastructures in order to reach a maximum number of viewers. In this regard, the Transaction would significantly increase the reach of the merged entity, and thus it would strengthen the market position of Vodafone, which allegedly is already dominant. As a result, TV broadcasters would become far more dependent on the cable TV signal of the merged entity.⁷⁵⁹
- (1072) Similar concerns have been expressed by another participant to the investigation, which pointed out that Vodafone and Unitymedia each hold dominant positions on the markets for wholesale TV signal transmission in their respective footprint. The acquisition of Unitymedia by Vodafone would lead to a significant increase in market coverage and correspondingly an increase in bargaining power of the merged entity vis-à-vis TV broadcasters requesting signal transmission. Vodafone's and Unitymedia's market power would not be constrained by other distribution means, such as IPTV, in particular because the market share of IPTV is very low and practically irrelevant for the supply of MDUs. In essence, the merger would transform regional monopolies into a nationwide monopoly reaching almost the entirety of German households.⁷⁶⁰
- (1073) In general, notwithstanding the relevant bargaining power already enjoyed by the two cable platforms, the vast majority of the TV broadcasters submitted that the merged entity's bargaining power will significantly increase to the extent that they will be able to dictate their prices and other conditions to TV channels.⁷⁶¹ Also all telecommunications operators submitted that the merged entity's bargaining power will significantly increase to the extent that they will be able to dictate their prices and other conditions to TV broadcasters and most of them submitted that the merged entity will have the ability to foreclose access to its platform.⁷⁶² The vast majority of TV broadcasters submitted that if the merged entity were to stop providing access to its TV distribution platform, the effects on their business would be extremely severe.⁷⁶³
- (1074) Secondly, [REFERENCE TO EVIDENCE SUPPORTING THE LIKELYHOOD OF THE INCREASED MARKET POWER OF THE MERGED ENTITY].⁷⁶⁴ [...].
- (1075) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]

⁷⁵⁸ Tele Columbus, submission of 12 November 2018, EU Competitive Assessment Vodafone Unitymedia, page 40 [ID 2974].

⁷⁵⁹ Tele Columbus, submission of 12 November 2018, EU Competitive Assessment Vodafone Unitymedia, pages 41 ff. [ID 2974].

⁷⁶⁰ Deutsche Telekom, submission of 10 October 2018, *Significant impediment to effective competition in German media and telecommunication markets*, pages 34-37 [ID 446].

⁷⁶¹ Replies to questionnaire Q6, question 34; Questionnaire Q10, question 37.

⁷⁶² Replies to questionnaire Q6, questions 57 and 59; Questionnaire Q11, question 43.

⁷⁶³ Replies to questionnaire Q6, question 37.

⁷⁶⁴ [REFERENCE TO INTERNAL DOCUMENT].

- (1076) In its response to the Statement of Objections, the Notifying Party submits that the stated internal document, if *read* in its proper context, would not provide any evidence of increased market power post-Transaction, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]. Moreover, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁷⁶⁵
- (1077) The Commission notes the observations of Vodafone and agrees that future synergies and cost savings are difficult to estimate and substantiate, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]. However, the document confirms that, irrespective of the exact quantification, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]⁷⁶⁶ In light of that, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]
- (1078) To show the absence of effects of the Transaction, as already stated in section VIII.C.2.11.2, the *Notifying* Party has submitted an empirical analysis of the effects of the merger between Unitymedia and KBW on [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁷⁶⁷ [...] This empirical analysis would show that there is not any support to the allegation that the merger entity will have a stronger bargaining power as a result of the increased coverage.
- (1079) On this point, the Commission notes that the dimension of those companies was significantly more modest than the dimension that a merged Vodafone/Unitymedia would have in the cable TV signal market.⁷⁶⁸ One participant to the market investigation also submits that the merger between Unitymedia and KBW brought together cable networks that are smaller in size than those of the Parties in the Transaction.⁷⁶⁹ Moreover, in that case a relevant competitor with a similar dimension remained on the market in Germany (then KDG, now Vodafone), while post-Transaction the remaining competitors on the cable TV market would have marginal dimensions. Finally, also the increment brought about by that transaction was more limited than the present one⁷⁷⁰.
- (1080) Even assuming that the analysis submitted can be relevant for the present purposes, the Commission considers that the results do not run counter the thesis that a similar transaction has positive effects on the market power of the merging parties. [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]
- (1081) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁷⁷¹ [...].
- (1082) In its Response to the Statement of Objections, the Notifying Party contests these observations on a number of grounds.⁷⁷²
- (1083) Firstly, the Notifying Party argues that a comparison [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] does not take account of a multitude

⁷⁶⁵ Response to the Statement of Objections, pages 172-173.

⁷⁶⁶ [REFERENCE TO INTERNAL DOCUMENT]

⁷⁶⁷ Response to the Article 6(1)(c) Decision, annex C.VI.2.

⁷⁶⁸ In particular, Unitymedia was then active in two regions only (North Rhine-Westphalia and Hesse), while KBW was active in Baden-Württemberg only.

⁷⁶⁹ RTL's reply to RFI 6, page 18, question 3 [ID 3905].

⁷⁷⁰ With that transaction Unitymedia expanded its pre-merger subscribers base by around 50%, while in the Transaction Vodafone will nearly double its subscribers.

⁷⁷¹ [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]. See Table A2 in Annex C.VI.2, page 19.

⁷⁷² Response to the Statement of Objections, pages 169-170 and Annex E.3 to the Response to the Statement of Objections.

of factors [...]. The Commission acknowledges this but notes that it followed the Notifying Party's descriptive analysis in this respect and simply [...].

- (1084) Secondly, the Notifying Party argues that the absence of statistically significant effects should lead the Commission to conclude that there is no bargaining size effect. The Commission considers that statistical significance needs to be interpreted more carefully. The point estimates of the empirical analysis under discussion are economically significant, that is, when taken at face value the point estimates are large enough to support the bargaining-size effect. However, with the available data the point estimates are relatively imprecise.⁷⁷³ This statistical imprecision implies that, based on the sample at hand, there is a statistical margin of error around the point estimate that is relatively large, so that the true coefficient could be significantly smaller or larger than the point estimate. [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁷⁷⁴ [...]. Absence of statistical significance therefore should not be considered as proof that the true relationship is zero. Conventional statistical significance levels should instead be interpreted as short-hand statements about the statistical precision of an estimate, rather than proof of the true effect being zero or not, in particular when the point estimates are economically significant. In other words, when economically significant point estimates are statistically insignificant (or only borderline significant) the imprecision of these estimates has to be taken into account in the interpretation. However, this does not mean that absence of statistical significance implies that there is no effect.
- (1085) Thirdly, the Notifying Party argues that the Commission should not exclude [...] as an outlier observation it identified in the control group, as such outliers can convey valuable information and that this data point was not affected by a data or recording error. The Commission maintains that the exclusion of this outlier observation is justified based on the objective fact that [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]. In the Response to the Statement of Objections the Notifying Party has also provided no explanation why [...] would continue to be a reliable proxy for the control group.
- (1086) Fourthly, the Notifying Party argues that [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁷⁷⁵ [...].⁷⁷⁶
- (1087) In conclusion on this point, the Commission considers that the elements stated above represent a first indication that, post Transaction, the merged entity will enjoy a relevant market position vis-à-vis TV broadcasters in the wholesale market for the TV signal transmission. The empirical evidence on the basis of data obtained from broadcasters as well as the analysis based on [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] is consistent with this view, although, due to imprecision of the estimates and limited availability of data, not conclusive in its own right.

⁷⁷³ This may be due to [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].

⁷⁷⁴ The “doubling” of the percentage term comes from the fact that statistical significance uses a two-sided test of the null-hypothesis that the point estimates of this absolute magnitude (either positive or negative) would have been generated by a random sample drawn from a population in which the true coefficient value is zero.

⁷⁷⁵ In 2010, KBW had 1.4 million TV subscribers, compared to Unitymedia's had 2.5 million and KDG's 4.1 million. (Commission Decision in M.5900 LGI/KBW, recital 86).

⁷⁷⁶ [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].

- (1088) The Notifying Party has submitted a series of objections to such conclusion, which in essence can be summarised into three main lines of arguments: (i) TV broadcasters have a strong countervailing buyer power, including because of the German regulatory framework, (ii) the Transaction would not bring any change to the market power position of the Parties, mainly because the two cable networks do not overlap, and (iii) in any case, even accepting the thesis of strong market power of the merged entity, each Party would already be indispensable for TV broadcasters and therefore the Transaction could not have any further negative effect.
- (1089) The Commission has carefully assessed the objections brought forward by the Notifying Party. In order to do so, the Commission has verified whether the current regulatory framework in Germany is such as to prevent, in any case and irrespective of the relative size, the exercise by providers of TV signal of market power vis-à-vis TV broadcasters.

2.11.3.5. The regulatory framework

- (1090) Media law regulation in Germany includes three main provisions that are relevant for the present purposes:⁷⁷⁷
- (a) Providers of TV services are required to use up to one-third of their digital capacity to transmit certain “Must-Carry” FTA channels, in particular those of (i) public broadcasters, (ii) private broadcasters with the highest viewer market share and (iii) regional and local channel broadcasters;
 - (b) A further third of network capacity must be used in accordance with a number of guiding principles that aim to protect media plurality (“Can-Carry” channels). These principles include, inter alia, the adequate consideration of a multitude of broadcasters and a diverse portfolio, for example, by including special interest as well as foreign language programmes;
 - (c) A non-discrimination principle applicable to feed-in terms and conditions.
- (1091) The German State Media Authorities have added that as part of their mandate to enforce the non-discriminatory provision of the German Media Law, they have the possibility to review the Electronic Program Guide (EPG) listing of providers of TV services, both in free-to-air and Pay TV.⁷⁷⁸
- (1092) The Commission notes that these provisions are mainly relevant for FTA TV channels. In particular, the carry obligations are applicable to FTA channels only. As for the non-discrimination principle, its applicability to payments from retail TV providers to TV broadcasters appears limited to payments due by FTA channels.⁷⁷⁹
- (1093) The limited relevance of the applicable media regulation with respect to Pay TV is confirmed by the market investigation, where nearly all informed TV broadcasters and providers of TV services have confirmed that in Pay TV the degree of market power of providers of TV signal is not limited by the relevant German regulation.⁷⁸⁰
- (1094) Furthermore, even with respect to FTA channels the relevant regulation does not seem able to offset completely the possible market power of providers of TV signal. Considering the current capacity of providers of TV signal and the channels’ offer in Germany, only a limited number of channels (mainly public or local) benefit from

⁷⁷⁷ Articles 52, 52(b) and 52(d) of the Interstate Broadcasting Treaty (Rundfunkstaatsvertrag).

⁷⁷⁸ Agreed minutes of the meeting of 22 February 2019 with Die Medienanstalten, page 2 [ID 4533].

⁷⁷⁹ See Form CO, paragraph 6.869 and annex C.VI.1 to the Reply to the Article 6(1) c decision.

⁷⁸⁰ Replies to questionnaire Q10, question 39.2 ; replies to questionnaire Q11, question 45.2.

the Must-Carry obligation.⁷⁸¹ Similarly, Can-Carry provisions are very general and only secure access for certain categories of programmes (niche, foreign language etc.), according to the principles of media plurality, but providers of TV services are free to select the channels in the different categories.⁷⁸² The Notifying Party has confirmed this limited applicability in its Response to the Statement of Objections, but has added that retail TV providers must give prior notice of their programme portfolio, as well as any change to this portfolio, to the relevant state media authority.⁷⁸³ In this respect, the Commission does not consider that this changes the above analysis.

- (1095) Moreover, as the Notifying Party states, [INFORMATION ON BUSINESS STRATEGY AND CONFIDENTIAL CONTRACT INFORMATION].⁷⁸⁴ This implies that the Must-Carry and Can-Carry provisions, although relevant, would not completely prevent large providers of TV signal from using their market power in negotiations where the main subject of discussion is not the simple carriage of the channels, but the availability of additional services and their economic conditions.
- (1096) The German State Media Authorities have confirmed this point and added that this limitation applies also with respect to the non-discrimination principle in the feed-in fees paid by the different TV broadcasters to providers of TV signal: the Media Authorities' power would be limited, in particular because the feed-in fee would just be one element in a complex negotiation that involves different economic flows between TV broadcasters and providers of TV signal. The Media Authorities do not have any power of control or intervention with respect to all those other economic elements of the negotiations, which are assuming increasing importance. OTT services would also not be subject to regulation.⁷⁸⁵
- (1097) In its Response to the Statement of Objections, Vodafone submitted that these additional non-linear services and features are within the control of broadcasters and are increasingly important to retail TV providers. Therefore, the absence of any regulation of the terms of access to these features would strengthen the bargaining position of TV broadcasters, not that of the retail TV providers. In any case, a draft amendment to the relevant regulation in Germany would extend access rights and non-discrimination rules of content providers to non-linear media platforms, that is to say including all OTT providers.⁷⁸⁶
- (1098) In this regard, the Commission notes that in this section the assessment focuses on the relevance of regulation as a counterbalance to the market power of the merged entity. Therefore, the fact that the absence of regulation for certain aspects would favour TV broadcasters rather than the merged entity is not relevant here and will be

⁷⁸¹ According to a respondent to the market investigation, depending on the federal state or the respective region being served by the relevant cable TV network, approximately up to 30 out of more than 300 TV channels on a TV platform may benefit from regulation. The overwhelming majority of TV broadcasters therefore would not be protected by a must-carry obligation. Notably, the must-carry obligation would not apply, in essence, to commercial TV broadcasters. (Deutsche Telekom, reply to questionnaire Q11, question 45.1.1). A national TV broadcaster confirmed that Must-Carry only applies to its SD main channel and not to the remaining seven FTA channels accounting for far more than 50 % of its market share. Therefore, the scope would be so limited that would not be sufficient to negotiate on a level playing field with cable network operators (RTL, reply to questionnaire Q10, question 39.1.1).

⁷⁸² Replies to questionnaire Q11, question 45.1.1.

⁷⁸³ Response to the Statement of Objections, pages 175-176.

⁷⁸⁴ Response to the Article 6(1)(c) Decision, paragraph 337.

⁷⁸⁵ Agreed minutes of the meeting of 22 February 2019 with Die Medienanstalten, para 4 [ID 4533].

⁷⁸⁶ Response to the Statement of Objections, page 176.

analysed further below in the section relating to the countervailing market power of TV broadcasters. As for the proposed amendment of the current regulation to include OTT services, the Commission considers that, although it could help the on-going development of OTT offer, any possible direct effect on the current competitive scenario is difficult to assess, before the adoption of a final, detailed text.

- (1099) In general, the non-discrimination principle, allegedly applicable to all TV services and platforms, could help smaller TV broadcasters to obtain some conditions comparable to the ones applied by providers of TV signal to the larger TV broadcasters. However, this would not be decisive for the present purposes, in case it is demonstrated that retail TV providers enjoy relevant market power also with respect to larger broadcasters.⁷⁸⁷ This could be particularly the case with respect to the Transaction, considering the relevance of the market position of the merged entity in the cable TV sector across Germany, stated above.
- (1100) The results of the market investigation seems to confirm the limited impact of German Media regulation also in FTA TV, with respect to the market power of large TV platforms. Most TV broadcasters and TV distributors have submitted that post-Transaction the market power of the merged entity would only be partially limited by the Must-Carry obligation, the Can-Carry obligation and the non-discrimination principle set forth in the relevant German regulation.⁷⁸⁸
- (1101) In summary, the Commission considers that the current regulatory framework in Germany, although relevant and to be certainly considered as a factor that could partially offset the market power of retail TV providers (for instance preventing total foreclosure of major FTA TV channels protected by carry obligations or the imposition of discriminatory conditions in feed-in fees), does not seem able to prevent, in any case and irrespective of the relative size, the exercise by large retail TV providers of market power vis-à-vis TV broadcasters.

2.11.3.6. The countervailing power of TV broadcasters

- (1102) The Commission has also carefully assessed the Notifying Party's claim that, as already stated in a previous Commission decision, in Germany there would be a relationship of mutual dependency between TV broadcasters and providers of TV signal transmission⁷⁸⁹. Although it is undeniable that retail TV providers – in Germany as in every other country – have a specific interest in obtaining attractive content from TV broadcasters to present competitive offers to TV customers, this in itself cannot prove the absence of market power on one of the two sides of the market. In other words, again the mutual dependency is just an element to be taken into consideration in the specific and concrete assessment of the question under discussion. Moreover, while the situation of mutual dependency can have a certain relevance with respect to major TV broadcasters with premium content, it seems less important for smaller TV broadcasters, whose offer could be easily excluded or neglected by TV retailers.

⁷⁸⁷ According to a respondent to the market investigation, the obligation of non-discrimination of a TV platform operator limits the room for TV platforms to negotiate different prices with different TV broadcasters but does not limit the price as such (Freenet's reply to questionnaire Q11, question 45.1.1 [ID 3998]).

⁷⁸⁸ Replies to questionnaire Q10, question 40.1; replies to questionnaire Q11, question 46.1.

⁷⁸⁹ Commission's decision of 20 September 2013 in case M.6990, *Vodafone/Kabel Deutschland*, paragraph 301.

- (1103) In essence, the question of the relative market power has to be assessed in light of all the relevant elements both on the offer and on the demand side of the market. The Commission considers that, irrespective of the above considerations on the regulatory framework, the natural mutual dependency between broadcasters and distributors or on the necessity of a proper underlying theory to justify the existence of market power⁷⁹⁰, the question of whether the merged entity would have market power is largely an empirical issue that should be investigated by measuring the relationship between firm sizes and bargaining outcomes. In this respect, the Commission has conducted a thorough market investigation to verify the current situation of market power in the wholesale TV signal transmission market in Germany.
- (1104) Firstly, in section VIII.C.2.11.3.3, the Commission takes the view that there is a likely positive relationship between the size of a TV platform and the conditions it can extract from TV broadcasters. Even assuming the existence of a (more or less) pronounced countervailing market power of TV broadcasters, this empirical relationship holds true.
- (1105) Secondly, nearly all participants to the market investigation have stated that already today national broadcasters need to be distributed via each of Vodafone's and Unitymedia's network, in order to reach a viable number of households. Although few respondents confirmed that there exists a mutual dependency between retail TV providers and TV broadcasters (in other words TV broadcasters have a countervailing bargaining power), the majority submitted that TV retailers currently enjoy much more bargaining power.⁷⁹¹ One respondent in particular submitted that large broadcasters own most of the important channels and have a high bargaining power, however a platform having access to almost 40% of the end-customer as the merged entity, will be in the position to decide on the market access.⁷⁹²
- (1106) In its Response to the Statement of Objections, the Notifying Party submitted that the Commission fails to acknowledge a number of responses to the market investigation that state that broadcasters have strong countervailing power.⁷⁹³ In this respect, the Commission notes that in recital (1105) it is clearly stated that some respondents stated that TV broadcasters have a countervailing bargaining power. The Commission has also expressly acknowledged that there is a situation of mutual dependency between TV broadcasters and retail TV providers. However, this does not change the fact that most respondents stated that TV retailers currently enjoy much more bargaining power. In any case, the object of the analysis carried out is exactly to verify whether this situation of natural reciprocal interest is such as to prevent the exercise of a significant market power by large providers of cable TV signal as the Parties and in particular, as the merged entity.
- (1107) In this respect, the Commission has started its analysis from the ability of the two large cable TV providers to impose feed-in fees to TV broadcasters in Germany.
- (1108) In Germany, both private and public FTA broadcasters are expected to pay feed-in fees for the transmission of their TV signal via cable, satellite and DVBT-2. Feed-in fees are calculated on a non-discriminatory basis. The introduction of this payment stream from broadcasters to network operators dates back to the early 1980 and the

⁷⁹⁰ As claimed by Vodafone in its Response to the Statement of Objections, page 177.

⁷⁹¹ Replies to questionnaire Q6, question 33; replies to questionnaire Q7, question 35.

⁷⁹² M7's reply to questionnaire Q7, question 35.1 [ID 2417].

⁷⁹³ Response to the Statement of Objections, page 180.

construction of the cable network by the former monopolist (Deutsche Post). For the present purposes, it is relevant to note that following the substantial changes in the TV sector, in the recent years many public and private broadcasters have ceased to correspond feed-in fees to networks operators. [DETAILS OF CUSTOMERS, PRICING ARRANGEMENTS AND BUSINESS STRATEGY].⁷⁹⁴ [...], it results that other retail TV providers do not receive feed-in fees, from large public as well as private TV broadcasters.⁷⁹⁵ [...]

- (1109) The Notifying Party claims that the fact that certain other retail TV providers do not receive feed-in fees would not in itself demonstrate strong bargaining power of the Parties. Feed-in fees would only be one part of an overall financial settlement between the broadcaster and the retail TV platform, in which payments flow in both directions, due to the interrelation between the infrastructure and the content side. The value of feed-in fees therefore could not be analysed in isolation from these other payment flows. For similar reasons, no inference could be obtained by observing that some retail TV platforms do and some do not charge feed-in fees – all types of payments would need to be taken into account. The fact that the Parties have [DETAILS OF SALES AND PRICING ARRANGEMENTS].⁷⁹⁶ [...]
- (1110) In this respect, the Commission acknowledges that the commercial relations between TV broadcasters and retail TV providers are complex and include different financial flows, in both directions. Nevertheless, the Commission stresses that it has established that there is a positive correlation between the prices (also including other commercial conditions) that a provider of TV signal can extract from broadcasters and its size. The fact that [DETAILS OF SALES AND PRICING ARRANGEMENTS] further accentuates the imbalance existing between large and small providers of TV signal transmission, and confirms the Parties' market power vis-à-vis TV broadcasters.
- (1111) Furthermore, feed-in fees, which are directly connected to the TV signal transmission, are an important element of this complex financial relation,⁷⁹⁷ as also demonstrated by the fact that [DETAILS OF SALES AND CONFIDENTIAL CONTRACT INFORMATION]
- (1112) As for the recent evolution of the payment flows, respondents to the market investigation confirmed that until 2013/2014, the amount of feed-in fees paid to the cable network operators was higher than the amount of fees paid to TV broadcasters for cable retransmission rights, in other words, the TV broadcasters generally were "net payers".⁷⁹⁸ Then, with the introduction of HD television and the possibility to attach additional digital features to the TV signal, including on-demand services, it has been possible for TV broadcasters to provide value-added TV services at a price

⁷⁹⁴ See Form CO, paragraph 6.861 and annex 6.C.IX.4.

⁷⁹⁵ RTL's reply to RFI 6: "*Vodafone and Unitymedia are the only networks that charge feed-in fees at all*" (page 3, question 2 [ID 3905]); ProSiebenSat1's reply to questionnaire Q10, question 23.1 [ID 4058].

⁷⁹⁶ [DETAILS OF SALES AND PRICING ARRANGEMENTS] VG MEDIA, a collecting society, complained that [...]. The Commission notes that this claim concerns a non-merger specific issue, which is outside the scope of this merger review process. [...]

⁷⁹⁷ See Form CO, annex 6.C.IX.4. Deutsche Telekom, in its submission dated 25 January 2019, states that according to available data, feed-in fees have traditionally accounted for approximately 7% of Unitymedia's revenues and 6% of Kabel Deutschland's (Vodafone) revenues. This amount would exceed the share of revenues achieved with Pay TV (5%) (*Detrimental effects of the merged entity's significantly increased bargaining power on the audio-visual value chain*, page 17 [ID 3982]).

⁷⁹⁸ See also replies to questionnaire Q10, question 24; replies to questionnaire Q11, question 38.

level above the low licence fees for simple SD retransmission. This has caused broadcasters' revenues to grow, as of 2014.

(1113) According to the some participants to the market investigation, this rise in revenues for TV broadcasters is connected to the following reasons:

- (a) TV broadcasters have to purchase the rights for additional and new forms of usage themselves from the original right holders. Their increasing revenues are just connected to their increasing costs for the acquisition of those additional rights. Respondents to the market investigation also point to the fact that features for enhanced TV entertainment coming to the market over time such as VoD and catch-up require additional investment in technology;
- (b) Revenues have increased for retail TV providers as well, as customers have migrated from SD and analogue viewing habits to value-added HD subscriptions;
- (c) Retail TV providers' expenses for the traditional feed have remained stable.⁷⁹⁹ In other words, what has occurred is an increase in demand (and revenues) for rights for "new means of distribution" or "new services" and a stagnation or only slight increase in CPS participation for TV broadcasters.⁸⁰⁰

(1114) Therefore, the increase in revenues obtained by TV broadcasters in the last years does not seem to prove that the market power of retail TV providers, and notably of the Parties, has decreased. It appears just a consequence of the general increase of the revenues in the TV sector, mainly due to the development of additional services, to be paid on top of the traditional FTA offer, on which the feed-in fee is based.⁸⁰¹ Therefore, this evolution in payments flow does not seem connected to a change in the relative market power of TV broadcasters and TV retailers.

(1115) In its Response to the Statement of Objections, the Notifying Party submitted that while the reasons just stated may explain why broadcasters have sought to impose these additional revenue streams, they do not change the fact that the broadcasters were able to do so due to their strong bargaining position. Broadcasters' ability to recoup increasing costs for additional rights/investment in technology from retail TV providers, as well as extract the additional revenue from retail TV providers with respect to value-added TV subscriptions would indicate that broadcasters have an increasingly strong bargaining position. There would be an inconsistency in the Commission's line of reasoning, as it would consider the fact that the Parties are able to obtain feed-in fees as a clear indication of substantial market power, but it would not consider the equivalent fact that broadcasters were able to impose their own revenue streams as evidence of their market power.⁸⁰²

⁷⁹⁹ RTL's reply to RFI 6, page 7, question 2 [ID 3905]. See also replies to questionnaire Q10, question 24; replies to questionnaire Q11, question 38.

⁸⁰⁰ Replies to questionnaire Q10, question 24; replies to questionnaire Q11, question 38.

⁸⁰¹ According to public sources, total TV revenues from Pay TV services in Germany passed from 4,008 million Euro in 2013 to 5,015 million Euro in 2018 (<https://www.statista.com/statistics/386608/tv-market-revenues-germany/>) [ID 5076]. See also Vodafone presentation of September 2016, at <https://www.vodafone.com/content/dam/group/investors/downloads/presentations/2016-09-29-Vodafone-Germany-Open-Office-Presentation.pdf>, page 24: "TV business: penetrating stable base with new services [...] continuous increase of Premium TV penetration – Increasing TV ARPU through incremental product take-up" [ID 4958].

⁸⁰² Response to the Statement of Objections, page 177.

- (1116) The Commission considers in general that the fact that suppliers of specific inputs obtain additional payments for new and additional inputs provided – for which the suppliers normally sustain additional costs and investments – cannot be considered evidence of strong countervailing power. As for the alleged inconsistency, the Commission underlines that what is mostly relevant in the feed-in fee issue, is the fact that [DETAILS OF SALES, PRICING ARRANGEMENTS AND CONFIDENTIAL CONTRACT INFORMATION]. In other words, what is most telling is the difference between the Parties as large cable TV providers and other, smaller TV retailers. This is a clear indication of specific market power and this feature does not appear in the corresponding increase in revenues for TV broadcasters, because all TV broadcasters have been able to obtain additional revenues from TV retailers, for the provision of additional services.
- (1117) To prove the countervailing market power of TV broadcasters, the Notifying Party has also submitted some examples of past episodes that would demonstrate the strong bargaining position of TV broadcasters: public broadcasters refusal to pay feed-in fees; [DETAILS OF SALES, PRICING ARRANGEMENTS AND CONFIDENTIAL CONTRACT INFORMATION].⁸⁰³
- (1118) In this respect, the Commission has already stated in this section that retail TV providers have a specific interest in obtaining attractive content from TV broadcasters and that major TV broadcasters with high viewership shares enjoy some degree of countervailing bargaining power. It is worth noting that the episodes referred to by the Notifying Party involves large public or private national broadcasters and some US broadcasters.
- (1119) In any case, with specific respect to the refusal to pay feed-in fees by public broadcasters, the Parties were legally obliged to offer the public channels involved due to the Must-Carry obligation. [DETAILS OF SALES AND CONFIDENTIAL CONTRACT INFORMATION].⁸⁰⁴ [...]
- (1120) With regard to the other instances, as already stated negotiations between broadcasters and TV distributors involve numerous elements and aspects. The fact that in such complex negotiations the Parties [CONFIDENTIAL CONTRACT INFORMATION] cannot prove the absence of market power. In any case, the possibility to negotiate single, important aspects are much more limited for smaller TV broadcasters, which are normally confronted with a take-it or leave-it approach.⁸⁰⁵
- (1121) In its Response to the Statement of Objections, the Notifying Party submitted that this characterisation of the market investigation would be misleading. Actually only [...] respondents would have stated that broadcasters were faced with a “take-it or leave-it” situation [...]. Some respondents would have stated that the broadcaster is the one seeking to impose “take-it or leave-it” terms. In any event, “take-it or leave-it” would not be an accurate description of the Parties’ interactions with smaller

⁸⁰³ See Form CO, paragraphs 6.947-6.950.

⁸⁰⁴ Replies to questionnaire Q10, question 34; replies to questionnaire Q11, question 40. ARD’s reply to questionnaire Q6, questions 33.2 and 50.1 [ID 2476]. See also the Response to the Statement of Objections (page 178), where the Notifying Party rectified some allegations by the respondents to the market investigation, but in any case confirmed the substance of the events. HbbTV is Hybrid Broadcast Broadband TV-signals, that is a development whereby TV broadcasters are able to allow retail TV customers that have a smart TV to directly connect to those broadcasters' own interactive OTT services via a linear broadcasting that encompasses so-called 'HbbTV triggers'.

⁸⁰⁵ Replies to questionnaire Q10, question 35; replies to questionnaire Q11, question 41.

broadcasters, in particular where this arises with respect to feed-in fees for FTA broadcasters, which are regulated under German media law. The Parties would aim to offer a broad range of TV channels to consumers and therefore would have an incentive to negotiate with both large and small broadcasters; it would not be possible to compile an attractive portfolio with a “take-it or leave-it approach”. The Notifying Party has described few examples of articulated negotiations with small broadcasters. Finally, changes to the channel portfolio of a pay TV package could [CONFIDENTIAL CONTRACT INFORMATION] would result in customer complaints.⁸⁰⁶

- (1122) With respect to the result of the market investigation on the “take-it or leave-it” approach, the Commission notes that it received eight meaningful non-confidential replies from smaller TV broadcasters in the questionnaire sent to TV broadcasters.⁸⁰⁷ Five, as pointed out by the Notifying Party as well, expressly stated that broadcasters were faced with a “take-it or leave-it” situation and only three said that this was not the case. In fact, one of these three broadcasters, after having affirmed that “*there is no take-it-or-leave situation*”, added that in general the platforms tell them the acceptable price level and then they try to reach a compromise, noting that the bargaining position of the platforms became tougher over the years.⁸⁰⁸ With respect to the relevant replies from TV platforms, none of them focused on small TV broadcasters but they described the general negotiation process with TV broadcasters.⁸⁰⁹ In fact, one of them explicitly referred to the strong bargaining position of the Parties, that could annul the otherwise relevant market power of TV broadcasters: “*TV broadcasters have significant bargaining power especially vis-à-vis small platform operators and they will try to enforce their preferred terms and conditions. In contrast, Vodafone/Unitymedia have, due to their market power and customer base, a much bigger bargaining power*”.⁸¹⁰
- (1123) As for the [CONFIDENTIAL CONTRACT INFORMATION] examples of [CONFIDENTIAL CONTRACT INFORMATION], the Commission notes that the Notifying Party has reported [CONFIDENTIAL CONTRACT INFORMATION]. In any case, the fact that, in complex negotiations, [CONFIDENTIAL CONTRACT INFORMATION] cannot prove the absence of market power, demonstrated by a series of other, converging elements.
- (1124) As for [CONFIDENTIAL CONTRACT INFORMATION] customer complaints that could arise from changes to the Pay TV package, the Commission notes that this allegation is unsubstantiated and in any case it does not appear to be relevant in case of changes involving minor channels.
- (1125) Furthermore, when analysing the possible countervailing market power of customers, the Commission considers, among others, whether customers could credibly threaten to vertically integrate into the upstream/downstream market.⁸¹¹ In this regard, broadcasters could counter the merged entity’s market power by circumventing TV distributors like the Parties, and directly serving end customers via OTT offers.

⁸⁰⁶ Response to the Statement of Objections, page 178-180.

⁸⁰⁷ Replies to questionnaire Q10, question 35.

⁸⁰⁸ Mainstream Media’s reply to questionnaire Q10, question 35 [ID 3438].

⁸⁰⁹ Replies to questionnaire Q11, question 41.

⁸¹⁰ United Internet’s reply to Questionnaire 11, question 41 [ID 4041].

⁸¹¹ Horizontal Merger Guidelines, paragraph 65.

- (1126) In this respect, in its Response to the Statement of Objections the Notifying Party submitted that the rapid growth of OTT services would be a significant game-changer in terms of the countervailing buyer power of broadcasters. The data would show that already today OTT is very popular (Netflix and Amazon would each reach around 13.5 million viewers, more than the combined cable subscribers of the merged entity); in any case, it would be growing very rapidly and its usage would be likely to expand dramatically in the coming years. According to the Notifying Party, other participants to the market investigation confirmed the relevance of OTT and its rapid increase. OTT services would be relevant for FTA TV but in particular for Pay TV services. Broadcasters and content owners would be already increasingly developing their own direct-to-consumer distribution and would be using this threat in their negotiation with classic TV platforms.⁸¹²
- (1127) The Commission has carefully assessed those observations and the underlying data provided by the Notifying Party and by the other participants to the market investigation. Already in the process of the definition of the relevant market, the Commission has observed that OTT distribution is becoming increasingly relevant in the TV sector in Germany as in many other countries (see section VII.19), although it has still considered necessary to focus the analysis mainly on the supply of TV signal transmission only via cable.
- (1128) In this respect, the Commission mainly refers to the data published by the German State Media Authorities about the current use of OTT as a replacement/complement of linear TV services: according to a study of June 2018⁸¹³, only 0.5% of TV households receive all TV content via open internet only⁸¹⁴. The usage of OTT direct offers seems to be concentrated, at least at present, within the younger generations, in particular, between the age of 14 and 29.⁸¹⁵ With respect to video content (VOD - non-linear TV), the use of OTT is more relevant: about a quarter of the respondents primarily use OTT as their means of receiving video content, while for 68.8% of the respondents, classic TV remains the primary source for audio-visual content. Only 2.1% of the respondents use both OTT and classic TV equally.
- (1129) The market investigation has confirmed the current relatively limited relevance of OTT in Germany, as exclusive and autonomous distribution network for linear TV. The majority of TV broadcasters still considers OTT products as currently complementary to basic linear TV services,⁸¹⁶ and the majority of TV distributors considers that, currently, in case of price increase of the basic TV subscriptions, customers would not switch (or would switch only partially) to OTT services.⁸¹⁷ This view appears [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁸¹⁸ On the other hand, as correctly pointed out by the Notifying Party, the same data shows the rapidly increasing importance of OTT distribution in Germany: 11.7% of respondents stated that they can imagine using OTT as the exclusive means of receiving TV at home. Moreover, it is also correct that some OTT distributors are

⁸¹² Response to the Statement of Objections, pages 181-183.

⁸¹³ “Digitalisierungsbericht Video 2018” (english version), page 38 available at https://www.die-medienanstalten.de/fileadmin/user_upload/die_medienanstalten/Publikationen/Digitalisierungsbericht_Video_2018/Digitisation_2018_video_english_web.pdf [ID 4961].

⁸¹⁴ This phenomenon is called cord-cutting, that is TV households that no longer use any of the classic means of TV transmission such as cable, satellite, terrestrial or IPTV.

⁸¹⁵ “Digitalisierungsbericht Video 2018” (english version), pages 30 and 38 [ID 4961].

⁸¹⁶ Replies to questionnaire Q10, question 21.

⁸¹⁷ Replies to questionnaire Q11, question 23.

⁸¹⁸ [REFERENCE TO INTERNAL DOCUMENTS].

already very popular, at least in the premium TV segment (Netflix, Amazon, DAZN). Similarly, some participants to the market investigation submitted that OTT services could substitute to some extent traditional TV services, in FTA or in Pay TV.⁸¹⁹ The Notifying Party has recently launched an OTT TV service, including both linear TV and VOD content, [DETAILS OF COMMERCIAL STRATEGY].⁸²⁰ In Germany already today several OTT providers aggregate individual channels and stream the linear TV programme via the open internet (see section VII.4.1).

- (1130) As reported by the German State Media Authorities, OTT is gaining ground as the primary means of reception for audio-visual content, with an increase of 6% between 2017 and 2018.⁸²¹ In terms of national viewership, OTT providers passed from 7.3% in 2015/16 to 12.8% in 2017/18. With specific respect to the premium TV segment, OTT viewership passed from 16.8% in 2015/16 to 23% in 2017/18.⁸²² A similar growth rate has been experienced during the same years in terms of subscribers (from 25.3% to 33.4%) and revenues (from 10.6% to 19.1%). It is to be observed that during the same period cable TV market shares decreased, showing that there is a certain interaction between the two distribution platforms, in particular for the premium TV. Some initiatives launched very recently confirm the momentum of OTT services in Germany.⁸²³
- (1131) In substance, the Commission observes that the role of OTT platforms that aggregate (FTA) channels and stream their linear TV package via the open internet, in direct competition with traditional (cable) TV platforms, without additional premium content, is still relatively limited. The picture is different with respect to OTT providers of premium content and in general of additional, non-linear services with respect to basic TV packages, that already have a relevant and rapidly increasing

⁸¹⁹ RTL, submission on 6 November 2018, *M.8864 - Vodafone/Liberty Global assets Germany*, page 11 [ID 5682]; agreed minutes of meeting of 23 July 2018 with ProSieben/Sat.1, paragraph 8 [ID 2658]; Deutsche Telekom's reply to questionnaire Q8, question 25 [ID 2554]. Sky submission of 19 March 2019, *Economic statement on the effects of the notified merger M.8864 Vodafone/Certain Liberty Global Assets*, paragraph 2.4. [ID 4996]; ARD reply to questionnaire Q6, question 23.1 [ID 2476]. Tele Columbus reply to questionnaire Q8, question 25.1 [ID 2385]; Discovery reply to questionnaire Q6, question 23.1 [ID 2405]. See in general replies to questionnaire Q6, questions 23 and 23.1, where a series of Pay TV broadcasters considered that OTT services are substitutes for traditional TV services.

⁸²⁰ See Form CO, paragraphs 6.468-6.476.

⁸²¹ "Digitalisierungsbericht Video 2018" (english version), page 38 [ID 4961].

⁸²² See Form CO, tables 6.61 and 6.62.

⁸²³ See a press release of June 2019 regarding the launch of Joyn (formerly 7TV), the joint venture of ProSiebenSat.1 and Discovery, that offers live streams from over 50 TV channels. Users will be able to view content free of charge and without registration on portable devices as well as on the web and via Smart TVs. The aim is to create a comprehensive German OTT platform for multi-channel content. New features and content will be added continuously and the content of maxdome and the Eurosport Player will be integrated into the platform. This OTT platform is targeting 10 million users in 2 years – underlining the very significant uptake in OTT services that is continuing to take place (<https://www.prosiebensat1.com/en/press/welcome-to-joyn-streaming-platform-with-the-largest-free-tv-and-video-on-demand-offering-for-germany-to-start-in-june-2019>). See also the press release of 13 June 2019 from UEFA, the European governing body for football, regarding the launch a new OTT streaming platform called UEFA.tv, that will initially offer original programmes based on football archives, live coverage of youth, women's and futsal competitions and behind-the-scenes content and interviews, among other things. Viewers will be able to register for free to watch it. Starting next season, the Bundesliga will be the first national league to be represented on the platform: UEFA and the Deutsche Fußball Liga (DFL) have entered into a partnership that provides for a separate channel on the streaming platform with videos from the Bundesliga in addition to European competitions. This service will be available as from the launch. In addition, other archives German content will be available (<https://www.uefa.com/insideuefa/about-uefa/news/newsid=2610427.html>).

penetration in the German market. In the following part of the present decision, where relevant the Commission will distinguish between the first category of OTT operators (OTT linear distributors) and the second category (OTT premium operators).

- (1132) Those elements point towards an increasing importance of OTT distribution in the medium term, as a direct replacement of traditional TV services but especially of non-linear and Pay TV services. However, the Commission still considers that, at present, it is not possible to conclude definitely that TV broadcasters have a real countervailing market power by virtue of the availability of OTT services. At present, as shown by the data presented above, OTT services provided by OTT linear distributors are not a complete substitute of traditional (cable) TV services, but mainly a complement, at least for linear, FTA channels. OTT linear distributors, including FTA channels, without additional premium content, do not yet have a significant diffusion, compared to the cable offer of the Parties. Moreover, what is relevant in the present section is the possibility for TV broadcasters of reaching directly TV customers through OTT offers, to completely by-pass the market power of (cable) TV platforms. The elements just stated appear to show that this possibility is still relatively limited in Germany and therefore its impact on the current market power of cable TV platforms, although undeniable, cannot be considered decisive, in particular for FTA channels. Nevertheless, in a more dynamic perspective, the Commission acknowledges that the situation is evolving rapidly and that in the medium term the development of OTT services could be able to limit substantially the market power of the traditional TV platforms and re-balance the negotiating position of the different actors, in particular in presence of the appropriate market conditions. This appears particularly true for Pay TV services, considering the present diffusion of OTT premium operators, and for non-linear, additional services (VOD), which are already relatively popular in Germany.
- (1133) In conclusion, on the basis of the market investigation and the analysis carried out, the Commission considers that the elements explained seem to show that already today each of the Parties enjoys a significant degree of market power with respect to TV broadcasters in Germany in the wholesale TV signal transmission market in Germany, by virtue of the dimension and quality of their TV networks, in terms of geographic coverage, households connected and additional services offered. Although there is a certain mutual dependency between TV broadcasters and retail TV providers and major TV broadcasters have a certain degree of countervailing bargaining power, the empirical analysis carried out and the market investigation show that the largest cable TV network operators have market power vis-à-vis all TV broadcasters that allows them to obtain favourable contractual conditions from TV broadcasters.

2.11.3.7. The alleged absence of any anticompetitive effects of the Transaction due to the non-overlapping nature of the Parties' cable networks

- (1134) As stated in section VIII.C.2.11.2, the Notifying Party submits that, even assuming a certain market power of the Parties, the Transaction would not bring any change in that respect, mainly because the two cable networks do not overlap: unlike a standard horizontal merger case, there would not be internalisation of any customer switching between the Parties. Moreover, as broadcasters value the widest possible distribution, and so face “increasing returns to scale” from dealing with more TV platforms, a merger of non-overlapping TV platforms would not strengthen their bargaining position, which would require that broadcasters instead face “decreasing returns to scale”.

- (1135) The Commission reiterates that the question of increasing/decreasing returns to scale is ultimately a matter to be assessed on the basis of the specific results of the market analysis and therefore objections based on pure abstract reasoning have to be compared with the result of the specific investigation carried out. In any case, as for the absence of footprints' overlap, both the Commission and other competition authorities have already considered that a merger between non-overlapping cable footprints can have a significant effect on the market power of the network operators at wholesale level.⁸²⁴
- (1136) As for the allegation of the broadcasters' "increasing returns to scale" in dealing with TV platforms, the Commission notes that the Notifying Party refers to a Commission decision where this theory would have been applied.⁸²⁵ In fact, although in that decision the Commission analysed some theoretical economic models presented by the parties, notably in terms of increasing or decreasing returns to scale, it finally assessed the case on the basis of the actual results of the market investigation and the economic analysis carried out in the specific case. The Commission expressly stated that, irrespective of any theoretical models, size effect existed in the relevant markets.⁸²⁶ The Commission is following exactly the same approach with respect to the Transaction: ultimately, the question is whether, in practice, there is a "size effect" in the particular case. Such an effect has been proved to exist, on the basis of the market investigation carried out.⁸²⁷
- (1137) Therefore, the Commission considers that the analysis of the relationship between a TV retailer's size and the commercial conditions it imposes, which is carried out at section VIII.C.2.11.3.3, is relevant for the purposes of establishing the effect of the Transaction on the merged entity's market power.
- 2.11.3.8. The alleged absence of anticompetitive effects due to the indispensability of the Parties
- (1138) The Notifying Party submitted two further argument to contest the finding that the Transaction would increase the market power of the merged entity. Firstly, the Transaction will not bring about any change, as each Party would already be

⁸²⁴ See Commission's decision of 30 May 2018 in case M.7000 – *Liberty Global/Ziggo*. See also: (i) US v. Charter/Time Warner Cable/Newhouse, final judgment of the District Court of Columbia of 9.9.16 and FCC Memorandum Opinion and Order of 5.5.2016; (ii) US case Comcast/TWC, presented in February 2014 and withdrawn in April 2015 because of serious concerns raised by the US Department of Justice and the Federal Communications Commissions (*Economic theories of harm raised by the proposed COMCAST/TWC transaction* (2015), November 9, 2017, by William P. Rogerson).

⁸²⁵ Commission's decision of 21 September 2012 in case COMP/M.6458, *Universal Music Group/EMI Music*

⁸²⁶ Commission's decision of 21 September 2012 in case COMP/M.6458, *Universal Music Group/EMI Music*, recital 521.

⁸²⁷ The limited relevance of the theoretical question of the returns of scale is confirmed by one empirical study on the Pay TV industry in the US, carried out on the basis of the actual analysis of an extended transaction-level data-set of channel licenses fees (*Do Bigger Firms Get Better Terms? Evidence from Pay TV*, by Robert Arons and Alexander Raskovich, April 2016, page 17). On the basis of the direct observation of the data, the study found "*robust evidence that per-subscriber license fees decline with [TV distributors] size, consistent with the bargaining leverage hypothesis*". Although referred to the US, this empirical result is generally informative for the purposes of establishing a direct relationship between the size of a TV cable provider and its market power. See also Deutsche Telekom submission of 25 January 2019, *Detrimental effects of the merged entity's significantly increased bargaining power on the audio-visual value chain*, according to which "[i]n the audiovisual industry, it is a well-accepted 'stylized fact' that larger TV platforms are able to negotiate significantly lower per-subscriber licence fees from suppliers of audio-visual content and services than smaller TV platforms" (page 10) [ID 3982].

indispensable in its footprint. Secondly, even assuming that the merged entity will become indispensable for broadcasters a so-called “pivotal buyer” scenario will occur, which will eventually put the merged entity at a disadvantage vis-à-vis other TV retailers. According to this theory, a large buyer is pivotal when a deal with this operator is necessary for the seller to produce at all; this is the case when the sum of payments from all smaller buyers is insufficient to cover the seller’s fixed costs. While this dependence might appear on its face to benefit the large buyer, in fact the opposite is true: this “pivotal buyer” is bound to cover part of the seller’s fixed cost in order for a deal to be stricken at all. Consequently, the “pivotal buyer” pays a higher price than similar buyers that are not pivotal. Thus, if a merger of two buyers, like in the present Transaction, creates an entity that is pivotal, the seller benefits from increased payments.⁸²⁸

- (1139) In its Response to the Statement of Objections, the Notifying Party added that the Commission would take an inconsistent approach with respect to the indispensability of the Parties, as on the one hand, it would affirm that the Parties are already necessary to broadcasters as evidence that TV broadcasters do not have strong countervailing power, and on the other hand it would argue that a further increase in bargaining power remains possible. If each of the Parties is already necessary to TV broadcasters there could not be any merger specific strengthening of the Parties’ bargaining position as a result of the Transaction. This would particularly apply to FTA broadcasters who need the widest possible distribution given their advertising-funded model. As for smaller (pay) TV broadcasters, they would only need to reach a (comparatively lower) minimum viewership and could take advantage of other distribution methods.⁸²⁹
- (1140) The Commission acknowledges that a series of elements, mentioned in sections VIII.C.2.11.3.3 and 6, indicate that each Party already enjoys a significant degree of market power in its own footprint. Many market participants have clearly stated that already today Vodafone and Unitymedia hold a strong market position in the market for wholesale TV signal transmission in their respective networks. However, this does not imply that the Transaction cannot have any impact on the bargaining position of the merged entity. In previous decisions, the Commission has found that the fact that the merging parties already enjoy significant market power does not imply that the transaction cannot have a negative effect on the competitive conditions in the market. In particular, in cases where the merged entity is (or continues to be) an indispensable counterpart and where customers have limited (if any) ability to switch supplier, the merged entity’s ability to exploit its customers will likely increase.⁸³⁰
- (1141) Most TV broadcasters are already present on both Unitymedia’s and Vodafone’s networks and the vast majority has submitted that the possible loss of just one of the two platforms would jeopardise their business.⁸³¹ However, the channels of some smaller TV broadcasters are distributed on one only of the two networks and the Transaction would see their bargaining position weakened, as they will lose the possibility to access only part of the TV customers located within the footprint of the merged entity, which would cover around [70-80]% of the German households, and

⁸²⁸ See Annex C.VI.2 of the Notifying Party’s Response to the Article 6(1)(c) Decision.

⁸²⁹ Response to the Statement of Objections, pages 174-175.

⁸³⁰ Commission’s decision of 21 September 2012 in case COMP/M.6458, *Universal Music Group/EMI Music*, recitals 430-432.

⁸³¹ Replies to questionnaire Q10, question 29.

will be faced with an all-or-nothing choice.⁸³² In general, comparing the FTA and Pay TV offers of the Parties, there are some TV channels that are broadcast only on one of the two platforms.⁸³³ There is also the case of TV broadcasters that have different offers in the two platforms, in terms of channels distributed and additional services offered.

- (1142) As for the alleged inconsistency in the Commission's reasoning, in that it pointed out, on the one hand, the current indispensability of the Parties for major TV broadcasters and, on the other hand, the possibility of further increase of market power following the Transaction, the Commission considers that this allegation is unfounded. In the section dedicated to the rebuttal of the allegation that TV broadcasters have decisive countervailing market power (section VIII.C.2.11.3.6), the Commission has considered that there is a certain degree of mutual dependency between retail TV providers and major TV broadcasters. In other words, on the one hand, large TV broadcasters need the Parties to distribute the TV signal and, on the other hand, the Parties need large TV broadcasters' content to attract viewers. In the analysis carried out and in light of the concrete elements gathered, the Commission has considered that, notwithstanding this mutual "indispensability", the largest cable TV network operators [CONFIDENTIAL CONTRACT INFORMATION] and considers it as evidence of market power. However, this does not imply that the Transaction could not worsen this situation and further imbalance the relationship between the two sides. In this respect, the Notifying Party [CONFIDENTIAL CONTRACT INFORMATION]. This confirms that the Parties do not currently enjoy an absolute and unrestricted market power, at least with respect to major TV broadcasters. The Transaction can thus increase the market power of the merged entity, also in relation to this category of TV broadcasters.
- (1143) The Commission acknowledges that, in a situation where the market power of the merging parties is already extremely relevant, as it appears in this case, its increment following the Transaction could appear marginal. However, considering that the competitive situation is already compromised, even a limited increment of market power can have significant detrimental effects on the market conditions.
- (1144) With respect to the allegation that smaller TV broadcasters would not really need cable TV distribution and would be able to substitute it with other platforms, the Commission notes that this is not in line with the result of the market investigation, where nearly all TV broadcasters confirmed that they need distribution via cable TV platforms (see section VIII.C.2.11.3.6). In any case, this allegation has nothing to do with the alleged indispensability of the Parties pre-merger, as it would exclude market power in the first place. The Commission has already addressed this question in previous sections VIII.C.2.11.3.2 to 6.
- (1145) As for the pivotal buyer theory, the Commission acknowledges that, according to an economic study, a "pivotal buyer" does not always have increased bargaining power. In this regard, the Notifying Party refers to a single study dated December 2003.⁸³⁴ The Commission reiterates that, ultimately, the question is whether empirical

⁸³² One respondent to the market investigation submitted to be only broadcast on Unitymedia's cable network and to fear that the merged entity would not renew the contract, as at present Vodafone is not interested in the carriage of this channel (German Car TV Programm GmbH's reply to questionnaire Q10, question 29, [ID 3546]).

⁸³³ See Form CO, annex 6.C.IX.3.

⁸³⁴ Alexander Raskovich, *Pivotal Buyers and Bargaining Position*, Journal of Industrial Economics, Vol.51(4), December 2003, quoted in Form CO, footnote 811.

evidence shows an increase in market power of the merged entity in the individual case.

- (1146) In its Response to the Statement of Objections the Notifying Party submitted that finding an empirical correlation without any coherent theory would not be sufficient and that in any case the Commission's empirical evidence would be flawed.⁸³⁵
- (1147) The Commission has already addressed in previous section VIII.C.2.11.3.3 the allegation on the inconsistency and irrelevance of the empirical evidence gathered in the course of the investigation. As for the necessity to find a sound economic theory to rebut the pivotal buyer scenario, the Commission reiterates that it relies on the fact that the merged entity would be a larger trading partner for TV broadcasters who have consistently voiced this as a concern. In the absence of a size effect, in particular if there was a threshold effect or an effect whereby a larger unavoidable trading partner would have less bargaining power – as claimed by the Notifying Party, broadcasters would have every reason to welcome, not oppose, the Transaction.
- (1148) Furthermore the Commission considers that the Notifying Party did not show that – contrary to the results of the market investigation, which showed a relationship between size and market power (and thus confirmed the economic theory according to which increased market size implies increased market power and a merger of two strong players creates an even stronger player) – in this specific situation a different conclusion should be drawn. The Notifying Party did not submit sound and concrete evidence about this conclusion, including on past similar situations in this market and on the specific threshold above which this pivotal scenario would apply, in order to justify a departure from the result of the market investigation.
- (1149) In conclusion, based on all the elements discussed in sections VIII.C.2.11.3.2 to 8, the Commission considers that the Transaction will increase the market power of the Parties in the wholesale market for (cable) TV signal transmission in Germany, vis-à-vis TV broadcasters.

2.11.3.9. Analysis of potential anti-competitive effects due to the increased market power of the merged entity

- (1150) In this section, the Commission will assess in detail whether the increase in the merged entity's market power as a supplier of TV signal is likely to reduce output, choice or quality of TV services for final customers, diminish innovative services or otherwise influence parameters of competition in the relevant markets.
- (1151) In the course of the market investigation, most respondents stated that there could be several detrimental effects on competition caused by the increased market power of the merged entity.
- (1152) Most respondents submitted that as a result of the Transaction, the merged entity will leverage its increased market power to foreclose access to its TV distribution platform by TV channels suppliers.⁸³⁶ Any foreclosure of this kind would have a negative impact on the TV broadcasters business, considering the technical reach of the combined network.⁸³⁷ Also, most TV retailers and telecommunications operators

⁸³⁵ Response to the Statement of Objections, page 175.

⁸³⁶ Replies to questionnaire Q6, questions 35-36.

⁸³⁷ Replies to questionnaire Q6, question 37.

submitted that the merged entity will have the ability to foreclose access to its platform.⁸³⁸

- (1153) One participant to the investigation in particular submitted that due to the massive increase of Vodafone's customer base, the merged entity will be able to achieve more favourable terms as well as prices from Pay TV channels, who in turn may demand higher prices from competing retail TV providers, in order to recoup any losses. According to the respondent, thanks to its increased size, Vodafone will be able to demand some kind of “network exclusivity” to broadcasters, which will further hamper competition as customers of other market players would be foreclosed from such content. The same participant submitted that the increased reach will lead to higher prices for the carriage of the TV signal of TV broadcasters because every TV broadcaster will have to rely on the merged entity's network. Smaller competitors would be put at a competitive disadvantage. Moreover, the merged entity could also have an incentive to refuse the transmission of certain smaller (niche) pay TV channels if these channels were to compete directly with the merged entity's own pay TV offer.⁸³⁹
- (1154) Another participant submitted that the merged entity's increased market power will allow it to charge higher feed-in fees to TV broadcasters, decrease the percentage of the revenue share it pays to suppliers of audio-visual content and services; and/or reduce its per-subscriber licensing fees payable for audio-visual content and services. By increasing the costs of audio-visual content and service suppliers while lowering their revenues, the merged entity will cause suppliers of audio-visual content to increase prices to third parties and/or harm the ability of suppliers of audio-visual content and services to produce and innovate (for all retail TV providers), to the detriment of consumers. Furthermore, the merged entity's increased buyer power will strengthen its market position not only in the procurement of audio-visual content but also with respect to (exclusive) marketing partnerships. This will allow the merged entity to negotiate exclusivity agreements and other restrictive contract clauses in dealings with suppliers of audio-visual content and services. Such restrictive clauses may in particular pertain to the access to (premium) content, innovative technical functionalities, and viewer data, thereby denying competing platform operators access to audio-visual input. The financially advantageous terms would improve the merged entity's leeway relative to its rivals, while the competitors' TV offers would deteriorate due to the foreclosure of content, innovative TV functionalities, and viewer data. This will lead to the merged entity gaining additional market shares at the expense of its downstream rivals. This would allow it to further improve its commercial conditions vis-à-vis companies in the upstream audio-visual value chain and finance investments in content. At the same time, downstream competitors' input conditions would further worsen as a result of their decreasing customer base. This will harm competition on the (upstream) market for wholesale TV signal transmission, on the (upstream) audio-visual content markets, and on the (downstream) retail TV markets to the detriment of consumers.⁸⁴⁰
- (1155) Another participant to the investigation submitted similar observations and added that post-Transaction Vodafone will be able to exert more pressure on TV

⁸³⁸ Replies to questionnaire Q6, questions 57 and 59.

⁸³⁹ Tele Columbus's submission of 12 November 2018, *EU Competitive Assessment Vodafone Unitymedia*, pages 35-43 [ID 2974].

⁸⁴⁰ Deutsche Telekom, submission of 25 January 2019, *Detrimental effects of the merged entity's significantly increased bargaining power on the audio-visual value chain*, page 14 [ID 3982].

broadcasters, gain access to exclusive content or obtain the status of a preferred buyer of content and prevent third party OTT providers from accessing content the TV broadcaster could provide. With respect to the signal transmission, this participant states that Vodafone will have the ability and incentive to hamper OTT services and also high quality products served by TV broadcasters.⁸⁴¹

- (1156) The German Media Association pointed out the increased imbalance between the merged entity and TV broadcasters and submitted that the merged entity could use its cable network for internet transmission and telephony, therefore reducing transmission possibilities for TV broadcasters. Moreover, the merged entity could purchase or even produce own content: The merged entity could give preferential treatment to its own content and other rights holders, like TV broadcasters, could be forced to exclusively distribute their program portfolio via the merged entity. The German Media Association also submitted that the merged entity could decide not to allow TV broadcasters to take advantage of Hybrid Broadcast Broadband TV-signals (HbbTV signals), which enables viewers to access the internet services of broadcasting companies.⁸⁴²
- (1157) Following those submissions, the Commission assessed in detail whether, following the increase in market power as supplier of TV signal, the merged entity could:
- (a) Obtain terms and conditions from broadcasters that ultimately have a negative impact on the access of competing retail TV providers to TV content;
 - (b) Negatively influence the breadth and quality of the programming content offered in Germany;
 - (c) Hamper the emergence of innovative TV services;
 - (d) Hamper the emergence of ATV applications.⁸⁴³

(i) Whether the merged entity would obtain terms and conditions from broadcasters for access to content that ultimately have a negative impact on the access of competing retail TV providers to that very same content

(a) The Notifying Party's view

- (1158) The Notifying Party argues that, even if any hypothetical increase in market power allowed the merged entity to obtain better terms, this would not be sufficient to marginalise the ability of rival platforms to compete because channel acquisition represents a small proportion of a retail TV provider's final price, rival TV platforms could compete with any such discounting with discounts and promotions of their own and rival platforms such as satellite or other cable providers likely have substantial sunk distribution assets.
- (1159) With specific respect to price effects, there would not be any plausible reason to expect a hypothetical increase in the merged entity's relative market power to lead to

⁸⁴¹ RTL's submission of 6 November 2018, *M.8864 - Vodafone/Liberty Global assets Germany* [ID 2813].
⁸⁴² VAUNET's submissions of 1 November 2018, *Further information of VAUNET on its members concerns regarding the notified merger* [ID 2871], and of 5 February 2019, *Accompanying letter of VAUNET to the Commissions questionnaire on activities of TV broadcasters/OTT service providers in Germany* [ID 4074].

⁸⁴³ Addressable TV (ATV) advertising or targeted advertising consists of a new form of TV advertising by which a TV channel broadcasts advertisements distinctively and specifically aimed for each viewer (or ad hoc group of viewers) on the basis of their prior viewing behaviour, rather than the same TV advertisement to a general audience, which is the standard existing business model for TV advertising

any “waterbed effects”⁸⁴⁴: (i) there would not be any reason to assume that broadcasters would seek to directly recoup any loss from negotiating with the merged entity from other retail TV service providers in Germany; (ii) the only mechanisms by which potential “waterbed effects” can operate would be if the merger somehow indirectly weakens the negotiating position of rival TV platforms, and (iii) neither Party is active in content [DETAILS OF COMMERCIAL STRATEGY]. In any case, any hypothetical “waterbed effect” would not be capable of leading to a sufficiently material increase in rivals’ costs to marginalise their ability to compete.

(1160) With respect to non-price effects and the possible foreclosure of rival TV platforms through exclusive or preferential access to TV content, the Notifying Party submitted that the German market is not characterised by exclusive agreements between broadcasters and retail TV providers [DETAILS OF COMMERCIAL STRATEGY]. Even if Vodafone were to pursue such a strategy, it would have neither the ability nor the incentive to achieve exclusivity from broadcasters: (i) Vodafone’s post-Transaction viewership share would remain below the level that would give rise to buyer power concerns; (ii) broadcasters have strong and increasing countervailing power and will be able to resist any attempt by Vodafone to impose exclusivity; (iii) existing regulation would prevent exclusive distribution of FTA channels covered by Must-Carry and Can-Carry obligations; (iv) in return for exclusivity, broadcasters of both FTA and pay TV channels would seek much higher payments [DETAILS OF CAPABILITIES].

(1161) In any case, even in the unlikely event that the merged entity did enter into exclusivity arrangements, this would not lead to foreclosure of rival TV platforms, because: (i) exclusivity could, at most, be relevant only for less popular channels and it is therefore unlikely to result in sufficient switching to the merged entity’s retail TV offering to foreclose rivals, (ii) approximately [70-80]% of total viewers use platforms other than cable and thus, any exclusivity deal would not disproportionately affect any particular rival in the market, and (iii) rival platforms could acquire exclusivity deals of their own or make other improvements to their offerings

(b) *The Commission’s assessment*

(1162) As discussed in sections VIII.C.2.11.3.2 to 8, the Commission considers that as a result of the Transaction the merged entity is likely to increase its market power vis-à-vis TV broadcasters in the wholesale market for the supply of TV signal. In this section, the Commission will assess whether the Transaction can raise competition concerns with regard to the possible foreclosure of competing providers of retail TV services in Germany that could stem from the merged entity’s increased market power at wholesale level.

(1163) In particular and following a series of complaints received during the market investigation (see section VIII.C.2.11.3.9), the Commission has verified whether, post-transaction, the merged entity will be able to leverage its increased customer base in order to negotiate with broadcasters certain exclusivity deals for premium content. This strategy could result in the foreclosure of competing providers of TV

⁸⁴⁴ According to the theory of the “waterbed effects”, more advantageous terms of trade for larger or otherwise more powerful buyers could lead to worse terms for their less powerful rivals (R. Inderst, T. Valletti, *Buyer Power and the Waterbed effects*, in *The Journal of Industrial economics*, 1, 2011, page 1).

services (irrespective of the transmission technology), whose TV offering's attractiveness would be reduced as a consequence of the potential exclusivity agreement.

(1164) As a starting point, the Commission notes that the German market is not characterised by exclusive agreements between broadcasters and retail TV providers. On the contrary, TV channels that own the exclusive right to broadcast premium content are generally available across the entire spectrum of TV distributors in Germany. For example, Sky, the main provider of premium Pay TV services in Germany, is currently available via all main TV distributors (Vodafone/Kabel Deutschland, Unitymedia, Deutsche Telekom, TeleColumbus, etc.). Customers that wish to subscribe to a Sky TV package need only pay an extra fee to access Sky's content.

(1165) The question is therefore whether the entity's increased bargaining position would allow it to negotiate agreements for the exclusive broadcasting of certain TV channels or content. In particular, the Commission will focus on the German football league (Bundesliga), the most important sports event in Germany, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]. However, the same considerations apply to other sports events or popular content (such as TV shows or films), [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]

The possibility of exclusive acquisition by the merged entity of premium channels/content

(1166) In this regard, post-transaction, the thesis put forward by certain third parties is that the merged entity could leverage its increased market power vis-à-vis broadcasters in Germany to offer exclusive access to certain popular content. Unlike Sky, the merged entity could limit the offering of such exclusive content or channels to its own TV customers. Unable to access popular content and channels that were before widely available across TV platforms, competing providers of TV services could be driven out of the market.

(1167) The Commission notes that in order to monetise the exclusive broadcasting of TV rights (and in particular sports), it is of utmost importance for a TV distributor to have the largest possible reach in terms of viewers. A national or almost-national coverage is indeed necessary in order to recoup the costs associated with the purchase of the exclusivity rights. According to the [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS],⁸⁴⁵ [...]

(1168) Certain respondents to the market investigation confirmed that there is a positive relationship between the size of a retailer's customer base and its ability to profitably recoup the purchasing price for exclusive rights. According to Deutsche Telekom, "[c]ontent exclusivity will be particularly harmful in the case of rights for premium live sport events such as the Bundesliga, currently owned by Sky and Eurosport – rights that are priced according to a lump sum and thus become relatively cheaper the bigger the customer base (gets) –, as the ability to offer premium sports is a significant source of product differentiation in order to attract customers."⁸⁴⁶

(1169) The Commission has thus assessed in the first place whether, post Transaction, the merged entity's increased size and market power vis-à-vis premium TV channels

⁸⁴⁵ [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]

⁸⁴⁶ Deutsche Telekom's reply to questionnaire Q8, question 54.1 [ID2554]

broadcasters/rights holders could allow Vodafone to force those broadcasters to grant exclusive rights.

- (1170) In this respect, competing providers of retail TV services have expressed some concerns that the merged entity will be able to gain exclusive access to content, and leverage that content to their detriment.⁸⁴⁷
- (1171) For example, Tele Columbus explains that “[d]ue to its higher market potential and its increased technical coverage, it will be harder for rights holders, but also for operators of TV channels, not to accept the demands raised by the merged entity during contract negotiations. This will in particular become apparent where the merged entity will demand exclusive rights for the usage of the respective content.”⁸⁴⁸
- (1172) Another respondent complained that the merged entity would be able to exclude competitors from the purchase of premium content. Telefónica explains that “[s]ince the proposed transaction will strengthen Vodafone’s ability and incentive to negotiate exclusive deals for audio visual content . . . , it will allow Vodafone to exclude competitors from opportunities to purchase such content on a non-exclusive basis. In addition, the chances of competitors to purchase exclusive content themselves is significantly reduced.”⁸⁴⁹ Telefónica goes on to stress that the Transaction is likely to raise barriers to entry as well, resulting in reduced choice for the end customer. “These factors will not only put existing competitors to a disadvantage but also increase market entry barriers significantly for players that consider entering the retail TV market on a stand-alone basis or in cooperation with a third party, leaving consumers with less choice.”⁸⁵⁰
- (1173) According to [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS],⁸⁵¹ [...]. Currently, Sky holds the majority of the exclusive rights to broadcast the Bundesliga, with Eurosport having the right to transmit certain limited events (Friday matches). The current licence that Sky and other broadcasters hold for the exclusive distribution of the Bundesliga covers the four-year football season from 2017/18 to 2020/21. According to online sources,⁸⁵² a new tender covering the broadcasting rights for the next four-year football season will start during the summer of 2019 and will be complete around April 2020.
- (1174) The Commission notes that Sky, the main retailer of premium sports rights in Germany and the holder of the Bundesliga rights, is highly reliant on each of the Parties for the distribution of its premium sports channels and this situation would increase after the Transaction. [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁸⁵³ [...] ⁸⁵⁴
- (1175) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]⁸⁵⁵ Similarly, [DETAILS OF SALES INFORMATION AND PRICING ARRANGEMENTS]

⁸⁴⁷ Replies to questionnaire Q8, questions 54.1 and 58.1.

⁸⁴⁸ Tele Columbus's reply to questionnaire Q8, question 54.1. [ID 2385].

⁸⁴⁹ Telefónica's reply to questionnaire Q8, question 54.1. [ID 2437].

⁸⁵⁰ Telefónica's reply to questionnaire Q8, question 54.1. [ID 2437].

⁸⁵¹ [REFERENCE TO INTERNAL DOCUMENTS].

⁸⁵² <https://media.sportbusiness.com/news/latest-bundesliga-tender-to-dominate-the-german-market-in-2019/> [ID 5073].

⁸⁵³ [REFERENCE TO INTERNAL DOCUMENTS].

⁸⁵⁴ [REFERENCE TO INTERNAL DOCUMENTS].

⁸⁵⁵ [REFERENCE TO INTERNAL DOCUMENTS].

Parties' revenues associated to Sky's Bundesliga's channels amounted [DETAILS OF SALES INFORMATION AND PRICING ARRANGEMENTS], out of a total revenue of [DETAILS OF SALES INFORMATION AND PRICING ARRANGEMENTS]. This means that in 2016 the Parties controlled access to [DETAILS OF SALES INFORMATION AND PRICING ARRANGEMENTS] of Sky's Bundesliga's customers, and to [DETAILS OF SALES INFORMATION AND PRICING ARRANGEMENTS] of Sky's Bundesliga's revenue. However, as underlined by the Notifying Party in its response to the Statement of Objections, [DETAILS OF SALES INFORMATION AND PRICING ARRANGEMENTS]⁸⁵⁶

- (1176) Therefore, the Commission considers that it is unlikely that Sky would agree to an exclusive agreement with the merged entity, which would imply a loss of a substantial part of its revenues from the other distribution platforms. The “dependency” mentioned in the described document refers to the fact that Sky would not exclude cable TV distribution, rather than to the fact that it would be ready to exclude the others platforms available in Germany. Furthermore, Sky is an international player and by far the major Pay TV service provider in Germany, with a multi-platform business model, which provides it with a certain countervailing buying power in its negotiation with the Parties and, in future, with the merged entity.
- (1177) However, the Commission has also verified whether the merged entity could reasonably follow a strategy aimed at gaining exclusive access to other channels/content, irrespective of the relationship with Sky, as in this case the merged entity could be negotiating with TV broadcasters/rights holders with different business models and with limited, if any, countervailing market power vis-à-vis the Parties.
- (1178) In general the Commission considers that Vodafone could have the financial wherewithal to bid for exclusive sports rights. As a matter of fact, the Commission notes that TV distributors and broadcasters often balance the financial burden of acquiring exclusive broadcasting rights with the benefit of achieving additional revenues from new customers switching to their TV platform. In this regard, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]⁸⁵⁷
- (1179) In its Response to the Statement of Objections, the Notifying Party submitted that, even assuming that the increased subscriber base of the merged entity would improve the economics of distributing content exclusively on Vodafone's own platform, the benefits would not outweigh the considerable costs of pursuing an exclusivity strategy, for the following reasons:⁸⁵⁸
- (a) The costs of pursuing this foreclosure strategy would be high. Taking Bundesliga as an example, the merged entity would need to enter the market for the acquisition of content rights and create a sports channel from these rights. This would be [DETAILS OF COMMERCIAL STRATEGY]. The merged entity would have to incur the full cost of acquiring the exclusive Bundesliga rights, for which it would likely have to outbid Sky and others. In other words the cost would reflect the revenues that could be achieved from

⁸⁵⁶ Response to the Statement of Objections, page 188 and Annex E.5 to the Response to the Statement of Objections.

⁸⁵⁷ [REFERENCE TO INTERNAL DOCUMENTS].

⁸⁵⁸ Response to the Statement of Objections, pages 197-199 and Annex E.1 to the Response to the Statement of Objections (pages 14-17).

distribution to all Bundesliga subscribers, despite the merged entity itself only accounting for about [DETAILS OF CUSTOMER NUMBERS] of 2.2 million Sky Bundesliga subscribers. This would leave an additional [DETAILS OF CUSTOMER NUMBERS] current Bundesliga subscribers who would have been factored into the cost of the rights, and which the merged entity would therefore need to offset. The only way for the merged entity to do so, whilst maintaining exclusivity for their own cable platform, would be to attract these subscribers to switch their TV (and potentially broadband) service to the merged entity;

- (b) The benefits of pursuing this foreclosure strategy would be limited and uncertain. In order to have the incentive to foreclose, the merged entity would need the number of switching customers to be large enough that these benefits outweigh the considerable forgone profit on any Bundesliga customers who are lost because they decide to remain with their existing TV provider. Since these forgone revenues are likely to be substantial, a positive incentive to foreclose would require this proportion of switching customers to be large. However, on cable only [DETAILS OF CUSTOMER NUMBERS] other Bundesliga subscribers would be available but a certain proportion would be associated with MDU contracts, where switching is complex and sometimes unconnected with premium TV availability. Of course another option would be to sublicense the Bundesliga content for distribution over satellite (and thereby recoup a proportion of the revenues accounted for by those satellite Bundesliga subscribers), but in this case the foreclosure strategy would be less evident.
- (1180) The Commission notes that, in principle, the purpose of the broadcasting of exclusive TV channels or content is usually customer retention or the acquisition of TV customers of competitors. The merged entity would have a substantial pool of potential customers within its cable footprint that could theoretically switch to the merged entity, should it offer exclusive content. In fact, each of the Parties serves only approximately [40-50]% of customers located within their respective cable footprint; post-transaction, the coverage of the merged entity's cable network would be approximately [...] million households, which is almost [70-80]% of the total [...] million TV households in Germany. Moreover, Vodafone is active also as OTT linear distributor outside its cable footprint, so that its exclusive offers could reach also non-cable customers. Therefore, the observations of the Notifying Party on the limited possibility of acquiring new customers, although relevant, are not completely convincing.
- (1181) The Notifying Party has in the past analysed the switching patterns of customers confronted with exclusivity deals. [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS],⁸⁵⁹ [...].⁸⁶⁰ [...].⁸⁶¹
- (1182) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁸⁶²
- (1183) The Commission therefore considers that, although it could not be excluded that the merged entity would have the ability to engage in a strategy of acquisition of exclusive channels or content, it is doubtful that the merged entity would have the incentive to do that. In particular, it appears that such a strategy would imply high

⁸⁵⁹ [REFERENCE TO INTERNAL DOCUMENTS].

⁸⁶⁰ [REFERENCE TO INTERNAL DOCUMENTS].

⁸⁶¹ [REFERENCE TO INTERNAL DOCUMENTS].

⁸⁶² Response to the Statement of Objections, pages 196-197.

implementation costs and uncertain beneficial results. In any case, to further assess the issue, the Commission has also reviewed the internal documents of the Parties in this respect.

The Parties' internal documents on premium channels/content acquisition

- (1184) The Commission [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].
- (1185) As far as Unitymedia is concerned, internal documents of Unitymedia highlight [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁸⁶³
- (1186) Internal documents of the Notifying Party suggest [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS],
- (1187) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS],⁸⁶⁴ [...] ⁸⁶⁵ [...] ⁸⁶⁶ [...]
- (1188) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENT] ⁸⁶⁷ [...]
- (1189) Moreover, internal documents of [REFERENCE TO CONTENTS OF INTERNAL DOCUMENT] ⁸⁶⁸
- (1190) In its Response to the Statement of Objections, the Notifying Party submitted a series of explanations regarding the referred evidence and [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] ⁸⁶⁹
- (1191) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] ⁸⁷⁰
- (1192) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] ⁸⁷¹
- (1193) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] ⁸⁷²
- (1194) With reference to Unitymedia, the Notifying Party submitted that Unitymedia considered [DETAILS OF BUSINESS STRATEGY] This would be demonstrated by a series of documents:
- (a) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENT] ⁸⁷³ [...] ⁸⁷⁴
- (b) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENT] ⁸⁷⁵
- (1195) It is to be noted that [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]
- (a) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]; ⁸⁷⁶
- (b) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]. ⁸⁷⁷

⁸⁶³ [REFERENCE TO INTERNAL DOCUMENTS].

⁸⁶⁴ [REFERENCE TO INTERNAL DOCUMENTS].

⁸⁶⁵ [REFERENCE TO INTERNAL DOCUMENTS].

⁸⁶⁶ [REFERENCE TO INTERNAL DOCUMENTS].

⁸⁶⁷ [REFERENCE TO INTERNAL DOCUMENT].

⁸⁶⁸ [REFERENCE TO INTERNAL DOCUMENT].

⁸⁶⁹ Response to the Statement of Objections, pages 194-197 .

⁸⁷⁰ Annex E.10 to the Response to the Statement of Objections, page 33.

⁸⁷¹ Annex E.11 to the Response to the Statement of Objections, page 9.

⁸⁷² Annex E.6 to the Response to the Statement of Objections, pages 12 and 14.

⁸⁷³ Annex E.8 to the Response to the Statement of Objections, page 4.

⁸⁷⁴ Annex E.9 to the Response to the Statement of Objections.

⁸⁷⁵ Annex E.8 to the Response to the Statement of Objections, page 4.

⁸⁷⁶ Annex E.7 to the Response to the Statement of Objections, slide 9.

⁸⁷⁷ Annex E.4 to the Response to the Statement of Objections, slides 14 and 41.

(1196) In light of this contemporaneous evidence, the Commission [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]

(1197) Therefore, also in light of the other evidence and observations above discussed, the Commission considers that it cannot be concluded that the merged entity would have the incentive to leverage its increased customer base in order to negotiate with broadcasters certain exclusivity deals for premium content in order to foreclose competing providers of TV services.

The possible effects of a hypothetical exclusive acquisition strategy

(1198) For completeness, the Commission has also verified whether such a hypothetical strategy could have significant anti-competitive effects, in particular by foreclosing rival TV platforms through exclusive or preferential access to TV content with a detrimental effects on consumers.

(1199) In this respect, the Notifying Party submitted that, even if exclusivity were possible, the merged entity's strategy would not lead to the foreclosure of competing retailers of TV services. This would be because exclusivity would only concern less popular channels, because [DETAILS OF CUSTOMER NUMBERS] of viewers that currently are customers of other TV distributors would not be impacted, and because rival platforms could acquire exclusivity deals of their own or make other improvements to their offerings.

(1200) The Commission has already clarified (see recital (1180)) that it cannot exclude that exclusivity could also cover popular channels and content, as the merged entity could have a pool of potential customers within (and partially outside) its cable footprint that could theoretically switch to the merged entity, should it offer exclusive content.

(1201) On the other hand, [...] on the switching patterns of customers confronted with exclusivity deals [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁸⁷⁸

(1202) Furthermore, even assuming that minor TV retailers would not be able to deploy effective counterstrategies to eliminate the effects of a hypothetical foreclosure strategy, there is at least one competitor – Sky – that would be able to compete with the merged entity in the acquisition of premium TV rights and to pursue its business model of multi-platform distribution. This would attenuate the effects of the merged entity's hypothetical foreclosure strategy, as also minor TV retailers could broadcast a series of relevant premium channels and content, via the Sky package.

(1203) Therefore, the Commission considers that it appears unlikely that a hypothetical foreclosure strategy of the kind described above could have significant anti-competitive effects, in particular by foreclosing rival TV platforms through exclusive or preferential access to TV channels and/or content, with a detriment to consumers.

Conclusion

(1204) In conclusion, for all the reasons explained in this section VIII.C.2.11.3.9(i), the Commission considers that, even if the Transaction would likely lead to the increase in the merged entity's market power in the market for the wholesale supply of TV signal, it is not possible to conclude that, as a result of such increase in market power, the merged entity would be likely to obtain terms and conditions from broadcasters and TV rights holders, in the form of exclusivity deals, that ultimately

⁸⁷⁸

[REFERENCE TO INTERNAL DOCUMENT].

would have a negative impact on the access of competing retail TV providers to TV channels or content.

(ii) Whether the merged entity would negatively influence the breadth and quality of the TV offer in Germany

(a) The Notifying Party's view

- (1205) The Notifying Party submitted that the merged entity will not have either the ability or the incentive to refuse to transmit certain TV channels. Such a theory of harm would only be expected to arise in vertical mergers which may change the merged entity's ability to source inputs from its own upstream division, as opposed to its upstream competitors, which would not be applicable in this Transaction.
- (1206) In any event, the merged entity will have no ability to engage in such a foreclosure as there would not be any increase in the merged entity's relative bargaining power as a result of the Transaction.
- (1207) The merged entity will have no incentive to foreclose broadcasters by refusing to transmit their channels, as the merged entity will not have its own competing channel/content offering [DETAILS OF BUSINESS STRATEGY]. Moreover, the merged entity will not be able to recapture forgone revenues from feed-in fees and/or forgone retail margins on downstream customers (who churn in response to the reduced channel offering) by increasing advertising or other revenues derived from its (non-existent) own channels/content.
- (1208) Even in the highly unlikely event that the merged entity did vertically integrate into channel/content production, there would not be any risk of anti-competitive foreclosure. The merged entity would still be incentivised to offer a rich package to its customers, which means that it would prefer to include third party content/channels.
- (1209) Moreover, the merged entity would have no incentive to foreclose small broadcasters either, because the expansion of high quality content increases the pressure on retail TV providers to obtain an attractive range of such content in order to compete for and retain customers. In any case, even in the highly unlikely scenario that certain smaller channels were not transmitted by the merged entity, this would not have a negative impact on consumers, given that these (by definition) are not particularly popular channels and are also likely to be able to reach their (limited) viewership by other means.
- (1210) Finally, the merged entity would not have the ability or the incentive to engage in other strategies aimed at hampering additional services to the disadvantage of TV broadcasters or at degrading the viewer experience of TV broadcaster (such as EPG).

(b) The Commission's assessment

- (1211) The Commission notes the observation of the Notifying Party that customer foreclosure strategies are typical of TV platforms that are vertically integrated in the upstream content/channel market, as such strategies harm rival channels in that they reduce their viewership which makes them less attractive for advertisers and in turn reduces their revenues. Rival channels that are put at a disadvantage as a result of such strategies may not be able to compete with the integrated platform's channels as aggressively as they would absent foreclosure. In this respect, the Commission recognises that this specific incentive would be absent in the present Transaction but has verified whether this strategy could nonetheless be adopted by the merged entity in consideration of other, different benefits that the merged entity could obtain. Considering the absence of vertical relationships with the content/channels markets –

where the merged entity is not active – the Commission has notably focused on the possible negative impacts that any such strategy would have on the breadth and quality of the TV offer for final consumers in Germany.

- (1212) As was established in section VIII.C.2.11.3.4, post-Transaction broadcasters would need to be distributed via the merged entity’s cable network in order to reach their viewers and in order to attract advertisers. Moreover, as already established in the same section, the Commission considers it likely that the Notifying Party will, as a result of the Transaction, enjoy increased market power vis-à-vis TV broadcasters, for the transmission of TV signal on its cable network, which gives access to a substantial part of the German market. This conclusion is based on the analysis of the current conditions in the involved markets and has been confirmed by the respondents to the Commission's market investigation.

The merged entity could foreclose access to its platform

- (1213) During the market investigation the vast majority of the TV broadcasters and of the telecommunications operators submitted that as a result of the Transaction, the merged entity would have the ability to foreclose access to its TV distribution platform to TV channel suppliers.⁸⁷⁹ In particular, it has been submitted that total foreclosure could prove to be difficult with respect to the most relevant FTA TV channels, considering both the regulatory obligations and the necessity to include the most popular channels in the merged entity’s offer, in order to attract a sufficient audience. Similarly, with respect to pay TV, the only must-have channels would be the ones offering premium content (national and international football) and, therefore total foreclosure of those Pay TV channels could prove to be difficult. On the contrary, nearly all participants to the market investigation agreed that the merged entity could easily deny access to its platform to small TV channels, both FTA and pay TV, without any particular consequence on its business. It has been submitted that smaller pay TV channels are a “nice to have”-product, but are not vitally important to TV platforms’ businesses and therefore they have no significant leverage against the platforms, except for the limited attractiveness of their programs and brands to a fraction of the platforms customers.⁸⁸⁰ It has also been submitted that total or partial foreclosure could be the result of disagreement on contractual conditions: there would be a significant risk that in case of not acceptance of the conditions imposed by the merged entity, the channels would no longer be distributed, totally or partially (for example, not all channels of a given broadcaster; only SD, not HD quality; worse positioning on the Electronic Program Guide - EPG).⁸⁸¹
- (1214) In this respect, the Commission notes that, as stated at recital (1141), already today some smaller TV channels are broadcast on one only of the two networks and other TV broadcasters have different offers in the two platforms, in terms of channels distributed and additional services offered.⁸⁸² Already before the Transaction

⁸⁷⁹ Replies to questionnaire Q6, questions 35 and 35.1; replies to questionnaire Q8, questions 59 and 59.1.

⁸⁸⁰ RTL’s reply to questionnaire Q6, question 35.1 [ID 2425].

⁸⁸¹ QVC’s reply to questionnaire Q6, question 35.1 [ID 2360].

⁸⁸² See Form CO, annex 6.C.IX.3. There is not a clear definition of large and small TV channels. The main drivers for the distinction are audience shares and content popularity. In this respect, while it is possible to identify with a certain precision major TV channels and TV broadcasters (in FTA, the public broadcasters’ main channels and some large private broadcasters’ channels; in Pay TV, mainly Sky’s premium channels and some other channels with very popular content), it is more difficult to really identify smaller TV channels, as any specific audience or turnover threshold could be arbitrary. In any

Vodafone has the ability to exclude and/or restrict access to its cable platform. It has control over what linear channels it carries (subject to must carry obligations for major broadcasting channels) and can also decide what non-linear content TV broadcasters can make available on its platform and what product innovations TV broadcasters can introduce. The only relevant limit seems to be related to the positioning in the EPG guide, which has to be non-discriminatory. However, although relevant, this limitation is related to just one aspect of the TV offer and does not seem to completely exclude the ability of the merged entity to use other significant levers as SD/HD, non-linear services. This ability cannot but increase following the Transaction, on the basis of all the elements discussed in section VIII.C.2.11.3.8.

- (1215) With respect to the possible exclusion of major (public or private) TV channels, as stated above the results of the market investigation seem to suggest that the merged entity will have less room of manoeuvre. Firstly, some major TV channels cannot be subject to total foreclosure due to their must carry status. Secondly, as explained in section VIII.C.2.11.3.6 the most popular channels enjoy some form of countervailing market power, so that a total exclusion could not be a likely option for TV platforms.
- (1216) However, neither of the observations stated in the previous recital is applicable to partial foreclosure. [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS AND CONFIDENTIAL CONTRACT INFORMATION].⁸⁸³ [...] As explained in sections VIII.C.2.11.3.3 to 6, this is directly linked to the market power of the merged entity, that will increase following the Transaction.
- (1217) In its Response to Statement of Objections, the Notifying Party submitted that it would not be true that the merged entity could easily deny access to small FTA channels, as certain among them are protected by media regulation. In any case, according to the Notifying Party, even where the merged entity could deny access to small FTA and Pay TV channels, this would not result in their total foreclosure: by definition, smaller channels would not need ubiquitous distribution in order to be viable, since they can achieve the minimum viewership they require through narrower distribution. This would be particularly true for Pay TV channels, where Sky would be the largest player and a clear alternative to distribution by the merged entity, as confirmed by the market investigation. Moreover, smaller broadcasters' options would be increasing as alternative distribution methods, in particular OTT, continue to grow.⁸⁸⁴
- (1218) With respect to partial foreclosure of all TV channels, in the Response to the Statement of Objections the Notifying Party submitted that the non-discrimination principle would ensure that all broadcasters receive equal treatment and therefore small channels would benefit from the bargaining position of large broadcasting groups. Moreover, the Parties would not have the ability to impose worse terms to broadcasters. In any case, according to the Notifying Party, as the Commission considers that Vodafone already has the ability to decide what product innovations TV broadcasters can introduce on its platform and that [DETAILS OF CAPABILITIES] , there would not be any increase following the Transaction. Even

case, for the purpose of the present decision, the Commission considers that the notion of small TV channels, as opposed to other channels having popular content, includes TV channels having limited audience share and no popular/premium content.

⁸⁸³ Replies to questionnaire Q10, question 34; replies to questionnaire Q11, question 40.

⁸⁸⁴ Response to the Statement of Objections, pages 204-205.

if the merged entity would be able to impose worse terms with respect to smaller or major TV channels, this would not lead to their partial foreclosure, as this could only arise if the worse terms were to impair the competitive viability of their service. In this respect, the Notifying Party has submitted an analysis showing that [DETAILS OF PRICING ARRANGEMENTS]⁸⁸⁵

- (1219) With respect to the allegation that smaller TV channels do not need distribution by the merged entity, as they could achieve the minimum viewership through narrower distribution, the Commission has already stated that nearly all participants to the market investigation have stated that already today for all broadcasters distribution via the cable TV network is extremely important, in order to reach a viable number of households and due to the specific characteristics of the cable TV transmission.⁸⁸⁶ This indispensability, as also stated, would increase following the Transaction. With respect to Pay TV channels in particular, that allegedly could be distributed by Sky, on the contrary nearly all the participants to the market investigation confirmed that they also need other distribution networks to operate profitably.⁸⁸⁷ As for OTT offers, the Commission has already acknowledged that OTT services are increasingly important in the German TV sector. However, the role of OTT linear distributors is still limited for FTA channels. As for Pay TV channels, as also noted OTT premium operators could represent a relevant alternative for pay TV broadcasters in the medium term, as OTT distribution can potentially reach all households with a good internet connection. However, the Commission cannot definitively conclude that the current OTT premium operators represent a decisive alternative for Pay TV broadcasters active on the Parties' cable network, particularly in light of possible obstacles that the merged entity could pose to the full development of real alternative OTT offers (on which, see section VIII.C.2.11.3.9(iii)).
- (1220) With regard to potential partial foreclosure for all TV channels, the non-discrimination principle invoked by the Notifying Party would not prevent the merged entity from partially foreclosing also larger broadcasters, whose bargaining position, although significant, would be weakened following the Transaction. The Commission further considers that the merged entity would have an increased market power also with respect to large broadcasters, enabling it to impose worse contractual conditions, as explained in section VIII.C.2.11.3.6. As for the fact that already today both Parties would be able put in place some [DETAILS OF CAPABILITIES], this does not imply that this ability cannot increase, as already discussed when dealing with the alleged indispensability of the Parties (section VIII.C.2.11.3.8).
- (1221) The Commission has also examined [DETAILS OF PRICING ARRANGEMENTS]. In this respect, the Commission notes that in a case of partial foreclosure as the one under discussion, the issue ultimately is not the marginalisation of TV broadcasters, but the degradation of the quality of the offer to final viewers. Therefore, even assuming that this strategy of partial foreclosure would not dramatically harm (major) TV broadcasters, there can be a negative effect on the market in the form of quality reduction for viewers. In any case, [DETAILS OF PRICING ARRANGEMENTS]. Feed-in fees are directly connected with the transmission of the cable TV signal and therefore they appear to be the main element in the payment flow that would be affected by the increased market power of the merged entity in the wholesale cable TV signal transmission market.

⁸⁸⁵ Response to the Statement of Objections, pages 206-207.

⁸⁸⁶ Replies to questionnaire Q6, question 33; replies to questionnaire Q7, question 35.

⁸⁸⁷ Replies to questionnaire Q10, question 31.

(1222) In conclusion, the Commission considers that, as a result of the Transaction, the merged entity would have an increased ability to negatively influence the breadth and quality of the TV offer in Germany. In particular, the merged entity would have the ability to:

- (a) Totally foreclose small (FTA and Pay TV) channels, and/or
- (b) Partially foreclose (in the form of quality degradation) any type of TV channels in Germany.

The possible incentive to foreclose access to the merged entity's platform

(1223) The Notifying Party maintains that any theory of harm based on the merged entity seeking to degrade the quality of its offering to viewers/subscribers (number of channels, additional features, other quality aspects), would be counterintuitive, as the merged entity will not have its own competing channel/content offering and in any case it has an interest, in competing with other TV distribution platforms, to offer the highest possible quality of service.

(1224) In the absence of current vertical integration of the Parties, the Commission has assessed whether there are other incentives that could lead the merged entity to restrict the breadth of its TV offer, by foreclosing totally or partially TV broadcasters.

(1225) During the market investigation the vast majority of the TV broadcasters and of the telecommunications operators submitted that as a result of the Transaction, the merged entity would foreclose access to its TV distribution platform to TV channel suppliers.⁸⁸⁸

(1226) Some participants referred to a “technical” incentive: cable is currently used by the Parties for the distribution of both TV and internet services. The two services compete for frequencies and currently internet advanced and interactive services provides increased revenues while TV revenues are flat. Therefore, more frequencies would be allocated to internet services by reducing the broadcast spectrum. This would lead to less TV channels or less opportunities for better quality TV channels (HD, Ultra HD).

(1227) In this respect, in the Response to the Statement of Objections the Notifying Party submitted that this technical incentive would not be merger specific, as it would exist equally for both Vodafone and Unitymedia absent the merger. Furthermore, any (hypothetical) increased ability of the merged entity to obtain better terms from TV broadcasters should reduce, not increase, this technical incentive, since one of the benefits of re-allocating bandwidth from TV channels to internet services would be that the TV platform no longer pays CPS fees on any disconnected channel. Therefore, the merged entity's (hypothetical) ability to obtain lower fees would reduce the benefits of reallocating bandwidth. Finally, that could support the rapid growth of OTT offerings, in the interest of final consumers.⁸⁸⁹

(1228) The Commission considers that the Notifying Party's observations in this regard have some merits. In particular, any incentive to substitute TV services with other services that share the same frequency resources does not seem to be connected with or impacted by the Transaction. This incentive appears to be connected with the current evolution of the media and internet sector and with the process of

⁸⁸⁸ Replies to questionnaire Q6, question 36; replies to questionnaire Q8, question 60.

⁸⁸⁹ Response to the Statement of Objections, page 208.

convergence between TV and internet services. Therefore, the Commission will not consider this incentive for the present purposes.

- (1229) Some respondents pointed also to the possible intention of the merged entity to reserve its capacity to the distribution of its own (future) content.⁸⁹⁰ Although, as stated in section VIII.C.2.11.3.9(i), the Commission cannot exclude that the merged entity could try to enter the content market and could increase the offer of (exclusive) TV premium content, at present there are not enough elements to support the thesis that in the near future the entry into the content market would be as massive as to justify a substantial reduction of access to its platform by third parties' channels. Therefore, the Commission will not consider this element for the present purposes.
- (1230) Some other respondents mentioned a financial incentive: after the Transaction, the merged entity will be less dependent on a broad portfolio and, therefore, could render its business margin more profitable. This would lead to the alignment of Unitymedia's offer with the Vodafone one (in other words the dropping by Unitymedia of its current channels not included in the Vodafone's one) and in general a reduction of the TV channels/services in offer.
- (1231) In connection with this overall policy of cost reduction, some respondents pointed also to a sort of "negotiation" incentive: due to the increased market power, the merged entity could more easily support its efforts to enforce its commercial demands vis-à-vis channel suppliers, imposing unfair contractual conditions and ceasing distribution agreements with TV broadcasters which do not accept the conditions proposed, or limiting their offer. According to this theory, total or partial foreclosure could be the result of disagreement on contractual conditions, in particular with smaller TV channels. Considering the increased market power, the limited relevance of small TV channels for the completeness of the merged entity's TV offer and the end of any form of direct or indirect comparison between the scope of the two cable TV offers, Vodafone could easily drop TV channels in case they do not agree on the contractual conditions unilaterally imposed by Vodafone. The Commission considers that this appears to be another declination of the financial incentive just stated and in general a consequence of the increased market power. According to this theory, the increased market power would allow the merged entity to impose worse contractual terms to the TV broadcasters. The Commission will take into account this element inasmuch as it can have an impact on the breadth and quality of the offers for final viewers.
- (1232) The overall profitability of a foreclosure strategy for Vodafone depends on the proportion of customers switching away from the merged entity as a result of this strategy. If customer switching is low, Vodafone would not lose many subscribers on its platform and hence the costs of foreclosure would be limited. If customers however have a strong preference for the foreclosed channels or services and do not find a suitable substitute on the merged entity's platform, they may consider switching to rival distributors that carry the foreclosed channels and services.
- (1233) In this respect, the Commission notes that, as already stated in section VII.5, the presence in the retail TV market of MDU customers with particular infrastructure needs, cost structures, and long-term contractual engagements creates a certain

⁸⁹⁰

Replies to questionnaire Q6, question 36; replies to questionnaire Q8, questions 59 and 60.

customer stickiness to cable TV that restricts switching between different TV infrastructures.⁸⁹¹

- (1234) Therefore, it can be safely assumed that customers could consider switching away – if even possible – only in case of absence in the merged entity’s platform of the most popular TV channels or pay TV offers. On the contrary, in case of foreclosure of smaller TV channels, the risk of customer switching appears extremely limited.
- (1235) Equally, customer switching as a result of partial foreclosure is likely to be very limited, in this case possibly also for major TV channels, given that the quality of the channels is merely degraded. The costs of such a strategy are likely to be limited.
- (1236) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]⁸⁹² [...] ⁸⁹³ [...]
- (1237) In its Response to the Statement of Objections the Notifying Party submitted that there would be no reason why the merged entity would be less dependent on a broad portfolio of TV channels/services following the Transaction as it will continue to require an attractive portfolio in order to compete in the retail TV market, where there would not be any change in competitive conditions. Vodafone would compare its TV offering with players other than Unitymedia, including Deutsche Telekom and all other retail TV providers. In addition, it would not be correct that denying access to small channels would not have consequences, as for FTA channels, the incentive would clearly be to continue receiving feed-in fees, and for Pay TV channels, changes to the Pay TV channel portfolio [CONFIDENTIAL CONTRACT INFORMATION].⁸⁹⁴
- (1238) The Commission agrees that the merged entity would still continue to require a relative large portfolio of TV channels to attract viewers, in particular including the most popular TV channels. However, the question is the role of smaller TV channels and of additional services, considering that, as already noted, in case of total or partial foreclosure of smaller TV channels and of mere quality degradation, the risk of customer switching appears extremely limited. As for the change in the competitive scenario, the Commission accepts that Vodafone compares its TV offering with players other than Unitymedia. However, Unitymedia represents the most significant comparison in terms of similarity of the offer, considering its dimension and the infrastructure used. [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]
- (1239) As for the alleged consequences for Vodafone in denying access to small channels, the Commission accepts the Notifying Party’s view that, for FTA channels, the loss of feed-in fees could be a disincentive for a strategy of total foreclosure, considering the relevance of feed-in fee in the commercial relationship with FTA TV broadcasters. On the contrary, with respect to Pay TV channels the Commission has already dismissed in section VIII.C.2.11.3.6 the allegation that the customers would have [CONFIDENTIAL CONTRACT INFORMATION], as unsubstantiated.
- (1240) Therefore, the Commission considers that the merged entity would not have an increased incentive, as a result of the Transaction, to totally foreclose FTA channels.

⁸⁹¹ The same Notifying Party confirms that individual customers living in an MDU equipped with cable are less likely to choose different transmission technologies (See Form CO, annex 6.C.IV.17, page 1).

⁸⁹² FDC RFIs – Second production of documents – Part01 – RE_A quick feedback [ID 3205-35628, Filename: VOD_001_00145246 msg].

⁸⁹³ [REFERENCE TO INTERNAL DOCUMENT].

⁸⁹⁴ Response to the Statement of Objections, pages 209-210.

Accordingly, the following analysis will focus on the incentive of the merged entity to (i) totally foreclose small Pay TV channels and (ii) partially foreclose (in the form of quality degradation) any type of FTA and Pay TV channels.

The Parties' internal documents on channel foreclosure

- (1241) The future strategy of the merged entity with regard to [DETAILS OF BUSINESS STRATEGY] and in general content acquisition [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁸⁹⁵ [...].
- (1242) In its Response to the Statement of Objections, the Notifying Party submitted that [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]. [DETAILS OF CAPABILITIES AND BUSINESS STRATEGY] Contrary to the Commission's suggestion, [DETAILS OF CAPABILITIES AND BUSINESS STRATEGY]⁸⁹⁶
- (1243) The Commission notes that [DETAILS OF CAPABILITIES AND BUSINESS STRATEGY].⁸⁹⁷ [...].⁸⁹⁸ [...].
- (1244) With respect to Vodafone's overall strategy [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]⁸⁹⁹ [...].
- (1245) As for the part of [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]
- (1246) In its response to the Statement of Objections, the Notifying Party submitted that the merged entity would still need to reach agreement with broadcasters in order to compete downstream. Furthermore, the alleged ability to secure better terms would reduce the extent to which "unfair conditions" would provide an incremental benefit to the merged entity.⁹⁰⁰
- (1247) In this respect, the Commission has already observed that the merged entity could easily drop minor TV channels or reduce the additional services offered, without any relevant consequence [REFERENCE TO BUSINESS STRATEGY]. Even assuming, as the Notifying Party pointed out, that the increased market power of the merged entity and its related ability to obtain better terms from TV broadcasters would suggest that this incentive would decrease following the Transaction, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].
- (1248) In its Response to the Statement of Objections, the Notifying Party submitted that, even assuming an increased incentive to reduce the number of channels distributed over its cable network or to improve the merged entity's terms vis-à-vis broadcasters, this would not equate to an incentive to foreclose those channels. Given the lack of any presence upstream, the merged entity would not have any incentive to cause broadcasters to exit the market or to be competitively marginalised.⁹⁰¹
- (1249) The Commission has already stated that specific "vertical" incentives are absent in the present Transaction. In light of that, the Commission has assessed whether foreclosure effects could nonetheless occur, because of alternative strategies adopted by the merged entity, with the result of a negative impact on the breadth and quality

⁸⁹⁵ [REFERENCE TO INTERNAL DOCUMENT].

⁸⁹⁶ Response to the Statement of Objections, pages 210-212.

⁸⁹⁷ In the Statement of Objections, the Commission assumed that [DETAILS OF CAPABILITIES AND BUSINESS STRATEGY].

⁸⁹⁸ Annex E.12 to the Response to the Statement of Objections.

⁸⁹⁹ [REFERENCE TO INTERNAL DOCUMENT].

⁹⁰⁰ Response to the Statement of Objections, pages 212-213.

⁹⁰¹ Response to the Statement of Objections, page 213.

of the TV offer for final consumers in Germany. The fact that (total or partial) foreclosure of TV channels would not be the objective of the merged entity, but merely the consequence of this strategy, does not make this strategy legitimate.

- (1250) In conclusion on this point, the Commission is therefore of the view that (i) total foreclosure of smaller Pay TV channels and/or (ii) partial foreclosure (in the form of reduction of the additional TV services offered and of quality degradation) of any type of TV channels, may be a profitable strategy for the merged entity, as customer switching as a result of these forms of foreclosure is likely to be limited.

The possible effects of a foreclosure strategy

- (1251) The question is therefore whether, as a result of this strategy, the quality of the viewer experience on the merged entity's platform would be reduced, either because channels valued by viewers would not be available or because the quality of the offer would be reduced, in terms of additional services.

- *Total foreclosure of small Pay TV channels*

- (1252) In its Response to the Statement of Objections the Notifying Party submitted that no anti-competitive effects would arise from any attempt to totally foreclose smaller Pay TV channels:

- (a) Only minor channels would be the target of any alleged foreclosure strategy and by definition, these could not represent a significantly large fraction of upstream output to sufficiently reduce upstream competition;
- (b) Even if these smaller channels were forced to exit the market or were competitively marginalised, they could not affect a significant fraction of downstream output, as these channels would be unimportant for retail TV competition ;
- (c) Furthermore, the downstream retail TV market would remain highly competitive and eliminate any possible anticompetitive effects of such a foreclosure strategy.⁹⁰²

- (1253) [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] The Commission notes that the reduction of the merged entity's offer would not be completely marginal, but would not represent a major reduction in the whole offer of the Parties: currently, Vodafone's cable pay TV offer includes [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] channels plus the Sky option and the Unitymedia's one includes [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] channels plus the Sky option.⁹⁰³

- (1254) Moreover, a certain number of respondents to the market investigation submitted that if the merged entity were to stop providing access to its TV distribution platform to their channels, they could be forced to close down.⁹⁰⁴ As a consequence, it is possible that also the quality of the offer on other TV platforms would suffer from such a scenario, as some of those channels could exit the German TV market. Therefore, the quality of the viewer experience could be reduced across all German TV channels.

⁹⁰² Response to the Statement of Objections, page 214-215.

⁹⁰³ See Form CO, Table 6.21. Sky's offer includes several packages (Sky Entertainment, Sky Cinema, Sky Sport, Sky Fussball Bundesliga). The base package (Sky entertainment) includes about 35 channels.

⁹⁰⁴ Replies to questionnaire Q6, question 37.

- (1255) However, the merged entity could decide to drop only minor channels to limit any risk of increased churn. [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] In this respect, the Commission considers that the effect of such strategy would not be significant for German Pay TV customers, in terms of breadth and quality of the offer at their disposal. The Commission considers that even if these smaller channels were forced to exit the market, they could not affect a significant fraction of the German customers, as these channels are generally niche channels, whose absence from the Pay TV offer should not result in significant customer switching. Ultimately [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] and therefore only channels with minor relevance for viewers (in relation to the whole pay TV package) could be totally foreclosed without running the risk of excessive customer switching or unsubscribing.
- (1256) Therefore, the Commission considers that it is unlikely that channels valued by viewers would not be available, as the total foreclosure would only target minor Pay TV channels, which means that such foreclosure would not have a substantial effect on the quality and breadth of the TV offer in Germany.
- *Partial foreclosure of (any type of) TV channels*
- (1257) With respect to partial foreclosure as a result of cost reduction policy by the merged entity, in its Response to the Statement of Objections the Notifying Party submitted that where a merged entity is able to obtain better terms as a result of increased bargaining power, a proportion of these cost reductions are likely to be passed onto consumers in the form of lower prices. Therefore, any potential improvement in terms achieved by the merged entity would result in pro-competitive, not anti-competitive, effects. Moreover, with respect to large broadcasters, any worsened terms would have minimal impact on their overall German revenues and therefore could not significantly affect these broadcasters' ability to compete. In any case, the market would remain sufficiently competitive and this would not result in the reduction in the breadth and quality of content available for viewers.⁹⁰⁵
- (1258) The Commission reiterates that the main issue under discussion here is not the potential marginalisation of TV broadcasters, but the degradation of the quality of the offer to final viewers. Therefore, even assuming that this strategy of partial foreclosure would not completely harm TV broadcasters, there could be a negative effect on the market in the form of quality reduction for viewers. Therefore, the Notifying Party's observation on the absence of decisive impact on major TV broadcasters is not decisive.
- (1259) In this respect, even excluding complete marginalisation, TV broadcasters' revenues and profits would decrease in case the merged entity use its increased market power to reduce payments for additional services and features for these channels or would request increased feed-in fees from FTA broadcasters. These types of revenue losses for TV broadcasters may in turn reduce their return on investment into content and may thereby lower their incentive to continue investing in attractive content in the future. This could result in consumer harm since end users would be left with lower quality programming. The Commission cannot exclude that the effect on the quality of the offer to German viewers would be significant, as it could involve all categories of TV channels.

⁹⁰⁵ Response to the Statement of Objections, page 215.

- (1260) As for the observation of the Notifying Party that this policy would have minimal impact on major TV broadcasters' overall German revenues, firstly, this cannot exclude that TV broadcasters could nevertheless be forced to reduce investments in content and in the acquisition of additional services. As already reported, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]⁹⁰⁶ [...].
- (1261) Secondly, as already stated in previous recital (1221), [REFERENCE TO BUSINESS STRATEGY AND PRICING ARRANGEMENTS] nothing in the file suggests that, following the increase in market power in the cable TV signal market, the Notifying Party would be limited in its possible price increase for feed-in fees, that is the main expression of their market power in the cable TV signal market. Therefore, the Commission cannot exclude that the effects of this policy would be significant.
- (1262) The Commission also believes that it is unlikely that the cost savings obtained by the merged entity [REFERENCE TO SYNERGIES POST-TRANSACTION] could have as a counterbalancing positive effect the reduction of pricing to final customers. In this respect, the merged entity would have limited incentive to reduce its final prices, because of the limited competition at downstream level, in particular in the MDU segment. Most respondents to the market investigation have rated both Parties as the less aggressive competitors in the German TV market, in terms of pricing.⁹⁰⁷ Following the Transaction, the Commission doubts that the merged entity would have any substantial incentive to reduce its final pricing.
- (1263) Therefore, in conclusion on the effects of a foreclosure strategy, the Commission considers that:
- (a) The total foreclosure by the merged entity of small Pay TV channels would not have a substantial effect on the quality and breadth of the TV offer in Germany, and,
 - (b) The partial foreclosure of (FTA and Pay) TV channels in Germany, as a consequence of the worsening of the contractual conditions, could have substantial effects on the quality and breadth of the TV offer in Germany.

Conclusion

- (1264) The Commission considers that, as a result of Vodafone's increased market power resulting from the Transaction, Vodafone would have the ability and the incentive to put in place a strategy in the market for wholesale TV signal transmission that could harm consumers downstream through a reduced quality of the viewer experience, reduced choice and fewer investments in content by TV broadcasters.
- (1265) In particular, as a consequence of the merged entity's increased market power, the Transaction could lead to a form of partial foreclosure of FTA and Pay TV channels, notably through the worsening of the contractual and financial conditions imposed by the merged entity to TV broadcasters, and as a consequence to quality degradation of the TV offer to final viewers in Germany.

⁹⁰⁶ [REFERENCE TO INTERNAL DOCUMENT].

⁹⁰⁷ Replies to questionnaire Q10, questions 45 and 45.1.

(iii) Whether the merged entity would hamper the emergence of innovative TV services (OTT – HbbTV)

(1266) The Commission has further assessed whether – in connection with the strategy just discussed in section VIII.C.2.11.3.9(ii) – the merged entity could hamper the emergence of innovative TV services, in particular of services aimed at increasing the direct interaction between TV broadcasters and viewers. During the market investigation a series of participants pointed to some specific additional and innovative services that are assuming increasing importance in the TV market and that would allow a more direct interaction between TV broadcasters and final viewers. These services/products would be:

- (a) TV broadcasters' OTT services: in particular the direct broadcasting of the TV channels over the internet without the involvement of the network operator in the control or distribution of the content;
- (b) HbbTV signals: HbbTV signals are a development whereby TV broadcasters are able to allow retail TV customers that have a smart TV to directly connect to those broadcasters' own interactive OTT services via a linear broadcasting that encompasses so-called HbbTV triggers.

(a) The Notifying Party's view

(1267) The Notifying Party submitted that the merged entity would not have the ability or the incentive to engage in strategies aimed at hampering the emergence of innovative TV services.

(1268) In addition to all the arguments put forward in respect to general customer foreclosure, with specific respect to OTT services the Notifying Party submitted that broadcasters would be reluctant to agree to any restrictions on the distribution of their content via OTT services given the success of that distribution in Germany. Moreover, the Transaction would not give rise to any change in the merged entity's incentives vis-à-vis OTT providers.

(b) The Commission's assessment

The ability to hamper the emergence of innovative TV services

(1269) Firstly, as already stated the Commission notes that this issue is partially connected to the question just discussed on the breadth and quality of the TV offer in Germany. During the market investigation, most TV broadcasters who took part in the market investigation confirmed that their commercial negotiations with both Vodafone and Unitymedia for the distribution of their linear TV channels simultaneously cover the distribution of non-linear TV content and additional services that are associated to those TV channels.⁹⁰⁸ In particular, negotiations include HbbTV services and OTT-related issues. Therefore, the Commission considers that the observations already reported in previous section VIII.C.2.11.3.9(ii) on the ability of the merged entity to adopt hampering strategies as form of partial foreclosure, are applicable to the present section as well.

(1270) In its Response to the Statement of Objections, the Notifying Party submitted that

- (a) TV broadcasters would continue to have alternative options for OTT distribution, [CONFIDENTIAL CONTRACT INFORMATION];

⁹⁰⁸

Replies to Questionnaire Q10, questions 27 and 28; replies to questionnaire Q11, question 41.2.

- (b) Broadcasters would continue to have various options for HbbTV signal distribution, including satellite. Moreover, amendments to the relevant regulation would be currently under discussion, to extend the Must-Carry obligation to the HbbTV signal of private broadcasters.
- (1271) With respect to the alleged [CONFIDENTIAL CONTRACT INFORMATION], firstly, the Commission notes that, as will be explained in the following recitals of this section, [CONFIDENTIAL CONTRACT INFORMATION]. Secondly, the [CONFIDENTIAL CONTRACT INFORMATION] would not prevent the merged entity from imposing contractual restrictions post-Transaction, in light of its increased market power.
- (1272) The Commission further considers that the fact that TV broadcasters could use satellite for HbbTV signal distribution would not be sufficient, as there is limited substitution between cable TV and satellite and therefore cable TV customers would be harmed irrespective of the theoretical availability of other platforms.
- (1273) As regards the possible extension of the Must-Carry obligation to the HbbTV signal of private broadcasters in the Must-Carry obligation, this depends on future and uncertain regulatory interventions.
- (1274) Therefore, the Commission considers that the merged entity would have the ability to hamper the development of OTT and HbbTV services.

The incentive to hamper the emergence of innovative TV services

- (1275) OTT and HbbTV services aims at creating a direct connection between TV broadcasters and viewers, therefore limiting the intermediation of classical TV platforms. The merged entity could therefore have a different, not purely “financial” incentive, that is to preserve a business model where the TV platform is in direct control of the customer relation and TV broadcasters are prevented from by-passing cable networks’ intermediation.
- (1276) This incentive [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].⁹⁰⁹ [...].⁹¹⁰
- (1277) With specific respect to OTT services, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]⁹¹¹
- (1278) A number of participants to the market investigation pointed to a general negative attitude of the Parties with respect to OTT and HbbTV services:
 - (a) A national pay TV operator submitted that [CONFIDENTIAL CONTRACT INFORMATION]⁹¹²
 - (b) With specific respect to HbbTV services, a series of participants to the market investigation submitted that both Vodafone and Unitymedia already use proprietary decoders, which do not support or in any case hinder HbbTV

⁹⁰⁹ [REFERENCE TO INTERNAL DOCUMENT].

⁹¹⁰ [REFERENCE TO INTERNAL DOCUMENT].

⁹¹¹ [REFERENCE TO INTERNAL DOCUMENT].

⁹¹² Sky, submission of 4 March 2019, *Economic statement on the effects of the notified merger M.8864 Vodafone/Certain Liberty Global Assets*, pages 13-15 [ID 4996].

services.⁹¹³[CONFIDENTIAL CONTRACT INFORMATION], see at section VIII.C.2.11.3.6.

- (c) Another participant to the market investigation confirmed that past negotiations regarding HbbTV signal with the cable networks operators have been very difficult, in particular with one of the two Parties.⁹¹⁴ The same TV broadcaster refers to past episodes showing that cable network operators attempted to restrict interactive services that they perceive as a threat to their own business model. The concentration would remove any countervailing market power broadcasters may have had in the past to discipline the cable network operators' market power, as it happened in some instances in the past episodes.⁹¹⁵
 - (d) In general, the German Media Association representing commercial broadcasting and audio-visual companies confirmed that it was only following difficult negotiations that members succeeded in obtaining from cable networks the possibility to transmit HbbTV signals. Previously, they refused to transmit those signals although this would not require any relevant capacity. However, notwithstanding the agreement reached, the cable operators adopted customers' receivers technically not programmed to process the HbbTV signals, so that ultimately customers could not access the members' internet services.⁹¹⁶
- (1279) In its Response to the Statement of Objections, the Notifying Party submitted that the specific incentive of preserving a business model would not be impacted by the Transaction. This would also be supported by the examples of the Parties' previous conduct in this respect. In any case, the Parties would actually distribute HbbTV via their cable networks and there would be no basis to assume that this would change post-Transaction. Only for legitimate commercial reasons [DETAILS OF CAPABILITIES AND CONFIDENTIAL CONTRACT INFORMATION]. The examples allegedly indicating a general negative attitude to innovative TV services would be misinterpreted. In general, the Parties consider these practices as to be standard and necessary provisions in order to protect the value of the content for which the Parties are paying the content provider and/or costs associated with implementing the technical capabilities for certain services. Notably, [DETAILS OF CAPABILITIES AND CONFIDENTIAL CONTRACT INFORMATION].⁹¹⁷
- (1280) The Commission considers that the examples referred to by the participants to the market investigation, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS], indicate that the Parties have already a certain incentive to limit the development of OTT and HbbTV services. Although it is correct to state that some of those conducts aim at legitimately regulating the reciprocal obligations between the Parties and TV broadcasters, it appears that in general measures aimed at preventing, hampering or delaying OTT and HbbTV innovations would reduce or eliminate the risk that such innovations would lead to cross-platform competition which might

⁹¹³ ARD's reply to questionnaire Q6, question 50.1 [ID 2476]; ProSiebenSat.1's reply to questionnaire Q6, question 51 [ID 2514] and Reply to RFI 7, page 4, question 10 [ID 4531].

⁹¹⁴ RTL's reply to RFI 6, pages 9-10, question 2 [ID 3905].

⁹¹⁵ RTL, submission of 6 November 2018, *M.8864 - Vodafone/Liberty Global assets Germany*, page 4 [ID 2813].

⁹¹⁶ VAUNET, submission of 1 November 2018, *Further information of VAUNET on its members concerns regarding the notified merger*, page 3 [ID 2871].

⁹¹⁷ Response to the Statement of Objections, pages 217-220.

ultimately threaten cable companies' business model, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS] mentioned in recital (1276).

- (1281) The existing incentive would increase following the Transaction. Firstly, the increased market power of the merged entity would limit the possibility that TV broadcasters resist the attempt of Vodafone to adopt such strategies, [DETAILS OF BUSINESS STRATEGY].
- (1282) Secondly, the merged entity will not have any incentive in introducing innovative interactive services, to react to similar services offered by the main comparable competitor.
- (1283) Finally, as already stated by the Commission in a previous case, since the successful foreclosure of competition from OTT services at the retail level would benefit all existing TV retailers, TV retailers have an incentive to free-ride on the foreclosure efforts of their competitors at the retail level. However, the proposed combination of Vodafone and Unitymedia would allow the merged entity to internalise the benefit to both parties of successful foreclosure of OTT services. That increases the incentive for the merged entity to engage in such strategy.⁹¹⁸
- (1284) Therefore, the Commission considers that the merged entity would have the incentive to hamper the development of OTT and HbbTV services.

The possible effects of a strategy aimed at hampering the emergence of innovative TV services

- (1285) As for the effect of such strategies, the quality of the viewer experience on the merged entity's platform will be reduced and in particular the final customers will not have the possibility to take advantage of innovative and interactive services, that are assuming increasing importance in a multiplatform and convergent scenario. Moreover, the limitation of TV broadcasters' ability to offer OTT services will also reduce the possibility of competition in the retail TV markets in Germany, as OTT offers by TV broadcasters or OTT platforms could in the near future start to pose a relevant challenge to the position of traditional TV platforms (as cable).
- (1286) In its response to the Statement of Objections, the Notifying Party submitted that even if the merged entity were to pursue such a strategy, there would be no risk of anti-competitive effects considering that with respect to HbbTV, broadcasters will continue to have alternative options including satellite as well as terrestrial distribution; and there would also be numerous and growing alternative methods for broadcasters to reach consumers directly through OTT, including by their own platforms or through third party platforms.⁹¹⁹
- (1287) [REFERENCE TO INTERNAL DOCUMENTS], the Notifying Party added that there could not be any possible concern, let alone any merger specific concern, relating to the Parties' decision not to enable their decoders (set-top-boxes - STBs) for HbbTV as: (i) broadcasters could still reach the large majority of the Parties' TV customers through HbbTV, given that [REFERENCE TO CUSTOMER DETAILS]; (ii) broadcasters would still be able to reach the vast majority of linear TV viewers via HbbTV through satellite, terrestrial and cable distribution, in particular those customers with smart TVs; and (iii) in any event, broadcasters could reach all

⁹¹⁸ Commission Decision of 30 May 2018 in case M.7000, *Liberty Global/Ziggo*, paragraph 581.
⁹¹⁹ Response to the Statement of Objections, page 220.

viewers [REFERENCE TO CUSTOMER DETAILS] through their own direct-to-consumer OTT offerings over broadband.⁹²⁰

- (1288) In this respect the Commission notes that, as already discussed (section VII.19), alternative options (satellite, terrestrial) have limited relevance for cable TV customers, considering the limited substitutability. Moreover, with particular regard to OTT services, the risk is that the merged entity could prevent TV broadcasters from including their TV channels in the packages offered by OTT linear distributors or OTT premium operators or from offering their channels with their own platforms. Restrictions to that alternative distribution method for their TV content would ultimately cement the significant market power that the merged entity would hold vis-à-vis the TV broadcasters as the main distributor of their TV content in Germany. Importantly, OTT offers would introduce further competition and innovation into the TV retail market. This would be particularly relevant, considering that in Germany a significant development in the provision of OTT TV services is already taking place.
- (1289) As for the Parties' decision not to enable their STBs for HbbTV, the Commission considers that the observations submitted by Vodafone [DETAILS OF CAPABILITIES AND BUSINESS STRATEGY] and on the commercial reason for this policy, are reasonable. The Notifying Party has in particular explained that [DETAILS OF CAPABILITIES AND BUSINESS STRATEGY] However, this does not address the concern regarding other measures aimed at restricting or blocking the transmission of the HbbTV signal, [DETAILS OF CAPABILITIES AND BUSINESS STRATEGY]
- (1290) Therefore, the Commission considers that a strategy by the merged entity aimed at hampering the emergence of innovative TV services (OTT and HbbTV) could negatively affect the quality of the TV offer in Germany.

Conclusion

- (1291) The Commission therefore considers that, as a result of Vodafone's increased market power resulting from the Transaction, Vodafone would have the ability and the incentive to put in place a strategy in the market for wholesale TV signal transmission aimed at hampering the emergence of innovative TV services as transmission of HbbTV signals and OTT offers, that could harm consumers downstream through a reduced quality of the viewer experience and reduced choice.

(iv) Whether the merged entity could hamper the emergence of ATV applications

- (1292) Some participants to the market investigation submitted that, thanks to its unique position as cable TV platform, the merged entity could also hinder the emergence and development of ATV applications. Addressable TV advertising or targeted advertising consists of a new form of TV advertising by which a TV channel broadcasts advertisements distinctively and specifically aimed for each viewer (or ad hoc group of viewers) on the basis of their prior viewing behaviour, rather than the same TV advertisement to a general audience, which is the standard existing business model for TV advertising.

(a) The Notifying Party's view

- (1293) With respect to targeted advertising and data collection, the Notifying Party submits that currently [DETAILS OF CAPABILITIES]

⁹²⁰

[REFERENCE TO INTERNAL DOCUMENTS].

(1294) Moreover, the Parties (and then the merged entity) would not be indispensable with respect to data collection: TV broadcasters would have several alternative source for comparable data: other retail TV providers, their OTT platforms. Considering that the two networks do not overlap and the data on individual customers' viewing activities are highly specific, the Transaction would not have any impact on data. In any case, the merged entity would not have the ability or the incentive to engage in foreclosure with respect to data collection.

(b) *The Commission's assessment*

(1295) Preliminarily, the Commission notes that a participant to the market investigation submitted that HbbTV services and customers' receivers able to process HbbTV signal are crucial also for the provision of ATV services and for this purpose the cooperation of the TV platform is indispensable.⁹²¹ To the extent that the provision of ATV services is linked to the availability of HbbTV services, the Commission refers to the observations and the conclusion of previous section VIII.C.2.11.3.9(iii), where the Commission has considered that the merged entity could have an incentive to prevent the development of interactive services that could allow a direct, bidirectional contact between TV broadcasters and final viewers, as it is the case for HbbTV services.

(1296) With specific respect to the data collection issue linked to the Transaction, some participants to the market investigations pointed to the significant relevance of data and on the relevant position of the merged entity in this respect.

(1297) One participant to the market investigation submitted that access to the individual user's device is a prerequisite for individual TV content and advertising being served with the linear or non-linear feed. Only the merged entity will be able to provide such access and provide the technical information required for serving the content/ad to the individual viewer. Without the technical prerequisites at the cable network operator's interface to the customer that enable the overlay of the linear signal, the broadcaster will not be able to provide personalised entertainment or sell ATV advertising to the advertising industry even though it is its content that creates the inventory in the first place. Moreover, the merged entity will be the only relevant source for nationwide TV/media consumption data that can meaningfully be used for future TV advertising applications, that is to say outside pure online or mobile advertising. This will additionally increase the merged entity's market power. The combination of the two largest and only credible players in this evolving industry would mean that all prospects for choice and innovation in addressable TV will be removed permanently.⁹²² The same participant submitted that the Notifying Party itself has underlined the importance of data and the dominant role of platforms in this respect: notably, in a public consultation regarding competition policy in the era of digitalization, Vodafone stated expressly that "[t]he growth of platforms in particular has led to an increased dependency of businesses on those platforms, which have become gatekeepers to markets and consumer. ... In particular: as platforms benefit from both direct and indirect network effects, the bigger they are the more successful they become. Access to those platforms then becomes essential to participate in many digital markets ... Digital platforms have an ability to collect, use and analyse large amounts of data ... This data aggregation ... may also reinforce the position of

⁹²¹ RTL, presentation of 12 March 2019, page 13 [ID 4967].

⁹²² RTL, submission of 6 November 2018, M.8864 - Vodafone/Liberty Global assets Germany, page 3 [ID 2813] and reply to RFI 6, page 26, question 12 [ID 3905].

*dominant platforms ... if competitors are unable to offer similar services ... because they cannot access or generate data themselves.*⁹²³

- (1298) In general, some participants to the market investigation submitted that Vodafone will become one of the most important gatekeepers for individual data, access to which is crucial for any business model based on targeted advertising, as next generation addressable TV application. Cable TV network providers are the only ones able to grant access and provide the information required for playing out the individualised advertisement to the relevant users. According to those respondents, the Transaction would bring the majority of addressable users under the control of only one undertaking, whereas absent the Transaction, broadcasters would at least have two major counterparts to launch future addressable TV applications with. The Transaction therefore would remove any choice for broadcasters that seek roll-out addressable TV applications. The Transaction would also stifle innovation, since with only one large network operator left, there will be no competition in innovation for the best advertising technology. Furthermore, the merged entity will be in possession of specific targeting data that are extremely relevant for broadcasters. Considering that the merged entity will also operate in the broadband and mobile markets, it will have a total reach of about half of the entire German population and would become a sort of "essential facility" for broadcasters and the media industry in general.⁹²⁴
- (1299) The relevance of the data collection issue related to the Transaction has been underlined by another participant to the market investigation, which submitted that in a data driven economy, the exclusive access of the merged entity to the data set of its enlarged customer base regarding viewing habits, preferences, age, "customer journey" etc., is vital. In particular TV broadcasters will depend on the data for advertising, for meeting the viewers' preferences and taste, or to improve modern audio-visual services that increasingly rely on customer interaction. Accordingly, the merged entity's data control would contribute to its bargaining power towards the upstream value chain. This bargaining power would not be mitigated by potential customer reactions, because the customers' ability and incentive to switch retail TV service providers would be limited in Germany. The gatekeeper position would therefore significantly improve the merged entity's bargaining power, vis-à-vis TV broadcasters and VOD suppliers or, if the merged entity acquires or licenses content directly, audio-visual content producers.⁹²⁵
- (1300) In this respect, the Commission observes that data can be a very important input for providing better and targeted services to final consumers.⁹²⁶ Furthermore, the recent development of technology has made it possible to collect, store, and use large amount of personal and users data. With the development of digital economy, data

⁹²³ Vodafone position paper on "*Shaping competition policy in the era of digitalisation*", 30 September 2018, reported by RTL, presentation of 12 March 2019, page 4 [ID 4967].

⁹²⁴ RTL's reply to questionnaire Q6, question 50.1.1. [ID 2425]. See also VAUNET (German Media Association representing commercial broadcasting and audio-visual companies), submission of 8 November 2018, *Additional information of VAUNET on its members concerns regarding the notified merger highlighting the effects on data-driven business models* [ID 4074].

⁹²⁵ Deutsche Telekom, submission of 25 January 2019, *Detrimental effects of the merged entity's significantly increased bargaining power on the audio-visual value chain*, page 12 [ID 3982].

⁹²⁶ See the Communication from the Commission to the European Parliament, the Council, The European Economic and Social Committee and the Committee of the Regions, "*Towards a common European data Space*", 25 April 2018, n. COM(2018)232final (at <https://ec.europa.eu/digital-single-market/en/news/communication-towards-common-european-data-space>).

about preferences and choices are becoming very important inputs to targeted marketing and advertising. The importance of individualised data about consumption and preferences is further increasing with the personalization of services. Access to data can therefore represent a relevant form of competitive advantage.

- (1301) The increasing importance of data in the digital era is also influencing the role and position of platforms, which have the possibility to observe in detail how the market functions and to collect precious information about what the consumers want and their spending behaviour.
- (1302) The Transaction and the consequent possibility of the merged entity to use its market power vis-à-vis the German TV broadcasters has to be assessed also in light of this, rather new, development. In this regard, the merged entity will have access to individual data of about [DETAILS OF CAPABILITIES] of the German viewership. It will be able to collect data about TV consumption, [DETAILS OF CAPABILITIES]. This dataset will represent a significant element for TV broadcasters, who would need those data to personalise the TV services and advertising.
- (1303) In its Response to the Statement of Objections, the Notifying Party submitted that the merged entity would not be able to engage in any foreclosure strategy with respect to aggregated data. Although the Transaction could result in one fewer source of such data and the merged entity would have a larger combined dataset, this would not materially impact the availability of such data for broadcasters as they would have several alternative sources for comparable data, including: viewership data compiled by AGF/GFK, which is broadcaster owned, other retail TV providers, such as Sky, Deutsche Telekom and third party OTT providers, as well as large technology companies. Moreover, broadcasters could obtain aggregated data through their direct OTT offers. In any case, the merged entity would not have any incentive to engage in a foreclosure strategy with respect to aggregated data. Finally, as broadcasters would still have numerous alternative sources of aggregated data for advertising purposes, no anticompetitive effects could arise from any attempted foreclosure strategy.⁹²⁷
- (1304) With respect to individual data, in its Response to the Statement of Objections the Notifying Party submitted that the Parties [DETAILS OF CAPABILITIES].⁹²⁸ [...] the Transaction would have no material impact on broadcasters' ability to access such data [DETAILS OF CAPABILITIES]⁹²⁹
- (1305) Furthermore, according to the Notifying Party the Transaction would have no impact on the Parties' incentives to deal with broadcasters in respect of any individual viewership data: the merged entity would not have its own content/channels and could only insert such advertising with the agreement and collaboration of the broadcasters. The Parties therefore would have no ability to monetise their [DETAILS OF CAPABILITIES] viewership data other than with the collaboration of broadcasters. Therefore, the merged entity would [DETAILS OF CAPABILITIES] work with broadcasters on commercial terms to improve the effectiveness/targeting and value of TV advertising. Finally, even if the merged entity were to attempt a foreclosure strategy, this would not give rise to any anti-

⁹²⁷ Response to the Statement of Objections, pages 222-224.

⁹²⁸ Response to the Statement of Objections, pages 224-225.

⁹²⁹ [REFERENCE TO INTERNAL DOCUMENT].

competitive effects given [DETAILS OF CAPABILITIES] the numerous alternative sources for comparable data.⁹³⁰

Aggregated data

- (1306) With respect to aggregated data, it appears that the merged entity would not be the only source of this kind of data, as TV broadcasters could obtain similar data on general TV consumption trends and habits from other entities, with comparable market penetration for the limited purposes of market analysis. Although the combined dataset of the merged entity could include a very large amount of relevant data, with increased statistical significance, for the present purposes the other sources still available on the market, in particular the ones mentioned by the Notifying Party, appear to represent a valid alternative for TV broadcasters looking for relevant aggregated data. In this respect, for this limited purpose of data collection, the different transmission infrastructures seem to have a certain degree of substitutability, as consumers' habits are generally not infrastructure-specific. Therefore, the Commission does not consider that the merged entity would represent a gatekeeper or an essential facility, as other operators would be able to provide similar data.
- (1307) Furthermore, it is not entirely clear what incentive the merged entity could have to engage in foreclosure strategy with respect to aggregated data. It appears that it would be in the interest of the merged entity to cooperate with TV broadcasters in order to increase the benefits of advertising campaigns and to obtain higher revenues for the whole sector.

Individual data

- (1308) With respect to individual data, as stated the Notifying Party has submitted [DETAILS OF CAPABILITIES]. In particular, [DETAILS OF CAPABILITIES]: their activities would be [DETAILS OF CAPABILITIES]:
- (a) Vodafone would [DETAILS OF CAPABILITIES].
 - (b) Unitymedia would [DETAILS OF CAPABILITIES]
- (1309) Considering that the merged entity would have a combined customer base of more than thirteen million clients, at present the relative collection ability of the merged entity appears [DETAILS OF CAPABILITIES].
- (1310) As also stated, the Notifying Party has submitted that the extent to which the merged entity would be able to materially develop/expand these capabilities would be highly uncertain, [DETAILS OF CAPABILITIES] The Commission therefore considers that it is not possible to conclude that the merged entity would rapidly expand into this collection activity.
- (1311) Even assuming that the merged entity would have the ability to adopt foreclosure strategy with respect to relevant individual data, the Commission notes that it is not clear what incentive the merged entity could have to engage in a foreclosure strategy in the absence of vertical integration in the content market, as the merged entity could monetise any data collected for targeted advertising only in collaboration with the relevant TV broadcaster. The merged entity does not have any of its own content/channels [DETAILS OF BUSINESS STRATEGY] and could not sell advertising slots and super-impose these advertisements on third party broadcasters'

⁹³⁰

[REFERENCE TO INTERNAL DOCUMENT].

content/channels. Furthermore, the incentives of the merged entity and TV broadcasters will continue to be aligned in this respect and the Transaction does not seem to have any effect on them: both parties will want to ensure that broadcasters can continue to attract advertising and to this end, targeted advertising would represent an important tool to increase the broadcasters' financial capabilities. In other words, it would clearly be in the merged entity's interest to make the individual data widely available to TV broadcasters and, where possible, to be compensated for access to this data.

- (1312) Even assuming that, following the Transaction, the merged entity would increase its market power by substantially increasing the number of addressable users under its control, Vodafone will continue to have the incentive to cooperate with TV broadcasters with respect to its data (to the extent it would be technically able to collect/use this in the first place). The merged entity would therefore have the incentive [DETAILS OF CAPABILITIES] to work with TV broadcasters to use available data to improve the effectiveness/targeting and value of advertising.

Conclusion

- (1313) The Commission concludes that the Transaction would not significantly impede effective competition with regard to the possibility of the merged entity to prevent or somehow hinder the emergence and development of ATV applications.

2.11.4. Conclusion on the wholesale market for the TV signal transmission

- (1314) The Commission concludes that the Transaction would significantly impede effective competition in the market for the wholesale TV signal transmission in Germany due to horizontal non-coordinated effects. In particular, in light of all the analysis conducted in previous section VIII.C.2.11.3, the Commission considers that:

- (a) As a consequence of the increased market power of the merged entity, the Transaction could lead to a form of partial foreclosure of Pay and FTA TV channels, in particular through the worsening of the contractual and financial conditions imposed by the merged entity on TV broadcasters. In turn, this could lead to quality degradation of the TV offer to final viewers in Germany.
- (b) As a consequence of the increased market power, the merged entity could hamper the emergence of innovative TV services such as transmission of HbbTV signals and OTT offers and consequently harm consumers downstream through a reduced quality of the viewer experience and reduced choice.

2.12. Horizontal non-coordinated effects in the market for the licensing and acquisition of TV broadcasting rights

- (1315) Both Vodafone and Unitymedia are active as acquirer of TV broadcasting rights in Germany. As the Transaction would combine their retail TV operations in Germany, some participants to the market investigation submitted that the Transaction could have a negative effect also on the market for the licensing and acquisition of TV broadcasting rights, considering that the merged entity will have the critical mass to directly acquire TV premium contents and as a consequence it could foreclosure other TV operators (broadcasters, TV retailers). One participant in particular submitted that the merged entity would significantly expand its activities on the market for the acquisition of audio-visual content, as both Vodafone and Unitymedia have the general market knowledge in order to be active in the acquisition of rights for movies or sport events. This has already happened in the past with other telco companies. The merged entity would likely be able to achieve favourable terms and prices in negotiations with rights owners. Moreover, the merged entity could obtain

exclusivity for its network from rights owners and that would further hamper competition as customers (normally TV broadcasters) would then be foreclosed from such content. In turn this could have negative effects on other retail TV markets.⁹³¹

2.12.1. The Notifying Party's views

- (1316) The Notifying Party submits that the Transaction would not have any effect on the market for the licensing and acquisition of TV broadcasting rights.
- (1317) Firstly, rights holders primarily sell or license rights to TV broadcasters, who acquire content to be packaged into TV channels and represent the vast majority of the demand side of this market. Additional routes to market for rights holders include retail TV providers, who acquire content for example for their VOD media libraries. Among the retail TV providers, OTT players are becoming increasingly important routes for the distribution of content to consumers, while traditional retail TV providers only account for a very small proportion of demand for the acquisition of broadcasting rights (other than Sky, which is also active as a broadcaster with its own channels, for which it acquires content).
- (1318) This would be confirmed by the marginal role of the Parties as acquirers of TV rights: the Parties would have negligible activities, limited to a small proportion of their VOD offerings and each spending [REFERENCE TO DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS] per year, and likely accounting for [REFERENCE TO DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS] of total expenditure. Even among the retail TV providers, which in aggregate account for a very small fraction of the demand side of this market, the Parties would only have a modest downstream position. The market position of the Parties would be minimal even considering the different possible segmentation of the market (FTA vs. pay TV, Linear vs. non-linear, different exhibition windows, genre).
- (1319) The merged entity would thus not have any bargaining power vis-à-vis the rights holders, who in turns would have strong countervailing power, considering that the merged entity would need to continue to acquire a wide range of high-quality content. Furthermore, there would be an increasing availability of additional distribution channels for rights holders (in particular OTT).

2.12.2. The Commission's assessment

- (1320) Preliminarily, the Commission has already assessed in section VIII.C.2.11.3.9(i) the effect of the Transaction on Vodafone's ability to leverage its increased customer base in order to negotiate with broadcasters certain exclusivity deals for premium channels and/or content, thanks to the merged entity's increased market power on the wholesale signal TV market. The Commission considers that the conclusion reached in section VIII.C.2.11.3.9(i) is relevant for the present part as well, with the additional observation that in the market for the TV broadcasting rights the merged entity would not enjoy any relevant market power. In any case, the Commission will assess the possible effects of the Transaction in the general TV content market.
- (1321) Both Vodafone and Unitymedia purchase a limited amount of broadcasting rights for some of the content offered in their respective VOD media libraries (mainly in their pay TV offer). To be noted that for the majority of their VOD media libraries, the Parties do not acquire broadcasting rights themselves: TV broadcasters acquire the

⁹³¹

Tele Columbus, submission of 12 November 2018, page 42-43 [ID 2974].

relevant rights and decide which content they want to make available on the Parties' platform.

- (1322) The main TV content providers active in Germany who participated to the market investigation have not expressed particular concerns with regard to the Transaction. Most respondents submitted that there would not be any difference in dealing with the merged entity instead of two companies with complementary footprints,⁹³² although one respondent argued that the merged entity would be in a better position to effectively compete for their media rights when they will be offered to the market, considering the aggregated resources.⁹³³ Similarly, most TV content providers submitted that the Transaction will not have an impact on the volume of audio visual content the merged entity will acquire from them⁹³⁴ and that their negotiation position will remain the same.⁹³⁵ In general, the TV content providers who participated in the market investigation consider that the Transaction would not have any impact on them⁹³⁶ and some of them submitted that the Transaction could have positive effect in the market for the licensing and acquisition of audio visual content broadcasting rights in Germany.⁹³⁷
- (1323) TV broadcasters who took part in the market investigation expressed more concerns with respect to the market for the licensing and acquisition of TV broadcasting rights. In particular, the vast majority of the participants submitted that as a result of the Transaction, the bargaining power of the merged entity in the market for the acquisition of broadcasting rights will significantly increase vis-à-vis the providers of audio visual content in Germany.⁹³⁸ It has been argued that the merged entity could be able to bid for more expensive rights packages and might be able to gain more favourable exclusivities. The Transaction could also encourage a process of vertical integration of the merged entity. However, the result is more mixed with respect to the effect of the Transaction on the competition in the market for licensing and acquisition of audio visual content broadcasting rights in Germany, where a portion of the TV broadcasters submitted that the Transaction would not have effects.⁹³⁹
- (1324) The Commission notes that at present the activity of the Parties as acquirers of TV broadcasting rights in Germany is extremely limited. The Parties have not provided analytical data on this market, given their minimal presence in content acquisition and the related limited insight into rights holders' market shares. In any case, they estimate that their combined expenditure share on the demand side of the market for the licensing of broadcasting rights, including on any possible narrower segmentation, would be less than [5-10]% of the total German market.⁹⁴⁰ The limited presence of the Parties in this market is confirmed in the market investigation.⁹⁴¹
- (1325) The Parties' marginal market presence is mainly due to their current business model as TV distributor platforms or channels aggregators: the Parties normally do not acquire TV content, but package different channels acquired from TV broadcasters.

⁹³² Questionnaire Q5, replies to question 16.

⁹³³ International Olympic Committee's reply to Questionnaire Q5, reply to question 16 [ID 2491].

⁹³⁴ Questionnaire Q5, replies to question 17.

⁹³⁵ Questionnaire Q5, replies to question 18.

⁹³⁶ Questionnaire Q5, replies to question 19.1.

⁹³⁷ Questionnaire Q5, replies to question 19.2.

⁹³⁸ Questionnaire Q6, replies to question 28.

⁹³⁹ Questionnaire Q6, replies to question 50.2.

⁹⁴⁰ See Form CO, paragraph 6.1009.

⁹⁴¹ Tele Columbus, submission of 12 November 2018, page 42 [ID 2974]. See also in general Questionnaire Q5.

In other words, the vast majority of the content available on their platforms is procured by TV broadcasters (channel providers). Moreover, the Parties do not operate their own channels.

- (1326) The main acquirers of TV broadcasting rights in Germany are thus the TV broadcasters, who aggregate the TV contents into their channels, to be then distributed via the different TV platforms. All major TV broadcasters in Germany, public and private, would remain active in the market after the Transaction, with market shares generally higher than those of the merged entity. Sky in particular is a major acquirer of TV broadcasting rights, notably premium rights, for its vast Pay TV offer.
- (1327) Also other retail TV distributors are acquirers of TV content, mainly for their VOD activities, in particular Deutsche Telekom, and OTT operators.⁹⁴² Those operators will remain active as well in the market following the Transaction.
- (1328) Furthermore, with respect to the allegation that the Transaction could influence the merged entity's ability to acquire premium content, most of the licensors of premium content are large Hollywood film studios or relevant sport rights holders, whose negotiating position vis-à-vis the merged entity is unlikely to deteriorate as a result of the Transaction and whose interest is achieving as wide a distribution as possible. In any case, the issue is analysed in more detail in section VIII.C.2.11.3.9(i).
- (1329) As for the possibility of future vertical integration of the merged entity in the TV content/channel sector, the Commission cannot exclude that in future Vodafone would change its business model, also in light of the on-going developments in the media sector. In particular, the TV sector appear already characterised by a reduction of the role of linear TV channels and an increased importance of non-linear distribution, which could also in the future imply a redefinition of TV platforms like Vodafone as mainly content (and not channel) aggregators. However, this possible evolution does not appear connected to the Transaction and any present assessment of similar scenarios would be purely hypothetical.

2.12.3. Conclusion

- (1330) The Commission concludes that the Transaction would not significantly impede effective competition in relation to the market for licensing and acquisition of broadcasting rights for TV content in Germany.

3. HORIZONTAL COORDINATED EFFECTS

3.1. Introduction

- (1331) As explained at section VIII.A.1.2, a merger in a concentrated market can also lead to coordinated anticompetitive effects if it increases the likelihood that the firms active on that market will coordinate their behaviour in an anticompetitive fashion.
- (1332) During the investigation, a number of respondents complained about possible coordinated effects in various markets.⁹⁴³

⁹⁴² See Form CO, Table 6.64.

⁹⁴³ See, for example, [CONFIDENTIAL]. The Commission considers that the Transaction will not significantly impede effective competition in the retail market for TV services as a result of horizontal coordinated effects in Germany. This is because the Transaction will not bring about any meaningful change in the market, as the Parties were only minimally competing as regards TV services pre-Transaction. Moreover, the Transaction will not increase symmetry (in terms of market share or

- (1333) Among many respondents⁹⁴⁴, one competitor of the Parties in particular raised the possibility that, post-Transaction, the merged entity and Deutsche Telekom will coordinate their behaviour in a number of German markets.⁹⁴⁵ The complainant allege that the Transaction will allow the merged entity and Deutsche Telekom to coordinate in order to (i) refuse wholesale access to their respective fixed telecommunications networks; (ii) reduce/delay their investment strategies; (iii) keep retail prices high; and (iv) promote the emergence of multiple play offers including fixed and mobile telecommunications services. According to the complainant, the Transaction will increase the ability of the merged entity to tacitly coordinate with Deutsche Telekom, thanks to an increase in (i) market concentration, (ii) symmetry, and (iii) transparency in the market, as well as the removal of Unitymedia as an important competitive force on the market.⁹⁴⁶
- (1334) For completeness, however, the Commission also notes that, following the submission of the Commitments, and in the context of their market test, the same complainant did not re-iterate its concerns. Rather, it took the view that the Transaction, as modified by the Commitments, is not likely to give rise to competition concerns, in particular because of the complainant's ability to compete more effectively in the market for fixed internet access services.⁹⁴⁷
- (1335) The Commission considers that the Transaction will not create or increase the possibility of tacit coordination between the merged entity and Deutsche Telekom in the retail provision of fixed internet access services, or the possible retail markets for multiple play 3P bundles including fixed telephony services, fixed internet access services and mobile telecommunications services and 4P bundles in Germany Those markets will be analysed in sections VIII.C.3.2 and VIII.C.3.3.
- (1336) As explained in section VIII.A.1.2, in order to assess the likelihood of coordination in a certain market, the Commission will examine in the following sections whether

operating costs) between the two firms, as the merged entity will have a market share of approximately [30-40]% in terms of households connected for 2017/18 and will operate a HFC network, whereas Deutsche Telekom will have a market share of [5-10]% only, and will mainly offer TV services via its xDSL network. Considerations in sections 3.2.2 to 3.2.4 equally apply here. Furthermore, see reply of United Internet to questionnaire Q8, question 112.7, alleging that the Transaction will lead to a tight duopoly between the merged entity and Deutsche Telekom in the market for business connectivity in Germany. The Commission considers that the Transaction will not significantly impede effective competition in the retail market for business connectivity services as a result of horizontal coordinated effects in Germany. This is because the Transaction will not bring about any meaningful change in the market, as the Parties were only minimally competing as regards business connectivity services pre-Transaction. Moreover, as for TV services, the Transaction will not increase symmetry (in terms of market share or operating costs) between the two firms, as the merged entity will have a market share of approximately [10-20]% in terms of subscribers for 2017/18 and will operate a HFC network, whereas Deutsche Telekom will have a market share of [50-60]%, and will operate an xDSL network. Finally, the Commission notes that the market for business connectivity is characterized by large unfrequent tenders, which reduce both the stability and the transparency of the market, thus making collusion even more unlikely.

⁹⁴⁴ See, for example, reply of Freenet to questionnaire Q8, question 112.10.1 (alleging a duopoly between the merged entity and Deutsche Telekom for multiple play bundles in Germany); [CONFIDENTIAL]; reply of United Internet to questionnaire Q8, question 112.6.1 (alleging a tight duopoly between the same firms as regards fixed internet access services).

⁹⁴⁵ See, for example, Telefónica's "Memorandum Theories of Harm" of 26 October 2018 [ID 3228], and Telefónica's Reply to RFI 11, question 6-12 [ID 4188].

⁹⁴⁶ See, for example, Telefónica's "Memorandum Theories of Harm" of 26 October 2018, pages V-VI [ID 3228].

⁹⁴⁷ See, Telefónica's Suitability Memorandum, of 16 May 2019, page 11 [ID 6806]

the proposed concentration will facilitate (i) reaching terms of coordination, (ii) monitoring and (iii) punishing deviations, and (iv) whether outsiders will likely uphold or oppose the outcome of coordination.

3.2. Horizontal coordinated effects in the retail market for fixed internet access services in Germany

3.2.1. Reaching terms of coordination

(1337) The complainant submits that the Transaction will reduce the number of fixed telecommunications infrastructure-based suppliers from three to two, thereby creating a near-monopoly in the German cable market and an infrastructure duopoly in the German fixed telecommunications markets. In particular, the complainant submit that the Transaction will facilitate reaching terms of coordination between the merged entity and Deutsche Telekom because it will:

- (a) Increase market concentration, by reducing the number of fixed telecommunications infrastructure-based suppliers from three to two. Post-transaction, the two largest suppliers in the fixed retail telecommunications market would be Deutsche Telekom and the merger entity, with a combined market share for the retail provision of fixed internet access services of [70-80]% at national level. The complainant believes that this combined share is likely to increase in the future.
- (b) Increase symmetry. Firstly, symmetry in market shares, with Deutsche Telekom having approximately [40-50]% of the market, and the merged entity [30-40]%. Secondly, symmetry in coverage, as the Transaction will create a quasi-national cable operator. Third, symmetry in cost structures, as both players will operate their own fixed telecommunications network. Fourth, symmetry in the markets where they will be active.
- (c) Remove Unitymedia as a significant competitive constraint, thereby increasing the market's stability. Unitymedia was allegedly an important competitive force, both in retail pricing and in innovation.
- (d) Increase transparency, by reducing the number of suppliers in the market and thus facilitating the comparison between retail offers and investment strategies. The complainant believes that the market for fixed retail internet services is both highly transparent and stable, with limited product differentiation.

3.2.1.1. The Notifying Party's views

(1338) The Notifying Party submits that the Transaction will not give rise to coordinated effects as regards the retail provision of fixed internet access services or multiple play bundles in Germany.

(1339) In particular, the Notifying Party affirms that it is unlikely that the market players will reach a common understanding on the terms of coordination. More precisely, it stresses that the markets for fixed internet access services or multiple play bundles are characterised by a wide range of differentiated offers (in terms of speed, data allowances, prices, and product combination), as well as differences in terms of network technologies (for example, cable, FTTx, xDSL, etc.). Coordination on a geographic focal point would not be possible either.

(1340) The Notifying Party further submits that coordination would be inherently unstable, because of the differences in network technologies between the merged entity and Deutsche Telekom.

3.2.1.2. The Commission's assessment

- (1341) The Commission considers that the Transaction is unlikely to facilitate reaching terms of coordination between the merged entity and Deutsche Telekom. In this section, the Commission will evaluate whether the Transaction will make it easier for the two players to “arrive at a common perception as to how the coordination should work” and “which actions would be considered to be in accordance with the aligned behaviour and which actions are not”.⁹⁴⁸

(i) Complexity of the economic environment

- (1342) According the Horizontal Merger Guidelines, generally, “the less complex and the more stable the economic environment, the easier it is for the firms to reach a common understanding on the terms of coordination”.⁹⁴⁹ For example, it is easier to coordinate among few players than among many.
- (1343) While it is true that the Transaction reduces the number of players active on the German retail market for fixed internet access services (and to a lesser extent, on the retail market for multiple play bundles comprising of fixed and mobile telecommunications services), a large number of providers will remain active in the market. In particular, in addition to the merged entity and Deutsche Telekom, other players active in the market are nation-wide providers of telecommunications services Telefónica and United Internet, as well as nation-wide cable provider Tele Columbus and regional cable and FTTH providers Net Cologne, EWE Tel, Deutsche Glasfaser and others.
- (1344) Moreover, the Transaction concerns the merger of non-overlapping cable providers. In this regard, the Transaction reduces the number of firms that would need to take part in a hypothetical coordination scheme only as regards Unitymedia's footprint, where Vodafone currently competes by means of its xDSL business. The Transaction does not reduce the number of firms part of a possible coordination scheme outside of Unitymedia's cable footprint: in that area, the total number of market players remain unaffected.
- (1345) The Horizontal Merger Guidelines also refer to single, homogeneous products as being more likely to become the object of coordination, as opposed to large number of differentiated products.⁹⁵⁰ The complainant submits that the telecommunications market (that is, the retail market for fixed internet access services) is characterised by high levels of transparency.⁹⁵¹ The complainant explains that the gross retail pricing strategies⁹⁵² of Deutsche Telekom and Vodafone already today follow an established pricing structure, whereby Vodafone's gross prices are aligned with Deutsche Telekom, but Vodafone offers additional download speed than Deutsche Telekom and Vodafone's net prices are typically EUR 5 lower than Deutsche Telekom's. For example, the complainant claims that Deutsche Telekom's gross retail price for a fixed internet access product offering a download speed of 16 Mbit/s was EUR 34.95 in the period from November 2016 to June 2018, whereas Vodafone's gross price for

⁹⁴⁸ Horizontal Merger Guidelines, paragraph 44.

⁹⁴⁹ Horizontal Merger Guidelines, paragraph 45.

⁹⁵⁰ Horizontal Merger Guidelines, paragraph 45.

⁹⁵¹ Telefónica's “Memorandum Theories of Harm” of 26 October 2018, page 68 [ID 3228].

⁹⁵² Gross pricing means listing prices, without taking into consideration the possible rebates or temporary discounts that may be offered by the telecommunications provider nor an additional upfront fees (such as activation fee or hardware price). On the other hand, net pricing includes rebates and discounts, as well as any upfront fee that the end customer has to pay.

the same product was EUR 29.99, and Vodafone's gross price for the 50 Mbit/s product was exactly EUR 34.95. Finally, the complainant claims that the Transaction will increase the overall transparency level in the market, because of the reduction in the number of available tariffs. This would facilitate the comparison between offers, and would help align investment strategies.⁹⁵³

- (1346) In this regard, the Commission finds the complainant's submission unconvincing. The Commission understands the complaint as purporting that already today the market for fixed internet access services in Germany is a commoditised market that revolves around a few number of focal points, namely *price* and *speed*, on which Deutsche Telekom and Vodafone could—post-Transaction—find a tacit collusive equilibrium.⁹⁵⁴
- (1347) Firstly, the Commission considers that fixed internet access services are differentiated products. Fixed internet access offerings largely differ from one provider to another, and even within the portfolio of the same provider, as products present different characteristics or different price structures.
- (1348) As evidenced by internal documents of the Parties, different providers propose different pricing structures for their fixed internet access contracts (for example, a single price for the whole duration of the contract, as opposed to a discount on the first half of the contract, followed by an increase in price; or a low monthly price coupled with an one-time activation fee vs. a single price but no activation or hardware fees). Moreover, every product differs because of download speed, upload speed, equipment, and network technology (xDSL, cable, or fibre). A clear snapshot of the different pricing formulas adopted by the German players active in the multiple play market comprising fixed internet access services and fixed telephony services is reported in Figure 22.⁹⁵⁵
- (1349) As stated in the Horizontal Merger Guidelines, it is more difficult for firms to coordinate on a large number of prices in a market characterised by many differentiated products.
- (1350) Secondly, it is important to remind here that the Commission's analysis focuses on the structural change that the Transaction brings about, and on the likely effect that such change will have on the ability of market players to reach a tacit understanding on prices or quantities. In this regard, the Commission considers that the Transaction will not further facilitate tacit collusion on the market, because of the removal of Unitymedia as an independent telecommunications operator.
- (1351) More precisely, the Commission considers that it is unclear how the Transaction will make it easier for Deutsche Telekom and the merged entity to coordinate on the provision of fixed internet access services post-transaction. This is because, as previously discussed, the Transaction does not substantially affect the structure of the market in federal states within Vodafone's cable footprint, and even in federal states within Unitymedia's cable footprint, the Transaction only minimally affects the

⁹⁵³ Telefónica's "Memorandum Theories of Harm" of 26 October 2018, page 69 [ID 3228].

⁹⁵⁴ On the other hand, the Commission notes that the current pricing structure of Vodafone and Deutsche Telekom—while suggesting a certain price alignment—could not represent a stable equilibrium: this is because Vodafone is pricing its products at a substantial discount (in terms of price or speed) compared to Deutsche Telekom's products, which in a competitive market will result in a substantial share of customers leaving Deutsche Telekom to Vodafone (or to the company that offers the most attractive prices in the market).

⁹⁵⁵ [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].

ability of the merged entity and Deutsche Telekom to coordinate. In fact, in the three federal states where Unitymedia is active, the Transaction will simply decrease the importance of Vodafone as a provider of xDSL internet access services.

- (1352) Similarly, the Commission notes that the number of tariffs and offerings on the market will overall remain unchanged, because of the new internet cable offerings of the remedy taker. This will further contribute to the complexity of the fixed internet access market in Germany, thus rendering collusion more unlikely.
- (1353) As a result, the Commission considers that the Transaction is unlikely to facilitate tacit collusion between the merged entity and Deutsche Telekom, because of the differentiated nature of the product market for fixed internet access services in Germany.

(ii) Demand and supply conditions

- (1354) Furthermore, the Horizontal Merger Guidelines explain that “it is easier to coordinate on a price when demand and supply conditions are relatively stable than when they are continuously changing”.⁹⁵⁶
- (1355) In its submission, the complainant claims that the market for fixed telecommunications services in Germany is relatively stable, and thus conducive to coordination. The complainant submits that, on the supply side, no meaningful entry has occurred in recent years. Moreover, retail pricing tends to be stable, and the technological developments of different operators coincide in time. On the demand side, the complainant submits that there is significant stability in the total number of internet subscribers, as the demand growth has slowed down in recent years.⁹⁵⁷ Finally, the complainant submits that the Transaction would allegedly facilitate coordination by removing Unitymedia as a potential competitive constraint.⁹⁵⁸
- (1356) The Commission disagrees with the complainant as regards the characteristics of supply and demand in the German market for fixed internet access services. As far as supply is concerned—and as already explained in section VIII.C.2.2.2.6, the Commission considers that the German market for the retail supply of fixed internet access services is indeed characterised by high barriers to entry, which resulted in no meaningful entry in the past five years.⁹⁵⁹ However, the Commission considers that demand is relatively unstable, with steady but moderate growth in the past three years. In particular, the Commission notes that the total number of subscribers of fixed internet access services in Germany grew from a total of 27.5 million in 2015/16 to 28.7 million in 2016/17, and eventually to 29.7 million in 2017/18.
- (1357) The Commission also notes that each of Deutsche Telekom and the merged entity will operate different telecommunications network technologies, xDSL and FTTH for Deutsche Telekom, and HFC for the merged entity. As noted in section VIII.C.2.4.2.3⁹⁶⁰, investment cycles into fibre networks (such as deployment of FTTH) and into cable networks (such as upgrade to DOCSIS 3.1) involve different timelines, different CAPEX and OPEX, and result in different final product characteristics. Deutsche Telekom’s adoption of FTTH technology will provide it

⁹⁵⁶ Horizontal Merger Guidelines, paragraph 45.

⁹⁵⁷ Telefónica’s “Memorandum Theories of Harm” of 26 October 2018, page 48 [ID 3228]

⁹⁵⁸ Telefónica’s “Memorandum Theories of Harm” of 26 October 2018, page 47 [ID 3228]

⁹⁵⁹ See Form CO, paragraph 8.66

⁹⁶⁰ In particular, Vodafone, Meeting Presentation of 29 January 2019, Session 2 – Vodafone infrastructure investment.

with a means to substantially catch up with the merged entity's speeds (and likely to exceed them). For this reason, the Commission considers that the difference in investment cycles of HFC and fibre technologies is likely to disrupt the relative stability of supply that has characterised the German market in recent years.

- (1358) Finally, the Commission notes that the introduction of the remedy taker's new cable products will further destabilise the supply-side of the market for the fixed internet access services in Germany, thus rendering post-transaction coordination even more unlikely.
- (1359) Consequently, the Commission considers that the supply and demand conditions on the market for fixed internet access services in Germany is such that the Transaction is unlikely to increase the risk of coordinated effects.

(iii) Increased symmetry

- (1360) Lastly, the Horizontal Merger Guidelines explain that “[f]irms may find it easier to reach a common understanding on the terms of coordination if they are relatively symmetric, especially in terms of cost structures, market shares, capacity levels and levels of vertical integration.”⁹⁶¹
- (1361) According to the complainant's submission, the Transaction will increase symmetry in the market between the merged entity and Deutsche Telekom. As market shares are concerned, the complainant claims that post-transaction the two companies will have similar market shares (in particular, Deutsche Telekom [40-50]% and the merged entity [30-40]%) and will thus control approximately [70-80]% of the market.⁹⁶² Moreover, the complainant foresees that (i) the two market shares will progressively align in the coming years (with an expected difference of [5-10]% in [...]), due to cable technology's higher performance vis-à-vis DSL technology⁹⁶³, and that (ii) the combined market shares of the two entities will reach [70-80]% and [70-80]% in 2025 and 2030 respectively.⁹⁶⁴
- (1362) Additionally, the complainant submits that Deutsche Telekom and Vodafone would both have almost nation-wide coverage, similar cost structures and would be active in a similar range of end markets. With regard to cost structures, the complainant submits that the merged entity and Deutsche Telekom will have similar cost structures, characterised by high fixed costs and low variable costs, even if they operate telecommunications networks of different technologies (DSL for Deutsche Telekom and HFC for the merged entity).⁹⁶⁵ The complainant goes on to explain that only variable costs have pricing relevance, and that variable costs are largely independent from the network technology, since retail costs (which account for the majority of variable costs) are similar across infrastructures.⁹⁶⁶ Finally, the complainant submits that wholesale fees paid by Vodafone to Deutsche Telekom would largely fall away.
- (1363) The Commission considers that the Transaction is unlikely to cause the symmetry between Deutsche Telekom and the merged entity to attain a sufficient level for tacit coordination to take place. Firstly, the Commission notes that, even if the merged

⁹⁶¹ Horizontal Merger Guidelines, paragraph 48.

⁹⁶² Telefónica's "Memorandum Theories of Harm" of 26 October 2018, page 47 [ID 3228]

⁹⁶³ Telefónica's "Memorandum Theories of Harm" of 26 October 2018, pages 62-63 [ID 3228]

⁹⁶⁴ Telefónica's "Memorandum Theories of Harm" of 26 October 2018, page 56 [ID 3228]

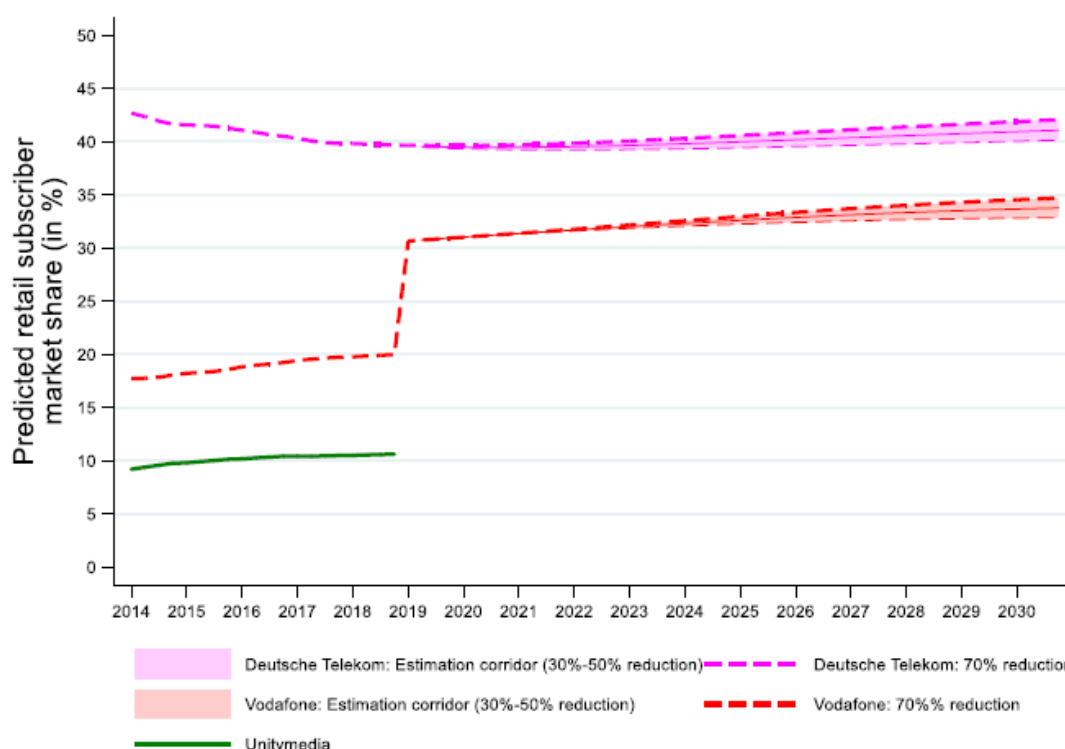
⁹⁶⁵ Telefónica's "Memorandum Theories of Harm" of 26 October 2018, page 64 [ID 3228]

⁹⁶⁶ Telefónica's reply to RFI 11 of 17 December 2018, page 10-11, question 6 [ID 4188].

entity's market share in the provision of retail fixed internet access services will increase because of the merger, the difference with Deutsche Telekom will remain substantial. As it can be seen from Table 2, the combined market share of the Parties post-Transaction for 2017/18 will be [30-40]% in terms of subscribers, and [20-30]% in terms of revenue, while Deutsche Telekom's share is [30-40]% in terms of subscribers, and [40-50]% in terms of revenue. This means that Deutsche Telekom's share is generally [10-20]% (subscribers) to [60-70]% (revenue) higher than the merged entity's. Moreover, the two entities will control only between [60-70]% (revenue) and [60-70]% (subscribers) of the whole market, with more than [30-40]% of it in the hands of market players that will not be part of the tacit coordination scheme.

- (1364) Even considering the figures submitted by the complainant for future developments in the market, it is clear that the respective market share of two entities will not substantially align, and that their combined market share will not exceed [70-80]%.

Figure 23: Predicted alignment of the market shares of Deutsche Telekom and Vodafone in the market for fixed retail telecommunications services



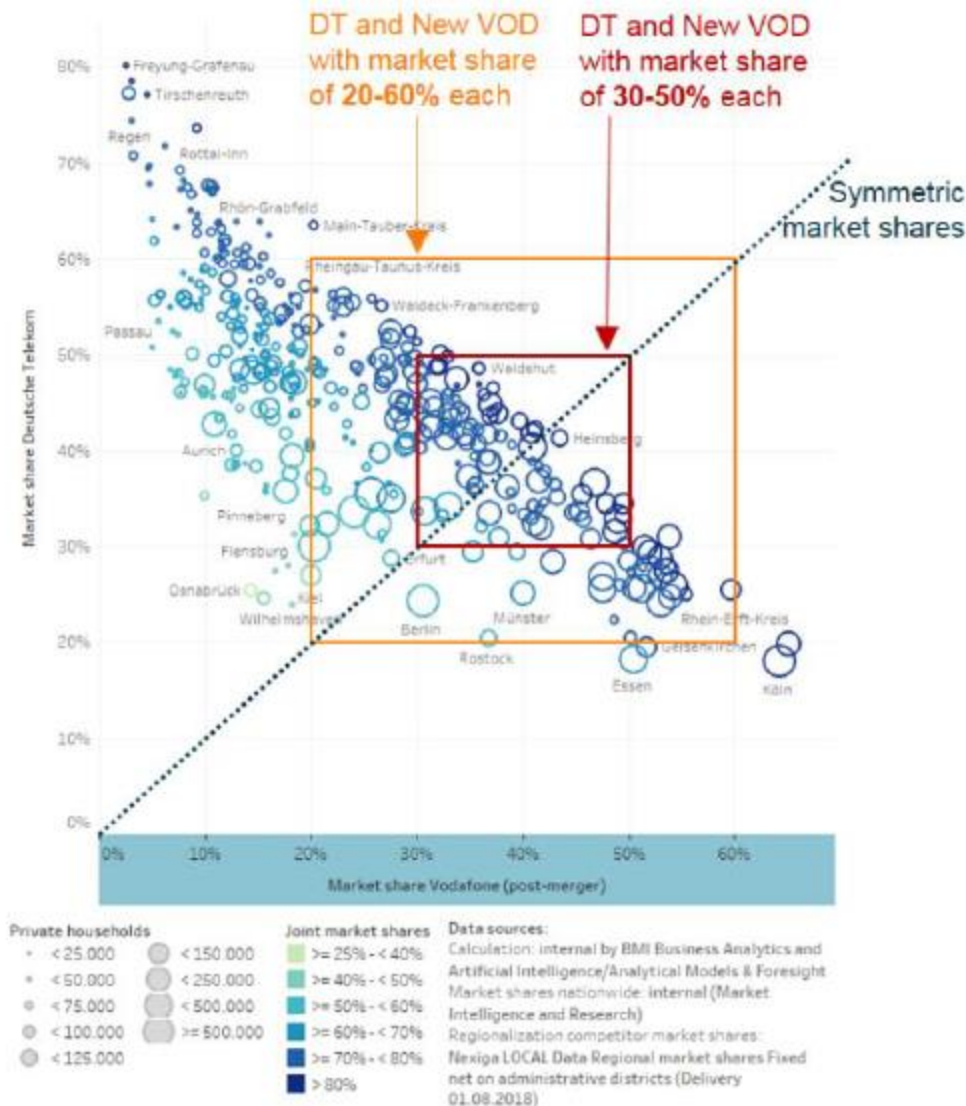
Source: Telefónica's non-confidential reply to RFI 11 of 17 December 2018, page 63 [ID 4188].

- (1365) Moreover, data submitted by the complainant show that—contrary to the complainant's assertions—the market share of the two entities broadly vary at local level, with the merged entity being more predominant in large urban areas and Deutsche Telekom in rural areas.⁹⁶⁷

⁹⁶⁷

The Commission notes that any possible coordination based on a geographic segmentation of the market (rural areas—to Deutsche Telekom, and urban areas/areas where the Parties' cable network is present to the merged entity) would not be sustainable. Coordination would be unlikely, as the substantial portion of revenue that Deutsche Telekom would forgo in urban areas would not be compensated by the increased revenue in rural areas. This is because areas not covered by the Parties' cable network represent a small share of the total number of fixed internet households in Germany (approximately 20%).

Figure 24: Scatterplot of Deutsche Telekom's and Vodafone's market shares at district level in the market for fixed retail telecommunications services.



Source: Telefónica's non-confidential reply to RFI 11 of 17 December 2018, page 64 [ID 4188].

- (1366) The Commission considers that the Transaction will not likely increase the symmetry in cost structures of the merged entity and Deutsche Telekom. Assuming that the merged entity will not shift a substantial share of its xDSL customers to its own cable network post-Transaction, the Commission notes that the merged entity and Deutsche Telekom will continue to have different cost structures post-Transaction. This is because Vodafone's cost structure with regard to customers that it serves via wholesale access to Deutsche Telekom includes an access fee, and thus is substantially different from Deutsche Telekom's, which is the owner of the network. Moreover, Deutsche Telekom's cost structure is equally different from Vodafone's own cost structure with regard to cable customers. Currently, Vodafone serves a substantial share of its customers via wholesale access to Deutsche Telekom's xDSL network, and assuming this will not substantially change with the Transaction, that share will still be a significant portion of the merged entity's total customer base (approximately [DETAILS OF SYNERGIES], which is [DETAILS OF SYNERGIES] out of [DETAILS OF SYNERGIES] subscribers).
- (1367) Furthermore, even assuming that the merged entity will actively try to migrate its existing xDSL customer base to its cable products (in order to avoid paying an access fee), this is unlikely to reduce to zero the number of subscribers that the merged

entity will serve via xDSL products. As explained above, each of the Parties' networks only cover a certain share of households in the federal states where they are active⁹⁶⁸, so that in order to get nationwide coverage the merged entity will need to continue to rely on wholesale access to Deutsche Telekom, or risk foregoing a sizeable share of revenue.

- (1368) Finally, the difference in cost structures between the merged entity and Deutsche Telekom will likely remain the same or further increase in the future, as Deutsche Telekom has plans to further rely on FTTH technology to serve its customers in the future. As explained by the Parties⁹⁶⁹, FTTH have lower operating (or variable) costs due to the passive nature of the access network compared to HFC networks, which are reliant on powered amplifiers and optical nodes in the access networks. Cable companies are unlikely to substitute their HFC network with FTTH technology in the short to medium term, as the HFC network they already operate can deliver speeds comparable to FTTH (for example, by relying on DOCSIS 3.1 technology).⁹⁷⁰
- (1369) In conclusion, the Commission considers that the Transaction will not lead to increased symmetry between the merged entity and Deutsche Telekom.

(iv) Conclusion

- (1370) For the reasons set out above, the Commission considers it unlikely that the Transaction will increase the possibility that the merged entity and Deutsche Telekom will arrive at a common understanding on the terms of coordination.

3.2.2. Monitoring deviations

- (1371) As regards market transparency, the complainant submits that the Transaction will make it easier for the merged entity and Deutsche Telekom to monitor deviations from their tacit coordination.⁹⁷¹ In the complainant's view, it is easy to observe and compare the different product offerings of German suppliers, including their specific characteristics and their prices, which are publicly available on the suppliers' websites, retail shops and price comparison websites. Moreover, the fact that customers switching suppliers have the right to port their numbers to the new supplier makes the market even more transparent, as it allows suppliers to monitor whether and to which supplier customers switch.

3.2.2.1. The Notifying Party's view

- (1372) The Notifying Party submits that monitoring and policing coordination is unlikely. It claims that monitoring terms of coordination is difficult, given that each player would need to scrutinise a high number of product characteristics and given the constant technological changes in the market.

⁹⁶⁸ The Parties estimate that Vodafone's and Unitymedia's cable networks only cover respectively [DETAILS OF CAPABILITIES] and [DETAILS OF CAPABILITIES] of the total households within their respective areas. See Form CO, paragraph 6.538.

⁹⁶⁹ See Parties' reply to RFI 22 of 4 February 2019, question 18.

⁹⁷⁰ This is further supported by information submitted by the Parties. The Notifying Party submits that it has [DETAILS OF INVESTMENT STRATEGY] plans for infrastructure investments in FTTH networks, [DETAILS OF INVESTMENT STRATEGY]. Moreover, the majority of those investments will be dedicated to [DETAILS OF INVESTMENT STRATEGY]. Likewise, Unitymedia submits it does not have any large-scale fibre rollout plans nor committed investment. Rather, it has been focusing on upgrading its existing cable network to Gigabit speeds through the implementation of DOCSIS 3.1. See Form CO paragraph 6.379.

⁹⁷¹ Telefónica's "Memorandum Theories of Harm" of 26 October 2018, page 48 [ID 3228]

3.2.2.2. The Commission's assessment

- (1373) The Horizontal Merger Guidelines explain that “[c]oordinating firms are often tempted to increase their share of the market by deviating from the terms of coordination, for instance by lowering prices, offering secret discounts, increasing product quality or capacity or trying to win new customers. Only the credible threat of timely and sufficient retaliation keeps firms from deviating. Markets therefore need to be sufficiently transparent to allow the coordinating firms to monitor to a sufficient degree whether other firms are deviating, and thus know when to retaliate.”⁹⁷²
- (1374) The Commission considers that the Transaction is unlikely to have an impact on the ability of the merged entity and Deutsche Telekom to monitor deviations.
- (1375) If on the one hand the Transaction will reduce the number of players in the market for fixed internet access services, it is unclear what the overall effect on the ability to monitor deviations is. This is because the two mechanisms that the complainant mentions could be used to monitor the market cannot provide a comprehensive overview of the commercial conditions granted by market players in Germany, nor do they allow a thorough monitoring of the inflow and outflow of customers.
- (1376) The first transparency mechanism that the complainant mentions is publicly available product offerings. The complainant claims that post-Transaction, the merged entity and Deutsche Telekom will be able to monitor each other's offerings simply by accessing each other's websites, retail shops or price comparison websites. Moreover, pricing and offerings are easily accessible through each company's national advertising campaigns.
- (1377) The Commission notes that, even if a substantial portion of customer acquisition happens via the sales channels stated above, a non-negligible portion of customer acquisition or customer retention is generally carried out via sales channels that competitors cannot easily monitor.
- (1378) In this respect, companies sometimes rely on "below-the-line" ("BTL") offers as a way to complement their standard offers, known as "above-the-line" offers ("ATL"). BTL offers, also called "underground", "tactical" or "promotional" offers, are tariffs that (i) target individual customers or specific clusters of customers, unlike the ATL offers, which are available to the general public; and that (ii) are more favourable than the ATL tariffs (as they, for example, involve a rebate from the ATL price and/or better commercial terms for the same price). Furthermore, unlike ATL tariffs, BTL tariffs are not publicly advertised by companies through the standard channels (websites, TV ads and printed media), but are offered to the target customers through specific channels, such as tele-selling and SMS (and can be activated by the customers either via phone or at a retail shop). Also, BTL tariffs are typically only valid for a limited timeframe within which the customer may subscribe. BTL tariffs can be used to acquire new customers from other providers, or to win back customers who have been switching away to a competitor.
- (1379) [CONFIDENTIAL].⁹⁷³
- (1380) The second monitoring mechanism that the complainant mentions is number portability. The complainant states that German law mandates that customers of

⁹⁷² Horizontal Merger Guidelines, paragraph 49.

⁹⁷³ [CONFIDENTIAL]

fixed or mobile telecommunications services have the right to keep their number when switching providers, and that the majority of switching fixed or mobile telecommunications subscribers make use of this number portability provision.⁹⁷⁴

- (1381) In this regard, the Commission notes that it is unclear whether number portability can be easily used to monitor deviations for coordination purposes. This is because even if data submitted by BNetzA show that 70% of fixed internet access customers purchase a bundle comprising fixed telephony services, a substantial portion of fixed internet access subscribers (30%) elude monitoring via number portability, because they do not subscribe to fixed telephony services with the same provider. Moreover, [CONFIDENTIAL].⁹⁷⁵
- (1382) Finally, the Commission notes that the Transaction will not have a large impact on the overall ability to monitor deviations in the market, because the Transaction does not bring about any structural changes in federal states where Vodafone's cable network is present, and only a marginal change in the three states where Unitymedia is active.
- (1383) In conclusion, the Commission considers that the Transaction is unlikely to further increase the already-existing degree of transparency in the market.

3.2.3. *Deterrent mechanism*

- (1384) As regards deterrence, the complainant submits that each of the merged entity or Deutsche Telekom could engage in a price war in order to retaliate against a possible deviation from the terms of coordination.⁹⁷⁶ Moreover, the complainant submits that an additional retaliatory measure that the merged entity could take is the opening of its cable network to third parties.⁹⁷⁷
- (1385) In addition to the two mechanisms above, the complainant submits that mutual dependencies would further stabilise coordination.⁹⁷⁸ On the one hand, the merged entity would remain partially dependent on Deutsche Telekom for wholesale access in regions not covered by its cable network—even after transferring parts of its xDSL customer base to Unitymedia's cable network after the completion of the takeover. In particular, the complainant claims that this would give Deutsche Telekom a device to discipline the merged entity in case of deviation from a collusive equilibrium, as the terms of access are partly bargained over (at least for VDSL products). On the other hand, Deutsche Telekom would be vulnerable due to the difference in bandwidth that can be achieved with the copper network compared to the cable network.

3.2.3.1. The Notifying Party's views

- (1386) The Notifying Party submits that the merged entity and Deutsche Telekom do not have credible deterrence mechanisms to put in place. In its view, all available punishment strategies (for example, technology investments or price wars) have little credibility as they are likely to be irreversible (as it would be difficult to return to any previous coordinated arrangement) and would commit the punishing firm to a future state of the world where they would be worse off, with no prospect of returning to the previous coordinated outcome.

⁹⁷⁴ Telefónica's reply to RFI 11 of 17 December 2018, page 12, question 7 [ID 4188].

⁹⁷⁵ Telefónica's reply to RFI 11 of 17 December 2018, page 12, question 7 [ID 4188].

⁹⁷⁶ Telefónica's "Memorandum Theories of Harm" of 26 October 2018, page 49 [ID 3228].

⁹⁷⁷ Telefónica's "Memorandum Theories of Harm" of 26 October 2018, page 49 [ID 3228].

⁹⁷⁸ Telefónica's "Memorandum Theories of Harm" of 26 October 2018, page 50 [ID 3228].

3.2.3.2. The Commission's assessment

- (1387) The threat of possible retaliation makes a tacit coordination sustainable in the long term. In particular, retaliation is credible if (i) deviation is detected, (ii) there is sufficient certainty that the deterrence mechanism will be activated, and (iii) the deterrence mechanism produces consequences that are sufficiently severe to convince the coordinating firms to adhere to the terms of coordination.⁹⁷⁹ The complainant puts forward three possible deterrent mechanisms, a price war, the threat of additional entry into cable telecommunications, and the mutual dependency between the two firms.
- (1388) The Commission considers a possible price war a credible retaliation mechanism. As laid out in the Horizontal Merger Guidelines⁹⁸⁰, retaliatory measures that have an immediate disciplining effect on the non-aligning firm (such as updates in pricing, which directly hit the non-aligning firm's bottom line) constitute a credible retaliation mechanism. Moreover, the Guidelines explain that companies use price wars as an effective deterrence mechanism, because the short-term loss due to the lower prices is offset by the long-term benefits of the return to coordination.⁹⁸¹
- (1389) However, the Commission does not consider a price war to be an effective deterrent mechanism in this particular case. A deterrent mechanism's strength is linked to market transparency: the quicker the deviation is detected, the sooner the retaliation can take place.⁹⁸² In this case, the Commission notes that, as explained in section VIII.C.3.2.2, the market is not entirely transparent due to the presence of BTL offers and the fact that number portability does not allow the monitoring of the totality of switching customers.
- (1390) As regards the possible threat of additional entry, the Commission does not consider it an effective deterrent mechanism. Firstly, the Commission notes that, by agreeing to grant wholesale access to its cable network as part of the Commitments, the merged entity has already triggered such mechanism, thus rendering the risk of coordination even more remote. Secondly, even considering such an option in light of future retaliation, the Commission considers that the merged entity will not have any incentive to utilise such a strategy, because of its irreversibility: any short-term loss due to the entry of an additional competitor cannot be compensated by long-term gains, because once entry has taken place, it is highly unlikely that the merged entity and Deutsche Telekom will reinstate the coordination scheme.
- (1391) Finally, as regards the mutual dependency, the Commission does not consider the mechanism described by the complainant as a credible deterrent mechanism. This is because, if it is true that the merged entity will rely on Deutsche Telekom for the portions of the country where its cable network is not present, Deutsche Telekom does not have much leeway to retaliate against any deviation of the merged entity from the collusive scheme. This is because, firstly, the current agreement between Deutsche Telekom and Vodafone for the wholesale access to the former's DSL network requires a [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS]⁹⁸³, which would not make any retaliation timely and immediate. Secondly, Deutsche Telekom's incentive to engage in any margin

⁹⁷⁹ Horizontal Merger Guidelines, paragraph 52.

⁹⁸⁰ Horizontal Merger Guidelines, paragraph 53.

⁹⁸¹ Horizontal Merger Guidelines, paragraph 54.

⁹⁸² Horizontal Merger Guidelines, paragraph 53.

⁹⁸³ See Parties' reply to RFI 33, question 3.

squeeze practice in the renegotiation of the wholesale access conditions would be reduced due to the fact that in the past it was already sanctioned for a similar conduct that was found to breach Article 102 TFUE.⁹⁸⁴ Thirdly, even assuming that Deutsche Telekom could worsen the merged entity's access conditions at the expiry of the current access agreement, this would not be an effective retaliatory measures for the following reasons: the German Telecommunications Regulator (BNetzA) oversees the access conditions granted by Deutsche Telekom (even as regards the *Kontingentmodell*), so that no margin squeeze could occur; moreover, any renegotiation of the access agreement would not be timely or immediate, and thus not an effective retaliatory measure against the merged entity. Because the merged entity would not be dependent on Deutsche Telekom for the reasons set out above, the credible threat of a speed competition by the merged entity would be ineffective for the purposes of policing a tacit agreement, as it would not be matched by an equivalent threat by Deutsche Telekom.

- (1392) All in all, the Commission considers that a possible price war would be a credible but ineffective deterrent mechanism, that the threat of a possible entry through wholesale access to the merged entity's cable network would not be a credible deterrent mechanism, and that the two firms are not mutually dependent.

3.2.4. *Reactions of outsiders*

- (1393) The complainant submits that the remaining players active in the provision of fixed internet access services in Germany will not be able to disrupt the purported tacit coordination between the merged entity and Deutsche Telekom.⁹⁸⁵ In this regard, the complainant makes a difference between local/regional players on the one hand, and national players on the other hand. The complainant submits that local/regional players only play a limited competitive role in Germany, because of their limited geographic footprint, lack of brand recognition, and focus on the upper price segment. National players are equally unable to disrupt the likely coordination, because they mainly rely on wholesale access to Deutsche Telekom, and do not have sufficient margins to challenge network operators at retail level.

3.2.4.1. The Notifying Party's views

- (1394) The Notifying Party submits that any attempted coordination with respect to the retail market for fixed internet access services would not be feasible, because of the reaction of players that sit outside of the hypothetical collusive agreement. Those players would allegedly have a strong incentive to set their prices below the collusive level in order to maximise their market share. Moreover, the Notifying Party submits that entry through regulated wholesale access to Deutsche Telekom's DSL network would disrupt the collusive equilibrium even if the existing market players were to follow the lead of the two colluding companies (the merged entity and Deutsche Telekom).

3.2.4.2. The Commission's assessment

- (1395) The Horizontal Merger Guidelines explain that “[f]or coordination to be successful, the actions of non-coordinating firms and potential competitors, as well as

⁹⁸⁴ See, in particular, Commission Decision of 21 May 2003 relating to a proceeding under Article 82 of the EC Treaty (Case COMP/C-1/37.451, 37.578, 37.579 — Deutsche Telekom AG) (OJ L 263, 14.10.2003, p. 9–41). See Non-Horizontal Merger Guidelines, paragraph 46.

⁹⁸⁵ Telefónica's reply to RFI 11 of 17 December 2018, page 13, question 6-12 [ID 4188].

*customers, should not be able to jeopardise the outcome expected from coordination.*⁹⁸⁶

- (1396) The Commission considers that it is likely that competing providers of fixed internet access services will disrupt the hypothetical coordination between Deutsche Telekom and the merged entity post-Transaction.
- (1397) As regards United Internet, as explained in section VIII.C.2.2.2.4, United Internet is an aggressive player in terms of pricing and competes closely with the Parties in this respect. The market investigation also provided indications that United Internet focuses on the “budget segment” of the market. The Commission considers that, while United Internet may be likely to have the ability to compete post-Transaction, at least as regards price, it appears unlikely that it would have the incentives to compete to such an extent as to counteract the loss of competition deriving from possible coordinated effects.
- (1398) As regards other local and regional players (such as EWE in the north of Germany, M-Net in the Munich area or Tele Columbus in the east of Germany), as laid out in section VIII.C.2.2.2.4, the market investigation showed that their competitive role is constrained by the limited size of their respective networks. Therefore, the Commission considers that local and regional players will not be able to fully destabilise the hypothetical coordination strategy.
- (1399) As regards Telefónica, the Commission found in section VIII.C.2.2.2.4 that Telefónica was perceived as a less relevant competitor in the supply of fixed internet access services, due to its focus on its mobile telecommunications business. Moreover, the Commission found that the limited ability and incentives of Telefónica to compete in the market could be due to its less advantageous cost structure compared to United Internet and Vodafone (in terms of wholesale access to Deutsche Telekom’s network).
- (1400) Nonetheless, the Commission considers that Telefónica as a remedy taker will have a strong incentive to disrupt any hypothetical coordination between the merged entity and Deutsche Telekom post-Transaction. This is because the wholesale access agreement to the merged entity’s cable network that is part of the Commitments provides economic incentives for the remedy taker to acquire new customers. In this regard, any possible coordination in the market will not benefit the remedy taker, which will need to acquire new customers in order to recoup its upfront commitments in terms of access fees.
- (1401) Therefore, the Commission considers that the Transaction—as modified by the Commitments—will not lower the incentives of non-coordinating firms to disrupt any possible tacit coordination.

3.2.5. *Other possible means of coordination*

- (1402) In its submission, the complainant claims that, post-transaction, the merged entity and Deutsche Telekom could further coordinate to (i) reduce or delay their investment strategies or (ii) refuse wholesale access to their fixed telecommunications networks.⁹⁸⁷

⁹⁸⁶ Horizontal Merger Guidelines, paragraph 56.

⁹⁸⁷ Telefónica’s “Memorandum Theories of Harm” of 26 October 2018, page 47 [ID 3228].

3.2.5.1. Coordination with regard to investments

(1403) In its submissions, the complainant submits that the Transaction could lead to the coordination of investment strategies of Deutsche Telekom and the merged entity, which in turn could result in the reduction or delay of investments into FTTH (or DOCSIS 3.1 for the merged entity).⁹⁸⁸ To substantiate its claim, the complainant submits that the level of investments in the Netherlands substantially slowed down following the merger between Liberty Global's UPC and Ziggo.⁹⁸⁹ The complainant submits that a similar reduction of overall investments into fixed telecommunications networks is likely to happen following the Transaction, given the similarities between the Dutch and the current merger.

(i) The Notifying Party's views

(1404) The Notifying Party submits that any possible coordination strategy that would lead to a reduction of innovation is not credible. It explains that different providers use different network technologies and therefore follow different innovation cycles. Moreover, it is unclear what mechanism the coordinating companies could use to monitor each other's network investment plans.

(ii) The Commission's assessment

(1405) The Commission notes that it is unclear from the complainant's submission whether the possibility that the Transaction could result in decreased levels of investments is a separate coordination theory, or simply one of the possible harmful effects of a potential coordination of the merged entity and Deutsche Telekom in the retail market for fixed internet access services. The Commission already discussed above why a possible coordination in the retail market for fixed internet access services is unlikely. By the same token, that conclusion equally applies to any harmful effects on investments that are the result of coordination on that market.

(1406) In this section, the Commission will assess the possibility that the merged entity and Deutsche Telekom could coordinate post-transaction on their respective investment and innovation strategies. For the reasons set out in the following recitals, the Commission considers that the transaction is unlikely to lead to horizontal coordinated effects as regards the two firms' investment strategies.

(1407) Firstly, the Commission notes that it is unclear what mechanism the merged entity and Deutsche Telekom could employ to reach and monitor a sustainable coordination on investments. The complainant claims that the investment strategies of the different German players are transparent, in part because of publicly available sources (Breitbandatlas and Infrastrukturatlas) that track details on regional broadband availability and roll-out activities. The Commission notes that none of the tools stated by the complainant can be used to effectively track the investment strategies of competitors (especially in order to monitor deviations from a collusive scheme): this is because both the Breitbandatlas and the Infrastrukturatlas are fed by data submitted voluntarily by the network providers. The providers are not required to report the current status of their network's investments, so that it is not uncommon that the atlases do not reflect the current state of infrastructure investment in Germany.⁹⁹⁰

⁹⁸⁸ Telefónica's "Memorandum Theories of Harm" of 26 October 2018, page 65 [ID 3228].

⁹⁸⁹ Telefónica's "Memorandum Theories of Harm" of 26 October 2018, page 67 [ID 3228].

⁹⁹⁰ For example, see <http://www.bmvi.de/DE/Themen/Digitales/Breitbandausbau/Breitbandatlas->

- (1408) Secondly, the Commission notes that the merged entity's and Deutsche Telekom's investments are not symmetrical in terms of costs. As explained in sections VIII.C.3.2.1(ii) and (iii), Deutsche Telekom is likely to invest in FTTH, whereas the merged entity is [DETAILS OF COMMERCIAL / INVESTMENT STRATEGY], at least [DETAILS OF COMMERCIAL / INVESTMENT STRATEGY]. The Commission notes that the two technologies require different levels of capital investment, as FTTH roll-out is much more capital-intensive (because of the need to lay cables in the ground) than [DETAILS OF COMMERCIAL / INVESTMENT STRATEGY].
- (1409) Thirdly, the Commission notes that no credible deterrent mechanism could effectively policy the tacit collusion. The complainant submits that in case either supplier was to deviate from the terms of coordination, the other supplier could initiate a price war and/or increase its investments in FTTB/H: if Deutsche Telekom were to deviate from the terms of coordination, Vodafone could also increase its investments in DOCSIS 3.1.⁹⁹¹ However, the Commission notes that for a deterrent mechanism to be credible, the retaliatory measures must have an immediate disciplining effect on the non-aligning firm.⁹⁹² This is not the case of investments in DOCSIS 3.1 or FTTH, which require lengthy planning and implementation.
- (1410) Finally, the Commission notes that in any case the Transaction is not likely to increase the risk of investment coordination between Deutsche Telekom and the merged entity. This is because, as evidenced at section VIII.C.2.4.2.3, pre-merger the Parties did not compete against each other in terms of cable network investments, so that the Transaction is not likely to reduce any investment competition between the two, nor it is likely to make it easier for the Parties to coordinate with Deutsche Telekom.
- (1411) In conclusion, the Commission considers that the Transaction would not significantly impede effective competition with regard to investments in fixed telecommunications networks as a result of horizontal coordinated effects in Germany.
- 3.2.5.2. Coordination to refuse wholesale access to the merged entity's and Deutsche Telekom's telecommunications networks
- (1412) The complainant submits that the Transaction could likely lead to the coordination of Deutsche Telekom and the merged entity as regards wholesale access to their respective fixed telecommunications networks. In particular, the complainant submits that the two firms could coordinate to constructively refuse wholesale access to their networks, thus reducing competition in the market for fixed telecommunications services.⁹⁹³
- (i) The Notifying Party's views**
- (1413) The Notifying Party submits that any possible risks of coordination as regards wholesale access to fixed access markets are unlikely. Firstly, it submits that wholesale fixed access to Deutsche Telekom's network on competitive terms is guaranteed by regulation, as are, by extension, any agreements under which Vodafone resells its access to Deutsche Telekom's network. Secondly, it claims that

Karte/start.html [ID 6770], FAQ section at the bottom of the page. For Infrastrukturatlas, see also Parties' reply to RFI 22 of 4 February 2019, question 16.

⁹⁹¹ Telefónica's "Memorandum Theories of Harm" of 26 October 2018, page 49 [ID 3228].

⁹⁹² Horizontal Merger Guidelines, paragraph 54.

⁹⁹³ Telefónica's "Memorandum Theories of Harm" of 26 October 2018, page 47 [ID 3228].

any coordination strategy regarding wholesale access to the Parties' cable networks would not have any impact on retail competition, since [DETAILS OF COMMERCIAL / INVESTMENT STRATEGY], and therefore no downstream competitor would be foreclosed. Finally, the Notifying Party submits that the Transaction will not have any impact on the merged entity's and Deutsche Telekom's ability to coordinate to refuse wholesale access to their respective telecommunications networks, because the Parties' network do not overlap and therefore the Transaction does not reduce the total number of firms that would need to take part in a hypothetical coordination scheme.

(ii) The Commission's assessment

- (1414) The Commission considers that the Transaction is unlikely to lead to the coordination of the merged entity's and Deutsche Telekom's commercial strategies as regards access to their respective telecommunications networks.
- (1415) In particular, the Commission notes that, as part of its Commitments, the Notifying Party already agreed to provide wholesale access to its cable network to a potential remedy taker. As a result, this possible theory of harm is moot. Furthermore, the Commission notes that the complainant itself took the view that the Transaction, as modified by the Commitments, is not likely to give rise to competition concerns.⁹⁹⁴
- (1416) In light of the above, the Commission considers that the Transaction would not significantly impede effective competition with regard to wholesale access to the merged entity's and Deutsche Telekom's fixed telecommunications networks as a result of horizontal coordinated effects in Germany.

3.2.6. Conclusion

- (1417) For the reasons set out above, the Commission considers that the Transaction will not significantly impede effective competition in the retail market for fixed internet access services as a result of horizontal coordinated effects in Germany. This is because the Transaction is unlikely to make it easier for the merged entity and Deutsche Telekom to reach terms of coordination. Moreover, the Transaction is equally unlikely to make the monitoring of deviations more straightforward, which will make any possible deterrent mechanism ineffective.

3.3. Horizontal coordinated effects in the possible retail markets for multiple play 3P bundles including fixed telephony services, fixed internet access services and mobile telecommunications services and 4P bundles in Germany

- (1418) During the market investigation a complaint has been submitted whereby the Transaction will make it more difficult for remaining players to compete on the possible market for the provision of fixed-mobile convergence bundles (or FMC), which are bundles of fixed internet access services and mobile telecommunications services (be it 3P or 4P bundle markets).⁹⁹⁵ In particular, a complainant claims that already today the margins it has in the provision of fixed internet access services are too narrow for it to profitably market FMC products [CONFIDENTIAL].^{996 997}

⁹⁹⁴ In its reply to RFI 11, the complainant alleges that, absent the Transaction, Unitymedia would have likely provided access to its cable networks to third parties. The complainant submits that this is plausible, given the growth-oriented strategy of Unitymedia. [CONFIDENTIAL]

⁹⁹⁵ See in particular Telefónica's "Memorandum Theories of Harm" of 26 October 2018, page 69 [ID 3228].

⁹⁹⁶ Telefónica's "Memorandum Theories of Harm" of 26 October 2018, pages 71-72 [ID 3228]

3.3.1. *The Notifying Party's views*

- (1419) The Notifying Party strongly opposes any allegations of horizontal coordinated effects in the retail market for FCM bundles. It submits that coordinating over the pricing of bundles is even more challenging than coordinating behaviour in the standalone markets: firstly, the bundled products combine even more product dimensions and components of pricing than standalone products; secondly, the pricing of bundled products would need to be coordinated in addition to coordination on all the pricing and products dimensions of the standalone products that would remain in the market.
- (1420) More generally, the Notifying Party submits that reaching agreement on a complex menu of product offerings would be too complicated. Moreover, any coordination would likely be unstable, because of the asymmetries between the two firms, and because of the reaction of other market players. Finally, it submits that deviations are very hard to monitor, making punishment unlikely.

3.3.2. *The Commission's assessment*

- (1421) At the outset, the Commission notes that the theory of harm put forward by complainants closely resembles a joint predatory strategy: according to this theory, the merged entity and Deutsche Telekom would leverage their combined market power in the retail market for fixed internet access services in order to foreclose standalone retail mobile telecommunications operators. Under this theory, the colluding firms would grant steep discounts on their fixed-mobile bundles, which providers of standalone services could not match. The Commission considers that a possible predation theory based on joint dominance would be even less sustainable than a hypothetical predatory strategy based on unilateral effects in the retail market for fixed internet access services. Therefore, the Commission considers that the analysis of the possible conglomerate effects of the Transaction carried out at section VIII.C.5 equally applies to the complainant's concern here.⁹⁹⁸

⁹⁹⁷ The complainant focuses its allegations on the purportedly harmful effects of the Transaction on FMC bundles, but alleges that the same would hold for bundles including TV services. Because the Commission's analysis with regard to FMC bundles largely applies to bundles comprising TV services, this possible theory of harm will not be discussed further.

⁹⁹⁸ The complainant further claims that the tacit coordination would likely spill from the market for fixed telecommunications services into the market for the retail supply of TV signal to MDU customers. See Telefónica's "Memorandum Theories of Harm" of 26 October 2018, pages IV and 50 [ID 3228]. According to the complainant, the allegedly tacit coordination between the merged entity and Deutsche Telekom in the market for TV signal to MDU customers would profit both firms. The Commission considers that it is highly unlikely that the two firms coordinate in the retail market for TV signal to MDU customers, for the following reasons: firstly, because the Parties did not directly compete in the market for TV signal to MDU customers, the Transaction will not bring about any structural change, and therefore will not increase the likelihood of coordination. Second, reaching terms of coordination would be highly unlikely. The two companies have asymmetrical market shares, with the merged entity being one of the largest players in the market ([30-40]% [...]) and Deutsche Telekom a minor player ([0-5]% by number of connections); additionally, the two companies have asymmetrical cost structures, as the merged entity serves customers through cable technology, whereas Deutsche Telekom mainly employs IPTV (and minimally cable) technology. Third, the market is not transparent, so that monitoring deviations could be almost impossible. In fact, the market is structured around large and infrequent tenders, characterized by high confidentiality standards. Large and infrequent tenders also means that it is difficult to establish a sufficiently severe deterrent mechanism, since the gains from deviating at the right time may be large, certain and immediate, whereas the losses from being punished may be small and uncertain. See Horizontal Merger Guidelines, paragraph 53. For those reasons, the

- (1422) In this section, the Commission will nonetheless discuss the separate theory of harm involving the possibility that the merged entity and Deutsche Telekom coordinate their behaviour as regards the possible multiple play markets for FMC 3P or 4P bundles in Germany. For the reasons set out in the following recitals, the Commission considers that the Transaction is unlikely to give rise to horizontal coordinated effects in the retail markets for 3P bundles comprising of fixed internet access services, fixed telephony services and mobile telecommunications services or 4P bundles in Germany.
- (1423) Firstly, the Commission considers that the Transaction will have a negligible impact on the merged entity's and Deutsche Telekom's capacity to reach terms of coordination. In fact, the Commission notes that Unitymedia is only active in the market for 3P bundles comprising of fixed internet access services, fixed telephony services and mobile telecommunications services or 4P bundles to a very limited extent: the Notifying Party estimates that Unitymedia's share in the market for 3P or 4P bundles is below [5-10]%⁹⁹⁹. Furthermore, Unitymedia is active in the markets for 3P and 4P comprising mobile telecommunications services only within its cable footprint. As a result, the removal of Unitymedia as an independent provider of multiple play bundles will not significantly render the market more transparent, nor will it increase symmetry between Deutsche Telekom's and the merged entity's market shares.
- (1424) Secondly, the Commission notes that, thanks to the Commitments, the remedy taker will increase its presence in the markets for 3P bundles comprising of fixed internet access services, fixed telephony services and mobile telecommunications services or 4P bundles. This will result in increased competition, instability of supply conditions, and therefore to a reduced risk that the Transaction will lead to coordinated effects on those markets.
- (1425) Thirdly, reaching terms of coordination in any possible retail market for FMC bundles (be it 3P or 4P) will be even more unlikely than in the retail market for fixed internet access services standalone. The Horizontal Merger Guidelines stress that it is easier to coordinate on a price for a single, homogeneous product than on differentiated products.¹⁰⁰⁰ In this regard, the Commission considers that 3P bundles comprising of fixed internet access services, fixed telephony services and mobile telecommunications services or 4P bundles are highly differentiated products, as they differ at least on the basis of (i) prices, (ii) discounts, (iii) download speeds (for the fixed internet component), (iv) data allowances (for the mobile telecommunications component), and (v) content (the latter, for 4P bundles including TV services).

3.3.3. Conclusion

- (1426) In light of the foregoing, the Commission considers that the Transaction would not significantly impede effective competition in the possible retail markets for multiple play 3P bundles including fixed telephony services, fixed internet access services and mobile telecommunications services and 4P bundles as a result of horizontal coordinated effects in Germany.

Commission considers that the Transaction will not significantly impede effective competition in the retail market for TV signal to MDU customers as a result of horizontal coordinated effects in Germany.

⁹⁹⁹ See Form CO, paragraph 6.1226(iii)

¹⁰⁰⁰ Horizontal Merger Guidelines, paragraph 45.

4. VERTICAL NON-COORDINATED EFFECTS

4.1. Foreclosure of wholesale access and call origination services on mobile networks to retail suppliers of mobile telecommunications services in Germany

4.1.1. The Notifying Party's view

(1427) The Notifying Party submits that there can be no input foreclosure concerns given that there is no change in Vodafone's ability or incentive to engage in input foreclosure in relation to the downstream retail mobile market. In addition, Vodafone points to the MNOs that remain as viable alternative for MVNOs. In Germany, several non-MNOs are in fact hosted by several MNOs pre-Transaction. The Notifying Party submits a similar argumentation as regards the vertical link between Vodafone's wholesale activities and the Parties' activities in the downstream fixed mobile segment.

(1428) Similarly, the Notifying Party submits that there can be no customer foreclosure concerns given the de minimis ([0-5]% in subscriber terms) presence of Unitymedia in the downstream retail mobile market.

4.1.2. The Commission's assessment

(1429) In this section the Commission assesses the likelihood of anticompetitive vertical non-coordinated effects in the market for the retail supply of mobile telecommunications services in Germany. To this aim, section VIII.C.4.2.2.1 provides background information in relation to the German market for wholesale access and call origination services on mobile networks and describes the regulatory framework applicable in Germany. Section VIII.C.4.2.2.2 presents the market shares of the Parties in the relevant upstream and downstream markets. Section VIII.C.4.2.2.3 contains an assessment of the likely vertical non-coordinated anticompetitive effects of the Transaction in relation to the vertical relationship between the upstream market for wholesale access and call origination services on mobile networks and the downstream market for the retail supply of mobile telecommunications services and multiple play bundles including both a fixed and mobile component. Finally, section VIII.C.4.2.3 draws conclusions.

4.1.2.1. The German market for wholesale access and call origination services on mobile networks

(1430) All MNOs in Germany provide wholesale access and call origination services which enable operators without their own network, namely service providers, MVNOs and branded resellers, to provide their own mobile telecommunications services to end customers.

(1431) The provision of wholesale access and call origination services on mobile networks is partially regulated by an element of the spectrum licensing regime in Germany. The 3G licences of all the MNOs include the "Service Provider Obligation" which provides that MNOs are required to provide access to their networks to service providers on a non-discriminatory basis (for the purposes of selling their host MNO's retail offers). The BNetzA considers that these obligations are not limited to certain technologies like 2G and 3G. However, the concerned frequencies stipulating the Service Provider Obligation are going to expire at the end of 2020.¹⁰⁰¹ The Service Provider Obligation contained in these licences will therefore expire at the same time.

¹⁰⁰¹ See Parties' reply to RFI 37, question 3.

- (1432) The 4G technology of the MNOs in Germany rely on frequency usage rights granted by the BNetzA. The conditions for the allocation of these rights do not contain a Service Provider Obligation.
- (1433) The conditions for the auction of 5G frequencies provide that MNOs are obliged to negotiate with MVNOs and service providers in good faith over commercial terms for access to mobile services provided via 5G and older technologies. The BNetzA will play a “referee role” having the power to intervene and to impose fines if necessary.^{1002,1003} There is no obligation for MNOs to grant 5G access to MVNOs and Service Providers.
- (1434) In 2014, the Telefónica/E-Plus merger was cleared subject to three conditions relating to the merged entity’s access conditions for non-MNOs.¹⁰⁰⁴ Telefónica committed to (i) to sell, before the acquisition was completed, up to 30% of the merged company's network capacity, (ii) to offer to divest radio wave spectrum and certain assets either to a new network operator or subsequently to virtual operators who used network capacity, and (iii) to extend existing wholesale agreements with Telefónica's and E-Plus' wholesale partners until the end of 2025 and to offer wholesale 4G services to all interested players at "best prices" until the end of year [CONFIDENTIAL]. In addition, Telefónica committed to improve its wholesale partners' ability to switch their customers from one MNO to another.¹⁰⁰⁵
- (1435) United Internet (Drillisch at the time) is the remedy taker of the first commitment. In 2019, United Internet participated in the German 5G spectrum auction with a view to building out its own 5G network and becoming an MNO in the long term.¹⁰⁰⁶

4.1.2.2. Market shares

- (1436) The market shares of Vodafone and its competitors in the market for wholesale access and call origination services in Germany are illustrated in Table 46.

Table 46: Market shares for wholesale access and call origination services
(2015-2018)

Nationwide	2015/2016		2016/2017		2017/2018	
	M	%	M	%	M	%
Subscribers						
Vodafone	[...]	[40-50]%	[...]	[40-50]%	[...]	[30-40]%
Telefónica	[...]	[20-30]%	[...]	[20-30]%	[...]	[30-40]%
Deutsche Telekom	[...]	[30-40]%	[...]	[30-40]%	[...]	[20-30]%
Total	[...]	100%	[...]	100%	[...]	100%

¹⁰⁰² See Parties’ reply to RFI 22, question 24.

¹⁰⁰³ Vodafone and the other MNOs are currently challenging the inclusion of this obligation in the conditions for the 5G frequency auction, but the relevant motions have so far been dismissed. It therefore appears likely that this obligation will feature in the 5G licences when finally granted (see Parties’ reply to RFI 37, question 3).

¹⁰⁰⁴ Commission decision of 2 July 2014 in Case M.7018 - *Telefónica Deutschland/E-Plus*.

¹⁰⁰⁵ On 22 February 2019, the Commission issued a Statement of Objections relating to the third commitment. The Commission's preliminary view is that Telefónica did not properly implement its obligations under the wholesale 4G access obligation by not including certain existing wholesale agreements in the benchmark.

¹⁰⁰⁶ See https://www.united-internet.de/fileadmin/user_upload/pdf_praesentationen/20190128_1u1_DRI-5G_Rationale.pdf [ID 6788]; https://www.bundesnetzagentur.de/DE/Sachgebiete/Telekommunikation/Unternehmen_Institutionen/Frequenzen/OeffentlicheNetze/Mobilfunknetze/mobilfunknetze-node.html [ID 6776].

Nationwide	2015/2016		2016/2017		2017/2018	
	M	%	M	%	M	%
Revenues						
Vodafone	[...]	[40-50]%	[...]	[40-50]%	[...]	[30-40]%
Telefónica	[...]	[20-30]%	[...]	[30-40]%	[...]	[30-40]%
Deutsche Telekom	[...]	[30-40]%	[...]	[20-30]%	[...]	[20-30]%
Total	[...]	100%	[...]	100%	[...]	100%

Source: Form CO (Table 6.67 and 6.68).

- (1437) Table 46 shows that Vodafone is the largest provider of wholesale access and call origination services on mobile networks in Germany. There is no merger-specific change as Unitymedia is not active on this market as supplier. Rather, Unitymedia is a service provider on Telefónica's network.
- (1438) The market shares of the Parties and their largest competitors in the vertically related market for the retail supply of mobile telecommunications services in Germany are illustrated in Table 10 in section VIII.C.2.3.. While Vodafone is the number two or three provider of retail mobile communication services in Germany based on revenues and subscribers, respectively, no significant change arises from the Transaction in the structure of the market due to Unitymedia's extremely limited market position.
- (1439) The market shares of the Parties and their largest competitors in the vertically related market for the retail supply of multiple play FMC bundles in Germany are illustrated in Table 31 in section V.III.C.2.8. (3P FMC bundles) and Table 39 in section V.III.C.2.10. (4P FMC bundles).¹⁰⁰⁷ With respect to 3P FMC bundles, while Vodafone is the [CONFIDENTIAL] provider of FMC bundles in Germany based on revenues and subscribers, respectively, no significant change arises from the Transaction in the structure of the market due to Unitymedia's extremely limited market position. With respect to 4P FMC bundles, the Transaction brings about an increment, however, Unitymedia cannot be considered an important competitor in this market.¹⁰⁰⁸ Notably, Unitymedia's number of 4P customers [...] only [...] in 2017 to [...] customers in 2018. [CONFIDENTIAL]

4.1.2.3. Assessment

- (1440) In the market investigation, a concern has been raised as regards the potential vertical foreclosure effects of the Transaction to the detriment of retail suppliers of mobile telecommunications services and FMC bundles in Germany.¹⁰⁰⁹
- (1441) In the following recitals, the Commission assesses whether the Transaction would have any effects on the merged entity's ability to foreclose non-MNOs, on its incentive to do so, and the likely impact on effective competition of a possible input foreclosure strategy.¹⁰¹⁰

¹⁰⁰⁷ The discussed multiplay markets including a fixed and mobile component cover the most prevalent FMC bundles sold in Germany.

¹⁰⁰⁸ The Commission's market reconstruction was based on data from the Parties and Deutsche Telekom only and hence is likely to significantly overestimate the market shares of the included competitors.

¹⁰⁰⁹ Replies to questionnaire Q8, question 105.

¹⁰¹⁰ Given the very marginal presence of Unitymedia in the retail market for mobile telecommunications services (see Tables 10-13), the Commission considers that the Transaction does not give rise to any customer foreclosure concern.

(i) Ability to engage in input foreclosure

- (1442) At the outset, the Commission notes that wholesale access and call origination services on mobile networks is not currently mandated in a generalised form in Germany. A regulatory obligation exists only with respect to access services for service providers until the end of 2020. Post 2020, based on the conditions for the auction of 5G frequencies, this will be replaced by an obligation to negotiate in good faith with both service providers and MVNOs with the BNetzA playing a "referee" role. The Commission notes that these regulatory obligations would limit to a certain extent the technical ability of the merged entity to foreclose non-MNOs post-Transaction.
- (1443) Moreover, even without reliance on such regulation it has been possible for non-MNOs to reach commercially negotiated agreements with MNOs in the German. This is evidenced by the fact that there are several MVNOs active on the market although there is currently no mandated regulatory access for MVNOs. There is also a large proportion of service providers' business that is generated by commercially negotiated "white label" agreements (as opposed to "retail minus" business under the Service Provider Obligation).¹⁰¹¹ For those providers with whom Vodafone has both "white label" and "retail minus" agreements in place, over [INFORMATION CONCERNING SALES] of the relevant volumes relate to "white label" agreements, including with regard to [INFORMATION CONCERNING SALES].¹⁰¹²
- (1444) For input foreclosure to be a concern, the merged entity must have a significant degree of market power and a significant influence on the conditions of competition in the upstream market.¹⁰¹³ In this respect the Commission notes that, albeit Vodafone's market share in the provision of wholesale access and call origination services on mobile network is above the 30% market share threshold set forth in the Non-Horizontal Merger Guidelines (below which the Commission is unlikely to find concerns), the Transaction does not alter the market structure in the upstream market as the same number of MNOs with the same market position will remain post-Transaction. The merged entity will not have any increased ability to foreclose retail suppliers of mobile telecommunications services and/or FMC bundles in Germany.
- (1445) Importantly all three MNOs in Germany provide wholesale access to their mobile networks. Vodafone and Telefónica are the largest wholesale providers with a revenue-based share of [30-40]% and [30-40]% respectively ([...]). Deutsche Telekom is a significant third player with a market share of [20-30]% in terms of subscribers and [20-30]% in terms of revenues. Accordingly, there are three providers of wholesale access and call origination services on mobile networks (Deutsche Telekom, Vodafone and Telefónica) which provide equally viable alternatives to non-MNOs.¹⁰¹⁴
- (1446) The German wholesale market for access and call origination services is therefore concentrated. Each of the MNOs active on this market is likely to have some degree of market power but not a significant degree of market power in light of the existence of two alternative suppliers. In addition, the MNOs' technical ability to foreclose non-MNOs is limited by the partial ex ante regulation of this market by way of the

¹⁰¹¹ See Form CO, paragraph 6.825(i).

¹⁰¹² See Parties' reply to RFI 39, question 3.

¹⁰¹³ Non-Horizontal Merger Guidelines, paragraph 35.

¹⁰¹⁴ Importantly, one of such alternative, Telefónica, is subject to and access obligation as explained in section VIII.C.4.1.

Service Provider Obligation which is in place until the end of 2020. For instance, service providers Freenet and United Internet would benefit from the protection offered by this regulation. After 2020, MVNOs and service providers are protected to some extent by MNOs' obligation to negotiate in good faith and BNetzA's powers to intervene and impose fines if necessary.

(1447) Most importantly, the structure of the wholesale market will not be altered by the Transaction.

(1448) Therefore, the Commission considers that the merged entity would not have the ability to foreclose non-MNOs from the market for the retail supply of mobile telecommunications services in Germany.

(ii) Incentive to engage in input foreclosure

(1449) Even if Vodafone would have the ability to engage in input foreclosure, the merged entity would not have any increased incentive to do so post-Transaction. This reflects the fact that the Transaction does not materially change the market structure in the retail mobile market. This is indicated by Unitymedia's negligible market share of [0-5]% by subscribers and [0-5]% by revenue in 2018 in the retail mobile market.

(1450) With regard to the FMC segment, Vodafone's incentives to foreclose downstream fixed-mobile players would not change materially as a result of the Transaction. Vodafone already offers fixed and mobile retail services nationwide, including based on its own cable network infrastructure and based on its DSL offering. Yet it currently provides mobile access to [DETAILS OF CUSTOMERS], a fixed-mobile rival. While ownership of the Unitymedia cable network would increase the geographic area of the own fixed network, increasing the merged entity's competitiveness in offering FMC bundles, and therefore potentially leading to a slight increase in the merged entity's market share in FMC bundles, this will not significantly change its incentive to provide mobile access to third parties. Furthermore, based on data submitted by the Notifying Party, the Commission notes that the Transaction is likely significantly accelerate the update of FMC bundles. As further explained in recital (149)(b)(iv), the Notifying Party estimates that, absent the Transaction, the percentage of mobile subscribers purchasing fixed broadband connection would increase to [DETAILS OF SYNERGIES] by December 2020 (from [DETAILS OF SYNERGIES] in December 2017). With the Transaction, the figure is expected to increase to [DETAILS OF SYNERGIES]. Finally, the Commission notes that also [CONFIDENTIAL].¹⁰¹⁵

(1451) Neither will the internalisation of Unitymedia's current market position with regard to FMC bundles change Vodafone's incentives to provide mobile access to third parties. Given Unitymedia's focus on selling mobile services to its existing fixed customers, about [...] of its mobile customers also purchase Unitymedia fixed services.¹⁰¹⁶ While Unitymedia has a higher FMC penetration among its customer base, these customers represent again only [0-5]% by subscribers and [0-5]% by revenue in 2018 in the retail mobile market. While reliable market shares for the FMC segment are not available, it must be noted that Unitymedia's total number of mobile customers is below [...]. Therefore, as a result of the Transaction, the merged entity will not have a significantly larger retail customer base.

¹⁰¹⁵

[CONFIDENTIAL].

¹⁰¹⁶

See Form CO, paragraph 6.1208(ii).

(1452) Therefore, the Commission considers that the merged entity would not have the incentive to foreclose non-MNOs from the market for the retail supply of mobile telecommunications services or FMC bundles in Germany.

(iii) Effects on competition

(1453) For foreclosure to be anti-competitive, it must have a significant detrimental effect on competition in the downstream markets.¹⁰¹⁷

(1454) Even if the merged entity would have the ability and incentive to engage in input foreclosure, the effects of such attempts would depend on the possibility of non-MNOs affected by the merged entity's foreclosure strategy to source mobile wholesale access from other providers.

(1455) Vodafone's largest wholesale customers are [DETAILS OF CUSTOMERS] . In this respect, the Commission notes that two of Vodafone's current non-MNO customers, and the largest non-MNOs in the market, are hosted on multiple MNOs' networks.

(a) Freenet [...] is currently hosted by [...] German MNOs and its relationships with Deutsche Telekom and Telefónica would give it a significant degree of protection in the face of a hypothetical foreclosure strategy by the merged entity. [...] of its subscribers are currently [...], [...] by Deutsche Telekom and [...] by Telefónica.

(b) United Internet [...] subscriber share in the retail mobile market) is hosted by Vodafone and Telefónica and has recently increased its usage of the Telefónica network following the Telefónica/E-Plus merger commitments. [DETAIL OF CUSTOMERS] benefits from the remedy in Telefónica/E-Plus, providing it with access to up to 30% of Telefónica's network. Currently, [...] of its subscribers are hosted by Telefónica and [...] by Vodafone.

(c) Lebara [...] is not affected by the Transaction as it is hosted by Deutsche Telekom.

(d) Lycamobile [...] is only hosted by Vodafone. However, given its limited market size and its activity in a niche segment, Vodafone is even more unlikely to have an incentive to foreclose [...].

(1456) According to the Notifying Party, customers can switch providers based on well-established number portability procedures which are facilitated by all operators and also cover portability between pre-paid and postpaid contracts.¹⁰¹⁸ Respondents to the market investigation confirm that switching is technically possible and provide some examples of past switching. However, they also point out that switching entails risks in terms of customer churn as non-MNOs need to replace their customers' SIM cards. Moreover, respondents fear that MNOs have many contractual possibilities to interfere with the switching process.¹⁰¹⁹ Therefore, the Commission considers that while switching is technically possible, there are commercial and contractual barriers.

(1457) The Commission considers that if the merged were to adopt an input foreclosure strategy post-Transaction, this would not result in a significant impediment to effective competition on the retail market for mobile telecommunications services and FMC bundles in Germany for the following reasons.

¹⁰¹⁷ Non-Horizontal Merger Guidelines, paragraph 48.

¹⁰¹⁸ See Form CO, paragraph 6.825(iii).

¹⁰¹⁹ Replies to questionnaire Q8, question 104.

- (1458) Firstly, the largest non-MNOs active on the German market ([DETAILS OF CUSTOMERS]) are protected as they are hosted by multiple MNOs pre-Transaction.
- (1459) Secondly, service providers (Freenet and United Internet) will continue to benefit from the Service Provider Obligation post-Transaction until the end of 2020. Post 2020, based on the conditions for the auction of 5G frequencies, this will be replaced by an obligation to negotiate in good faith with both service providers and MVNOs with the BNetzA playing a "referee" role.
- (1460) Thirdly, United Internet is protected through the capacity on Telefónica's network, following the commitments from the Telefónica/E-Plus merger in 2014. [CONFIDENTIAL].
- (1461) Fourthly, besides United Internet, also all other non-MNOs are to some extent protected through the commitments from the Telefónica/E-Plus merger in 2014. Telefónica committed to extend existing wholesale agreements with Telefónica's and E-Plus' wholesale partners until the end of 2025 and to offer wholesale 4G services to all interested players at "best prices" until the end of year [CONFIDENTIAL]. In addition, Telefónica committed to improve its wholesale partners' ability to switch their customers from one MNO to another.
- (1462) Fifthly, even if there are some barriers to switching, it is technically possible. Therefore, if the merged entity engaged in a full foreclosure strategy, non-MNOs would be likely to switch to the two alternative suppliers Deutsche Telekom and Telefónica.
- (1463) Sixthly, the Commission considers that non-MNOs generally do not exert the same degree of competitive pressure as MNOs, mainly because of their dependency on wholesale conditions.¹⁰²⁰ They are, therefore, unable to effectively constrain the competitive behaviour of MNOs on the retail mobile market.
- (1464) Seventhly, with regard to access seekers whose main business activity is the supply of fixed telecommunications and TV services based on their own fixed network (for example, Tele Columbus and city carriers), the Commission notes that the withholding of wholesale access and origination services on mobile networks vis-à-vis such players would also not lead to significant harm to effective competition on the concerned downstream markets. None of these players has a significant number of mobile subscribers as of today. Besides their dependency on wholesale conditions, their market share in the retail markets for mobile telecommunications services and FMC bundles is also negligible. In order to effectively compete in the retail markets for fixed telecommunications and TV services, it is not necessary to be able to offer FMC bundles. As explained in section VII.2.6., FMC penetration in Germany is low with predicted FMC penetration reaching 21% of households in 2022. Therefore, for these players, wholesale access and origination services are not an important input for these players' downstream activities with regard to their main business activities.
- (1465) Therefore, the Commission considers that, even if the merged entity would have the ability and the incentive to foreclose non-MNOs from accessing Vodafone's mobile network post-Transaction, this would unlikely lead to significant harm to effective competition.

¹⁰²⁰

See for example Commission decision of 1 September 2016 in case M.7758 – *Hutchison 3G Italy/WIND/JV*; Commission decision of 11 May 2016 in case M.7612 – *Hutchison 3G UK/Telefónica UK*; Commission decision of 2 July 2014 in case M.7018 – *Telefónica Deutschland/E-Plus*.

4.1.3. *Conclusion*

(1466) In light of the foregoing, the Commission concludes that the Transaction would not significantly impede effective competition in the market for the retail supply of mobile telecommunications services in Germany as a result of vertical non-coordinated effects.

4.2. **Foreclosure of retail suppliers of TV signal transmission to MDU customers in Germany**

4.2.1. *The Notifying Party's view*

(1467) According to the Notifying Party, the Transaction will not lead to vertical non-coordinated effects in the retail supply of TV signal transmission to MDU customers in Germany.

(1468) In particular, the Notifying Party submits that the Transaction does not lead to any merger-specific changes in the concerned upstream or downstream markets. In particular:

- (a) With regard to ability, there is no change in the merged entity's ability to foreclose access to the combined Level 3 network as a result of the Transaction because there is no change in the upstream market structure (intermediary TV signal delivery);
- (b) With regard to incentive, the merged entity's incentive to foreclose access to its Level 3 networks does not change as a result of the Transaction because there is no material impact on the downstream market (retail TV signal transmission to MDU customers).

(1469) In the Response to the Statement of Objections, beyond merger-specificity, the Notifying Party questions the Commission's preliminary assessment that the Transaction is likely to lead to a significant impediment to effective competition in the market for the retail supply of TV signal to MDU customers through alleged vertical effects in Level 3 wholesale signal delivery, as a result of a significant weakening of Tele Columbus' ability to compete and to expand its business in the Unitymedia footprint. In particular, the Notifying Party submits that the Commission has failed to show evidence that:

- (a) Tele Columbus' access to Level 3 signal delivery in the Unitymedia footprint will be hampered or eliminated due to an increase in market power resulting from the merger;
- (b) The alleged worsening of Tele Columbus' Level 3 access conditions will foreclose it from competing (that is to say, reduce its ability/incentive to compete) in the Unitymedia footprint; and
- (c) This foreclosure would impact effective competition in the downstream market to such an extent that it would allow the merged entity to profitably increase the prices it charges.

4.2.2. *The Commission's assessment*

(1470) In this section the Commission assesses the likelihood of anticompetitive vertical non-coordinated effects in the market for the retail supply of TV signal transmission to MDU customers in Germany as well as in the potential regional markets

corresponding to the cable footprint of the Parties.^{1021,1022} To this aim, section VIII.C.4.3.2.1. provides background information in relation to the German market for intermediary TV signal delivery and describes the regulatory framework applicable in Germany. Section VIII.C.4.3.2.2. presents the market shares of the Parties in the relevant upstream and downstream markets. Section VIII.C.4.3.2.3. contains an assessment of the likely vertical non-coordinated anticompetitive effects of the Transaction in relation to the vertical relationship between the upstream market for wholesale intermediary TV signal delivery services and the downstream market for the retail supply of TV signal transmission to MDU customers. Finally, section VIII.C.4.3.3. draws conclusions.

4.2.2.1. The German market for intermediary TV signal delivery

- (1471) The German market for intermediary TV signal delivery was subject to an ex ante regulation (Market 18) until 2010 when the sector specific regulation was lifted and replaced by general competition law rules.¹⁰²³ BNetzA lifted the ex ante regulation based on its assessment following the Commission's 2007 recommendation to deregulate Market 18.¹⁰²⁴ BNetzA found that while the market was characterised by massive (and structural) market entry barriers and that no effective competition would take place in the long term, there was no need for ex ante regulation due to the small declining market size, the on-going consolidation between Level 3 and Level 4 operators as well as the decrease in costs for satellite self-supply solutions. In its revocations of regulatory orders, the BNetzA upheld the finding of market power of the respective cable network operators.¹⁰²⁵
- (1472) The current agreements between Level 3 and Level 4 operators generally consist of two parts: contracts for the delivery of a basic TV signal by the Parties to the Level 4 operators, and pass-through and marketing agreements on the provision of digital (premium) TV, broadband internet and telephony products by the Parties through the respective Level 4 provider's network to the Parties' end customers [CONFIDENTIAL CONTRACT INFORMATION].¹⁰²⁶
- (1473) While the Parties need the permission of the respective Level 4 provider to supply their premium TV, broadband internet and telephony services to the relevant tenants through the Level 4 networks, the Parties supply these services to end customers in their own name and on their own account. These additional pass-through services were not subject to sector specific ex ante regulation on Market 18 since the Parties

¹⁰²¹ The assessment focusses on the downstream market for the retail supply of TV signal transmission to MDU customers. Level 4 operators primarily target MDU customers while they serve SDU customers on an occasional basis only if they happen to be in the vicinity of the MDU customers being served.

¹⁰²² The assessment focusses on input foreclosure. There can be no customer foreclosure concerns. As both Parties are already vertically integrated, neither Party is a significant customer of intermediary TV signal delivered via cable ([DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS], as explained in recital (767)). Vodafone's de minimis IPTV/OTT service in the Unitymedia footprint is delivered over broadband, and Vodafone is therefore not a customer of intermediary TV signal in this respect.

¹⁰²³ See revocations of regulatory orders regarding Kabel Deutschland, Unitymedia NRW and Hesse and KabelBW, BNetzA, (dated 12 October 2010) and market definition, BNetzA, Presidential Chamber (dated 7 October 2010), BK 3b-10/83, BK 3b-10/84, BK 3b-10/85 and BK 3b-10/86.

¹⁰²⁴ Commission recommendation of 17 December 2007 on relevant product and service markets within the electronic communications sector susceptible to ex ante regulation in accordance with Directive 2002/21/EC of the European Parliament and of the Council on a common regulatory framework for electronic communications networks and services.

¹⁰²⁵ FCO, B7-66-11, paragraph 252.

¹⁰²⁶ See Parties' reply to RFI 19, question 4.

have never been considered to have significant market power on the relevant markets. The contracting parties have therefore always been free to negotiate these [DETAILS OF BUSINESS STRATEGY].

4.2.2.2. Market shares

- (1474) With regard to intermediary TV signal delivery, the Notifying Party was not able to provide reliable market shares data due to a lack of transparency in this market. Based on the information provided by the Parties and received during the market investigation, the Commission considers that each of the Parties is the main supplier of intermediary TV signal in its respective footprint. To a lesser extent, other infrastructure-based competitors, in other words, Tele Columbus, Deutsche Telekom and city carriers, also provide intermediary TV signal within their respective network areas which partially overlap with one or both of the Parties' networks.
- (1475) The market shares of the Parties and their largest competitors in the vertically related market for the retail supply of TV signal transmission to MDU customers are illustrated in Tables 14 to 16. In summary, the Commission observes that, while the market for the retail TV signal transmission to MDU customers is highly concentrated and each of the Parties has a very strong (potentially dominant) position in its respective footprint, there is no merger-specific change as the Parties do not directly compete with each other in this market.

4.2.2.3. Assessment

- (1476) As preliminary remark, the Commission notes that the Transaction will not create any new linkages between different levels of the supply chain that would not exist in the absence of the Transaction. This is because both Vodafone and Unitymedia are already active both upstream (in separate geographic markets) in the provision of Level 3 signal to Level 4 providers, and downstream in the provision of retail TV signal transmission to MDU customers. Where these vertical links exist, the Transaction does not lead to a change in the market structure at the upstream or downstream levels:
- (a) Upstream market: Within each Party's respective footprint, the other Party is not active either as a supplier of intermediary TV signal. The Transaction does not, therefore, change the merged entity's ability or incentive to foreclose. There is no consolidation in the upstream market structure due to the Parties' geographically complementary footprints. Each Party's share of intermediary TV signal delivery in its respective footprint will remain the same as compared to the counterfactual and the alternative sources of TV signal supply in each footprint (for example, Deutsche Telekom, city carriers) will remain unchanged.
 - (b) Downstream market: There is no change in the downstream market structure, so there will be no impact on the merged entity's incentive to foreclose within each footprint. In other words, the trade-off between the wholesale revenues that would be lost if the merged entity pursued such a strategy as compared to the retail revenues that would be gained is no different as compared to the combined trade-offs that face each firm individually in the counterfactual.¹⁰²⁷

¹⁰²⁷

There is one limited exception which relates to the Unitymedia footprint where there is a de minimis increment in retail TV signal transmission to SDU customers as a result of Vodafone's IPTV/OTT offering. However this increment is too small to have any impact on the merged entity's incentive to

- (1477) Nevertheless, the Commission has investigated the specific complaints received during the market investigation relating to the transposition of Vodafone's commercial policy into Unitymedia footprint. Tele Columbus and other Level 4 operators have raised the concern that Vodafone will have the ability and incentive to engage in input foreclosure strategies which regard to the supply of intermediary TV signal, in particular by rolling over its [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS] Unitymedia's footprint.
- (1478) Tele Columbus is the only significant competitor that is active based on the Parties' intermediary TV signal delivery. Tele Columbus represents about [INFORMATION CONCERNING SALES] of Vodafone's and Unitymedia's total number of units supplied with intermediary TV signal, respectively. Tele Columbus submitted that in areas where Tele Columbus does not have its own Level 3 network, it is dependent on the intermediary TV signal delivery by either Vodafone or Unitymedia. According to Tele Columbus, the Transaction would lead to the permanent elimination of Unitymedia as supplier on the wholesale market for TV signal transmission, and it would enable Vodafone to [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS] in Unitymedia's footprint. As a result, the Transaction would negatively affect Tele Columbus' network expansion to the detriment of housing associations and their tenants.¹⁰²⁸
- (1479) Besides Tele Columbus, a number of small- and medium-sized Level 4 operators source intermediary TV signal from the Parties. Overall, these various players source intermediary TV signal from Vodafone and Unitymedia for a total number of [...] and [...], respectively. As described in sections VIII.C.2.4.2.1.(iii). and VIII.C.2.4.2.4.(i).(c)., the segment of independent Level 4 operators has shrunk significantly over the last decades. The low volume of units supplied via intermediary TV signal was also one of the reasons for BNetzA to deregulate this market in 2010. Level 4 operators themselves explain that they are active in a niche segment of the market while housing associations state that Level 4 operators frequently do not meet the required service level requirements and are not able to take care of Level 3 network upgrades.
- (1480) The Commission considers that Tele Columbus is the only meaningful competitor sourcing intermediary TV signal from the Parties. The other Level 4 operators have a negligible market presence and do not exert any competitive pressure on the market. Therefore, the Commission focusses its assessment on the likely effects of the Transaction on the competitive constraint to be exerted by Tele Columbus post-Transaction.
- (1481) The Commission has investigated whether the merged entity would acquire the ability and incentive to engage in a foreclosure strategy by restricting wholesale access or worsening wholesale access terms and conditions in Unitymedia's territory as a result of the Transaction.¹⁰²⁹ The Commission has also assessed whether such foreclosure would have a significant detrimental effect on competition in the retail market.

engage in input foreclosure. In any case, the MDU market is the primary downstream market concerned while the SDU market is only marginally affected (see section VII.20. above).

¹⁰²⁸

Tele Columbus' reply to questionnaire Q11, question 103 [ID 4020].

¹⁰²⁹

To the extent that Tele Columbus is alleging that [DETAILS OF COMMERCIAL ACTIVITIES IN PARTICULAR MARKETS]. Therefore, the following section exclusively focusses on the merger-related complaint regarding the rolling over of Vodafone's business strategy to Unitymedia's footprint.

(1482) The Commission considers that the Transaction would not lead to a significant impediment of effective competition as a result of vertical non-coordinated effects to the detriment of Tele Columbus for the following reasons.

(i) Ability to engage in input foreclosure

(1483) As prerequisite for the ability to engage in input foreclosure, the Commission has investigated whether the merged entity would have the technical ability to stop providing wholesale access to Tele Columbus or to deteriorate the terms and conditions of the wholesale agreement.

(1484) At the outset, the Commission notes that, as explained in section VIII.C.4.3.2.1., there is currently no ex ante regulation in place with regard to the supply of intermediary TV signal delivery in Germany. Therefore, the Commission considers that the merged entity's technical ability to foreclose Level 4 operators, in particular Tele Columbus, is not limited by an obligation to offer wholesale access to its TV signal.

(1485) The current framework agreement between Unitymedia and Tele Columbus became effective as from [CONFIDENTIAL CONTRACT INFORMATION] and remains in force until [CONFIDENTIAL CONTRACT INFORMATION].¹⁰³⁰ As of expiry, the agreement can be terminated by either party to the contract with a notice period of [CONFIDENTIAL CONTRACT INFORMATION].

(1486) In the Response to the Statement of Objections, the Parties explained that Tele Columbus has significant contractual protections in place which prevent the merged entity from hampering access to TV signal for units currently supplied by Unitymedia wholesale signal delivery. In fact, while the framework agreement between Unitymedia and Tele Columbus covers only [...].

(1487) Therefore, the Commission considers that the merged entity has the technical ability to deteriorate the wholesale conditions of [...] of Tele Columbus' units in Unitymedia's territory, whereas the other [...] are contractually protected in the medium term.

(1488) For the technical ability to translate into ability to foreclose Tele Columbus from the retail TV signal transmission market to MDU customers, the merged entity must have a significant degree of market power in the upstream market. It is only in those circumstances that the merged entity can be expected to have a significant influence on the conditions of competition in the upstream market and thus, possibly, on prices and supply conditions in the downstream market.¹⁰³¹

(1489) The intermediary TV signal delivery market is regional in scope and limited to the area of the relevant Level 3 operator. Within Unitymedia's footprint, there are few and marginal alternative cable network operators active which could act as alternative suppliers.

(a) The activities of city carriers are constrained by their limited geographic scope. NetCologne is the only significant city carrier active within Unitymedia's footprint, active in Cologne, Aachen and neighbouring areas. NetCologne's network is limited to about one million households connected.¹⁰³²

¹⁰³⁰ See Parties' reply to RFI 19, Annex 4.1.99.

¹⁰³¹ Non-Horizontal Merger Guidelines, paragraph 36.

¹⁰³² See [https://www.netcologne.de/ueber-uns/unternehmen/presse/mitteilung/jahresbilanz-2017-netcologne-auf-wachstumskurs-21927/\[ID 6784\]](https://www.netcologne.de/ueber-uns/unternehmen/presse/mitteilung/jahresbilanz-2017-netcologne-auf-wachstumskurs-21927/[ID 6784]).

- (b) Deutsche Telekom does not actually own a large-scale cable and/or fibre network. It builds out infrastructure to MDU's premises on a case-by-case basis only if a specific contract is profitable.¹⁰³³ Therefore, the areas in which Deutsche Telekom could already act as wholesale supplier are very limited whereas for all other areas Deutsche Telekom would need to undertake investments to connect Level 4 operators. Deutsche Telekom confirmed that the number of its intermediary TV signal delivery customers and related number of homes passed is very limited and that the Parties cover a multitude of Deutsche Telekom's customer base.¹⁰³⁴ Moreover, where Deutsche Telekom does provide services, it seems that the conditions are comparable with those of Vodafone.¹⁰³⁵ Therefore, even in limited areas where Deutsche Telekom could provide services, these do not replicate the conditions offered by Unitymedia.
- (1490) In the Response to the Statement of Objections, the Parties emphasise that satellite as an alternative out of market source of supply must be properly taken into account. Indeed, a proportion of Tele Columbus' homes are connected via satellite and it has acknowledged the viability of satellite as an alternative, at least for smaller MDU customers that do not require the supply of additional fixed services (see recital (792)). However, the Commission considers that the constraint from satellite is currently limited and further decreasing in light of the growing importance of offering internet access services in MDU contracts. In fact, this can also be seen from the fact that Tele Columbus seeks to connect units to Unitymedia's network that were previously served via satellite. Moreover, the Parties themselves emphasise that they cannot compete in the other Party's footprint based on satellite due to the increasing demands of MDU customers: [DETAILS OF COMMERCIAL / INVESTMENT STRATEGY]¹⁰³⁶
- (1491) Therefore, the Commission considers that the merged entity has significant market power vis-à-vis Tele Columbus, just like before the Transaction Unitymedia and Vodafone had significant market power vis-à-vis Tele Columbus in their respective footprints. In fact, nothing changes in this respect following the Transaction, as the structure of the wholesale market in Unitymedia's footprint will not be altered by it. The only change consists in the change of ownership from Unitymedia to Vodafone (and therefore possibly its management and business strategy). This means that the Transaction will have no impact on the merged entity's ability to foreclose Level 4 providers within each footprint.
- (ii) Incentive to engage in input foreclosure**
- (1492) As the only significant competitor of the Parties, Tele Columbus is concerned that the merged entity would have the incentive to hinder Tele Columbus' growth strategy. In particular, Tele Columbus notes that Unitymedia and Vodafone have [DETAILS OF COMMERCIAL / INVESTMENT STRATEGY]. On this basis, Tele Columbus fears that post-Transaction Vodafone will adopt its business strategy also in Unitymedia's footprint, [DETAILS OF COMMERCIAL / INVESTMENT STRATEGY].
- (1493) In this regard, the Parties confirm in the Response to the Statement of Objections that [DETAILS OF COMMERCIAL / INVESTMENT STRATEGY]. However, they

¹⁰³³ Deutsche Telekom's reply to RFI 20, question 1 [ID 4325].

¹⁰³⁴ Deutsche Telekom's reply to RFI 20, question 8 [ID 4325].

¹⁰³⁵ Cable4's reply to questionnaire Q11, question 68.3 [ID 3531].

¹⁰³⁶ See Parties' reply to RFI 22, question 23.

consider that the merged entity's incentive to foreclose access to its Level 3 networks does not change as a result of the Transaction because it does not have any material on the market structure.

- (1494) After examining the Response to the Statement of Objections, the Commission agrees that, even if it was confirmed that before the Transaction [DETAILS OF COMMERCIAL / INVESTMENT STRATEGY], in any event, the change in business strategy would not be the result of the changes in the structure of the market determined by the Transaction.
- (1495) Indeed, the Transaction would not lead to changes in the structure of the market and/or the competitive conditions in Unitymedia's footprint which would need to be examined under the Merger Regulation. The only change brought by the Transaction in this respect consists in the change of ownership of the cable operator and therefore possibly of its management and business strategy concerning intermediary TV signal delivery services. Telecolumbus seems to refer to such a change in management and business strategy when it argues that, following the Transaction, the management of the merged entity could adopt in Unitymedia's footprint the same business approach adopted by Vodafone in its cable footprint, [DETAILS OF COMMERCIAL / INVESTMENT STRATEGY]. However, this would not be the result of changes in the structure of the market (which in turn could affect the Parties' incentives to adopt certain business conducts) and in the competitive conditions determined by the Transaction. The possible [DETAILS OF COMMERCIAL / INVESTMENT STRATEGY] simply result from changes in the cable operator's business approach which could happen also independently from the Transaction, and are not merger-specific. Such non-merger specific changes in business approach should not therefore be examined under the Merger Regulation.
- (1496) Therefore, without being necessary to take a final position on the question [DETAILS OF COMMERCIAL / INVESTMENT STRATEGY], the Commission considers that in any event the merged entity would not acquire a merger-specific incentive to foreclose Tele Columbus from the market for the retail supply of TV signal transmission to MDU customers.

(iii) Effects on competition

- (1497) Despite the lack of clear merger-specificity, the Commission has also investigated – for the sake of completeness - the effects on competition if Vodafone were to have the ability and incentive to roll over its terms and conditions to Unitymedia's footprint.
- (1498) As a consequence, like in the Vodafone footprint today, Tele Columbus considers that MDU customers would be deprived of their access to another high-speed cable infrastructure as infrastructure competition would be harmed. According to Tele Columbus, [...] Tele Columbus would rely on the intermediary TV signal delivery only for an interim period before the build-out of the new infrastructure has been completed.
- (1499) In the Statement of Objections, the Commission preliminarily concluded that a deterioration in Tele Columbus' wholesale access conditions would be likely to significantly weaken Tele Columbus' ability to compete and to expand its business thereby significantly impeding effective competitive in the market for the supply of retail TV signal transmission to MDU customers. The Commission's finding was based on: (i) the already concentrated nature of the retail market for the supply of TV signal transmission to MDU customers in Germany, (ii) the likely weakening of the Parties' only significant competitor Tele Columbus for which intermediary TV signal

delivery is an essential input and the fees thereof represent a significant proportion of its costs in Unitymedia's footprint, and (iii) the resulting negative effects in terms of an increase in prices and a decrease in infrastructure competition as Tele Columbus represents an important competitive constraint in the market for the retail TV signal transmission to MDU customers, including in Unitymedia's footprint, and what is more, Tele Columbus plans to use the intermediary TV signal transmission in order to accumulate a customer base and eventually build out its own Level 3 network.

- (1500) In the Response to the Statement of Objections, the Parties provided a coherent body of evidence suggesting that the weakening of Tele Columbus in Unitymedia's footprint would have limited effects on competition in the market for the retail supply of MDU customers.
- (1501) A weakening of Tele Columbus in Unitymedia's footprint would not affect Tele Columbus' ability to compete based on its existing Level 3 infrastructure, which represents Tele Columbus' core business and which is situated mainly outside Unitymedia's footprint. Already pre-Transaction, Tele Columbus is a much stronger competitive constraint in the Vodafone footprint where it is active as a strong infrastructure based player, rather than as a weaker access-based player in Unitymedia's footprint. As explained in section VIII.C.2.4.2.4.(ii)., with respect to the Parties' infrastructure-based competitors, including Tele Columbus, the Transaction does not alter their position in the downstream market.
- (1502) With regard to Tele Columbus' activities in Unitymedia's footprint as pure Level 4 operator, there is no evidence that Tele Columbus (i) currently acts as important competitive constraint in the downstream market (whose weakening would lead to higher prices for MDU customers), and/or (ii) would be able to use its pure Level 4 business as a stepping stone to building out its own Level 3 infrastructure.
- (1503) As regards the first point, the Parties submitted evidence showing that [INTERNAL ASSESSMENT OF COMPETITION]. For instance, as pure Level 4 operator, Tele Columbus is not able to participate in tenders that require Level 3 network upgrades. Currently, Tele Columbus has a market share of [5-10]% in Unitymedia's footprint, supplying about [...] units with TV signal.¹⁰³⁷ Less than half of these volumes are covered by the framework agreement bound to expire at the end of [...]. These volumes at stake have a market share of about [0-5]% only. Moreover, Tele Columbus has not been growing over the last years and does not participate in a significant number of new tenders in Unitymedia's footprint. [INFORMATION CONCERNING SALES]. In summary, there are therefore only a very limited number of existing or new opportunities that could be impacted by a foreclosure of Tele Columbus. In any case, even if Tele Columbus was foreclosed, this would concern its activities as a reseller of Unitymedia's product through which it does not exercise a meaningful competitive constraint independently of Unitymedia. According to the Parties, the merged entity could replace Tele Columbus as a downstream Level 4 provider with no reduction in competitive pressure and no worsening of terms to MDUs or end users.
- (1504) As regards the second point, the Parties submitted that Tele Columbus is not building out its own Level 3 infrastructure at all or in the Unitymedia footprint, regardless of

¹⁰³⁷

As explained in section VIII.C.2.4.2.2., this market share may be underestimated due to the inflated market size. On the other hand, the Parties' estimates may contain some units supplied via satellite that are not part of the relevant market. Unitymedia estimates that Tele Columbus has about [...] homes in its footprint connected to satellite.

whether this is in reliance on Unitymedia Level 3 signal or otherwise. As already set out in section VIII.C.2.4.2.4.(i).(a)., there is rather compelling evidence that Tele Columbus has engaged in very limited Level 3 infrastructure expansion in recent years. This is entirely consistent with Unitymedia's experience who, as explained in recital (797), has not experienced Tele Columbus investing in infrastructure in reliance – for an interim period – on Unitymedia Level 3 signal. Therefore, there is no evidence that Tele Columbus would absent the Transaction use Unitymedia signal to build out its own infrastructure.

- (1505) In any case, the Commission takes note of the fact that Vodafone has made two irrevocable offers to Tele Columbus which ensure that the conditions of Tele Columbus' intermediary TV signal delivery in Unitymedia's footprint remain the same as they would have been absent the Transaction. Firstly, on [CONFIDENTIAL CONTRACT INFORMATION].¹⁰³⁸ [...].¹⁰³⁹

4.2.3. *Conclusions*

- (1506) In light of the foregoing, the Commission concludes that the Transaction would not significantly impede effective competition in the market for the retail supply of TV signal transmission to MDU customers in Germany as well as in the potential regional market corresponding to Unitymedia's footprint as a result of vertical non-coordinated effects.

4.3. **Foreclosure of access to wholesale leased lines to retail suppliers of mobile telecommunications services in Germany**

4.3.1. *Introduction*

- (1507) Both Vodafone and Unitymedia are active in Germany in the market for the wholesale leased lines.
- (1508) Vodafone supplies wholesale leased lines nationwide (both within and outside its cable footprint) and its activities are heavily reliant on purchasing infrastructure (copper or fibre based) from Deutsche Telekom for the "last mile" connection to the end customer's premises, which Vodafone then resells to its customers. Its main customers are other domestic and international carriers. The annual revenue earned from its wholesale leased line activities was EUR [INFORMATION CONCERNING SALES] million in years 2016/17 and EUR [INFORMATION CONCERNING SALES] million in year 2017/18. Vodafone estimates that its market share in Germany is inferior to [10-20]%, also in all possible sub-segments (Trunk vs. terminating segments, bandwidth above vs. below 2 Mbit/s, active vs. passive infrastructure).¹⁰⁴⁰
- (1509) Unitymedia provides wholesale leased lines to other domestic and international carriers based on its fibre-only product, but only within its own cable footprint. Its revenues on this market are [INFORMATION CONCERNING SALES]. Its market share at national level is estimated at less than [0-5]% (and in any case inferior to [5-10]% in all sub-segments).¹⁰⁴¹
- (1510) Considering that the Parties' combined market share is inferior to [20-30]% and the limited overlap, the market for the wholesale leased lines is not horizontally affected.

¹⁰³⁸ [CONFIDENTIAL CONTRACT INFORMATION].

¹⁰³⁹ See Parties' email of 12 June 2019, Irrevocable offer to Tele Columbus dated 11 June 2019.

¹⁰⁴⁰ See Parties' reply to RFI 39.

¹⁰⁴¹ Parties' reply to RFI 39.

However, the Transaction gives rise to a vertical relationship between Vodafone's wholesale leased line business and the Parties' downstream activities. In particular, considering that Vodafone's market share in the downstream market for wholesale access and call origination on mobile networks is [30-40]%, this market (and the wholesale leased lines market) is vertically affected.

4.3.2. *The Notifying Party's view*

- (1511) The Notifying Party submitted that there would not be prospect of vertical concerns arising as a result of the Transaction on the markets for wholesale leased lines or wholesale access and call origination on mobile networks.
- (1512) There could not be no input foreclosure concerns given that the Transaction will neither create nor increase Vodafone's ability or incentive to engage in input foreclosure, either on a national market or a market limited to Unitymedia's footprint.
- (1513) Similarly, there could not be customer foreclosure concerns, since the Transaction would not give rise to any material change in the downstream retail markets, nor any change in the downstream market for wholesale access and call origination on mobile networks.

4.3.3. *The Commission assessment*

- (1514) With respect to the prospect of the Transaction having an appreciable effect on the merged entity's ability to foreclose downstream competitors from the upstream input of wholesale leased lines, the Commission notes that the Parties' commercial activities in this wholesale leased lines market are currently limited. The combined market shares of the Parties is low (less than [10-20]% or less than [20-30]% in all sub-segments) and the increment very low. Moreover, there are several other competitors present, including the incumbent and market leader Deutsche Telekom (with a market share estimated at [50-60]% or higher), United Internet, Colt Telecom, QSC, Telefónica, NetCologne and EWE. Moreover, Vodafone is heavily reliant on purchasing the "last mile" from Deutsche Telekom and it would be possible for customers to go directly to Deutsche Telekom for this service should Vodafone's offering become less competitive.
- (1515) With respect to the prospect of the Transaction having an appreciable effect on the merged entity's incentive to foreclose downstream competitors from the upstream input of wholesale leased lines the Commission notes that such an incentive would be limited. Indeed, the increment brought about by the Transaction is marginal and at national as well as at Unitymedia's footprint level there are other competitors present to which customers could easily switch to. These include notably the incumbent Deutsche Telekom.
- (1516) Even if the merged entity were assumed to have an incentive to engage in input foreclosure the Commission considers that the such foreclosure strategy would not lead to an appreciable increase of the costs of downstream products and hence there would be no upwards pricing pressure on their sales prices. With particular regard to the market for wholesale access and call origination on mobile networks, where Vodafone has a market share of [30-40]%, the Commission notes that the two other operators are Telefónica, with a market share of [30-40]%, and Deutsche Telekom, with a market share of [20-30]%. A foreclosure strategy against those two operators appears ineffective given that neither are heavily reliant on Vodafone for their activities in this market.

- (1517) Similarly, considering that Unitymedia is not active in the market for the wholesale access and call origination on mobile networks, the Transaction will not give rise to any material change in this downstream market. Therefore, the Commission considers that no customer foreclosure concerns arise from the Transaction.
- (1518) In light of the above, the Commission concludes that the likely impact of such possible foreclosure strategy on effective competition in the relevant downstream markets would be marginal. As a consequence, the Commission considers that the Transaction would not significantly impede effective competition in the market for the wholesale access and call origination on mobile networks in Germany as a result of vertical non-coordinated effects connected with the market for wholesale access to leased lines.

5. CONGLOMERATE EFFECTS

5.1. Introduction

- (1519) As above explained, the Transaction would give rise to a series of horizontal overlaps in Germany, in the markets where both Parties are active. However, the Transaction could also increase the possibility of the Parties to combine closely related services in the telecommunications markets. In particular, Vodafone has a relevant presence in the mobile telecommunications market as MNO, while the addition of the Unitymedia cable network would allow the merged entity to extend its cable fixed and TV offers at national level. In other words, the Transaction would allow the merged entity to provide fixed-mobile multi-play services based on its own infrastructure nationwide.
- (1520) Considering that, as also explained, it is not possible to conclude on the existence of a single multiple play services market in Germany (see section VII.6), the Commission has also examined whether the Transaction would give rise to conglomerate effects by foreclosing competitors in the retail market for mobile telecommunications services, the retail market for fixed telephony services, the retail market for internet access services and the retail market for TV services.
- (1521) According to the Commission's Guidelines on the assessment of Non-horizontal Merger Guidelines,¹⁰⁴² conglomerate effects require (a) the ability to foreclose, (b) the incentives to foreclose and (c) the likelihood that a foreclosure strategy would have a significant detrimental effect on competition and harm consumers. Those conditions are cumulative. In order to be taken into account, any conglomerate effect must be merger specific. In other words, the conglomerate effect must result from Vodafone's acquisition of Unitymedia.

5.2. The Notifying Party's view

- (1522) The Notifying Party submits that the Transaction would not result in anti-competitive foreclosure of standalone service providers.
- (1523) The Notifying Party submits that the Transaction will have a pro-competitive effect on the fixed-mobile sector, as it will improve the merged entity's ability to offer fixed-mobile bundles within the Unitymedia cable footprint. This will have a positive impact on competition in this respect as it is expected to lead to a reduction in price and an improvement in choice and quality.

¹⁰⁴² Non-Horizontal Merger Guidelines, paragraph 91 and following.

- (1524) The Notifying Party points also to the Non-horizontal Merger Guidelines in which the Commission recognises that conglomerate mergers do not normally lead to competition problems and can produce significant procompetitive benefits.
- (1525) In any case, the merged entity would have no significant market power in any fixed or mobile markets and none of the Parties' products is particularly important or unique. Post-Transaction, the merged entity's share on a national basis will be below [30-40]% in mobile, fixed voice and premium TV, and only marginally above [30-40]% in fixed broadband and (access to) retail TV, but not at levels that would give rise to market power. Moreover, in each of these markets the merged entity will continue to face competition from several other operators, as Deutsche Telekom, Telefónica, United Internet in both the fixed and mobile markets, and from other standalone fixed and mobile players such as Tele Columbus and city carriers (in fixed) and Freenet (in mobile).
- (1526) The merged entity would therefore not be able to profitably raise prices on any of these standalone markets in order to leverage its market power from either the standalone fixed or mobile markets into the fixed-mobile segment.
- (1527) Therefore the Notifying Party submits that the merged entity would have no ability or incentive to either anti-competitively foreclose mobile rivals by increasing fixed prices and decreasing bundle price, or anti-competitively foreclose fixed rivals by increasing mobile prices and decreasing bundle price.
- (1528) Similarly, the merged entity would not have any ability or incentive to anti-competitively foreclose rivals through deep discounts on bundles.
- (1529) Finally, the Notifying Party submits that regardless of the alleged ability or incentive of the merged entity to engage in anti-competitive foreclosure, any foreclosure effect would not be the result of a merger-specific change in incentive or ability, because (i) Unitymedia's fixed and mobile activities are confined to its footprint, and (ii) Vodafone is already active in the fixed-mobile segment, to a much greater extent than Unitymedia, including already being active as both a mobile operator and a fixed cable operator.
- (1530) In the Response to the Article 6(1)(c) Decision, the Notifying Party reiterated its arguments on the absence of any negative conglomerate effect and added further elements to confirm this thesis:
- (a) With respect to fixed-only multiple play bundles, the Transaction would not give rise to any merger specific impact that could possibly lead to anti-competitive conglomerate effects, as already today both Parties offer the full range of fixed services on their respective cable networks in their respective footprints. They would therefore be each able to offer fixed bundles in the counterfactual and the Transaction would not enable them to offer anything different as regards fixed bundles. The simple increment to the merged entity's fixed market shares will not materially increase the merged entity's ability to foreclose by way of leveraging one fixed service into another;
 - (b) As regards fixed-mobile bundles, fixed-mobile convergence in Germany would be currently low, and there would not be inherent demand for bundles. In any case, the fixed-mobile segment in Germany would currently be highly competitive, with at least four strong players in addition to the merged entity;
 - (c) Furthermore, the merged entity would have no ability to foreclose standalone mobile players, because (i) the merged entity will not have market power on any fixed market; (ii) only a small proportion of a retail mobile competitor's

customer base could conceivably be impacted by a foreclosure strategy; (iii) fixed prices would have to rise by an implausibly large amount before foreclosure would occur; (iv) competitors would have effective counter-strategies available; and (v) even in the face of a foreclosure strategy, standalone mobile players would be unlikely to exit the market;

- (d) In any case, The Transaction would also not give rise to any material change in the merged entity's ability to foreclose mobile players, as Vodafone already has the ability to offer fixed-mobile bundles (and therefore implement a fixed-mobile bundling strategy) in the Unitymedia footprint pre-Transaction;¹⁰⁴³
- (e) With respect to the incentive to foreclose mobile players, such a strategy would not be profitable, and would instead result in significant lost fixed sales by the merged entity, with no prospect of recoupment from increased sales of fixed-mobile bundles. In any case, the Transaction would also not give rise to any material change in the merged entity's incentive to foreclose;
- (f) Furthermore, a foreclosure strategy would not have a significant detrimental effect on competition or harm consumers, as it could not lead to the marginalisation or exit of the merged entity's mobile rivals, and the ultimate impact of such a strategy would be entirely pro-competitive, leading to significant price cuts for consumers;
- (g) Similarly, the Transaction would not lead to the foreclosure of fixed competitors in the retail fixed markets through increases in standalone mobile prices coupled with fixed-mobile bundle discounts, as the merged entity would have no ability or incentive to engage in a foreclosure strategy of this type, for reasons similar to the ones mentioned for the case of foreclosure of mobile players;
- (h) Finally, the Notifying Party has rebutted claims of predatory pricing concerns, hard bundling, cross-subsidisation concerns and customer lock-in, again referring mainly to the absence of ability and incentive of the merged entity to engage in such practices.

5.3. The Commission's assessment

- (1531) The Commission has assessed the likely impact of the Transaction on the merged entity's ability and incentive to engage in practices related to multiple play bundles which would result in anticompetitive foreclosure of competitors in the retail market for mobile telecommunications services, in the retail market for fixed telephony services, in the retail market for internet access services and the retail market for TV services.
- (1532) Most respondents to the market investigation submitted that the merged entity, through the offering of multiple play packages including TV services, will have the ability and incentive to foreclose competing operators in other telecommunications services.¹⁰⁴⁴
- (1533) It was in particular highlighted that Vodafone could leverage its dominance in retail TV signal supply onto adjacent markets, namely for (high-speed) broadband, internet access, fixed telephony services, and mobile communications. In essence, the merged entity would be the leading supplier of TV signals and a very strong mobile

¹⁰⁴³ Commission decision of 4 February 2016 in case M.7637 - *Liberty Global/Base Belgium*, recital 363.
¹⁰⁴⁴ Replies to questionnaire Q8, question n 98.

telecommunications provider based on Vodafone's current mobile network. Moreover, the merged entity could rely on its superior nationwide coaxial cable network and this offer could be supplemented with high quality fixed voice services. The merged entity will also have the incentive to foreclose competitors, as such a strategy would be profitable as competitors would not be in a position to devise effective counter-strategies.¹⁰⁴⁵

- (1534) The same participant submitted that by offering bundled discounts for customers subscribing to two or more services, the merged entity could set very low prices compared to the individual components. This would give rise to anticompetitive effects in particular on the markets for (high-speed) broadband internet access and mobile telecommunications, because competitors would not be able to successfully replicate the merged entity's bundled offers as they either lack a competitive TV offer or coaxial cable infrastructure.¹⁰⁴⁶
- (1535) Some respondents pointed in particular to the relevant position of the Parties as provider of TV services to MDUs customers, who will not have an incentive to have another provider for telephone, internet or mobile connectivity if they already receive TV from the merged entity because it is usually easier and cheaper to have only one provider for multiple services. They argued that Vodafone will very likely leverage this lock-in situation to aggressively market telecommunications bundles including mobile telecommunications services at cross-subsidised prices significantly lower than the prices for the respective individual services. It was pointed out that Vodafone already today heavily cross-subsidise its mobile services when bundled.¹⁰⁴⁷
- (1536) A participant to the market investigation submitted that the combined entity – with a nationwide fixed and mobile network – will be able to cross-subsidise cable TV offers with its mobile, fixed telephone and internet offers, cut costs and offer dumping prices to household associations in order to squeeze out other competitors. Vodafone will also further push bundle products under the “more for more” logic, which leads to price increases for consumers who cannot opt for the individual service anymore, hence paying for services that they do not require, and to a squeeze out of competitors who cannot match such offers, for example because they do not own a mobile network.¹⁰⁴⁸
- (1537) Similarly, another participant to the market investigation pointed to the increasing importance of convergent offers in Germany and submitted that post-Transaction the Parties could leverage their enhanced market position for fixed internet services to foreclose competing suppliers of IPTV offerings, by raising access costs or limiting access to their networks.¹⁰⁴⁹ Moreover, the Parties will have exclusive access to the largest number of households in Germany, to whom they can offer "one-stop-shop"

¹⁰⁴⁵ Deutsche Telekom's reply to questionnaire Q8, question 98.1 [ID 2554].

¹⁰⁴⁶ Deutsche Telekom, submission of 10 October 2018, *Envisaged acquisition of Liberty Global's Unitymedia by Vodafone, Significant impediment to effective competition in German media and telecommunication markets*, page 4 [ID 446].

¹⁰⁴⁷ Freenet's reply to questionnaire Q8, question 98.1 [ID 2504].

¹⁰⁴⁸ Tele Columbus, submission of 12 November 2018, EU Competitive Assessment Vodafone Unitymedia, page 2 [ID 2974].

¹⁰⁴⁹ United internet, submission of 26 September 2018, The Vodafone/Unitymedia merger has anti-competitive effects and cannot be cleared, at least not unconditionally, page 12 [ID 5332].

multiple play services. This will foreclose competitors with more limited access to households or with less integrated offers.¹⁰⁵⁰

- (1538) The Commission has assessed whether the merged entity would have the ability and incentive to use its market power in one market to foreclose competitors in another market by bundling products after the Transaction. However, the Commission notes that already today (i) Vodafone offers the full range of mobile (as MNO) and fixed services nationwide (notably through its cable network in its footprint and via the DSL wholesale offer in the rest of Germany) and (ii) Unitymedia offers the full range of mobile (as MVNO) and fixed services in its footprint. In fact, both Parties have already bundled offers in their current portfolio. Moreover, the Parties' fixed retail activities overlap only in Unitymedia's footprint, where Vodafone is active through the DSL wholesale offer in the fixed internet and fixed telephony markets (and minimally in the TV market). Therefore, the analysis has also to consider carefully whether any possible foreclosure effect would be merger-specific.

5.3.1. *Ability to foreclose*

- (1539) In order to have the ability to foreclose rivals, the merged entity must have a significant degree of market power in at least one of the markets concerned. That is, at least one of the Parties' products must be viewed by many customers as particularly important and there must be few relevant alternatives for that product.¹⁰⁵¹
- (1540) With respect to the market for retail mobile telecommunications services in Germany, the merged entity's market share will be at [20-30]% in terms of subscribers and [20-30]% in revenues. There are at least two significant competitors with a similar market position (Deutsche Telekom at [20-30]% and Telefónica at [30-40]% in subscribers) and two other operators at about [10-20]% (Freenet and United Internet). Furthermore, the increment brought about by the Transaction will be minimal ([0-5]% in subscribers and [0-5]% in revenues). The Commission is therefore of the view that based on its position in the market for retail mobile telecommunications services in Germany, it is unlikely that after the Transaction the merged entity will have the ability to leverage its position in the market for retail mobile telecommunications services into the retail market for fixed telephony services, the retail market for internet access services and/or the retail market for TV.
- (1541) Similarly, the merged entity's market shares will not exceed 30% in the retail market for fixed telephony services, where post-Transaction Vodafone would have a market share of [20-30]% in terms of subscribers and [20-30]% in revenues. Deutsche Telekom has a market share of about [50-60]% in this market. Therefore, any relevant market power of the merged entity seems excluded.
- (1542) With respect to the fixed internet access market, the merged entity would have a market share of [30-40]% in terms of subscribers ([20-30]% on cable and [5-10]% on DSL) and [20-30]% in revenues ([10-20]% on cable and [5-10]% on DSL).¹⁰⁵² There is another operator with a larger market share (Deutsche Telekom, [30-40]% in terms of subscribers and [40-50]% in revenues) and another one with a market share close to [10-20]% (United Internet), both active at national level via DSL offers. The Commission notes that the market share of the merged entity, although superior to

¹⁰⁵⁰ United Internet, presentation of 5 July 2018, Anti-competitive effects of the Vodafone/Unitymedia merger, page 12 [ID 5434].

¹⁰⁵¹ Non-horizontal Merger Guidelines, paragraph 99.

¹⁰⁵² This data includes also fixed voice revenues [...] (See Form CO, footnotes 645 and 647).

30% in terms of subscribers, is more limited in terms of revenues. Moreover, the only overlap is in Unitymedia's footprint, where Vodafone has only DSL customers on the basis of Deutsche Telekom's wholesale offer. However, in that area all customers will still have the possibility to receive fixed internet access services from the main operator (Deutsche Telekom) and from the other operators active through Deutsche Telekom's wholesale offer (in particular United Internet). Therefore, even assuming a certain decrease of competition in the fixed internet market in Unitymedia's footprint, the Commission considers it unlikely that after the Transaction the merged entity will have such a degree of market power so as to be able to leverage its position in the market for fixed internet access services into the other retail telecommunications markets in Germany, considering the available alternatives.

- (1543) In the market for retail supply of TV services, the merged entity would have a market share of [30-40]% in terms of households connected and of [20-30]% in terms of viewership. In the premium TV segment, the merged entity's market share will be [10-20]% in terms of subscribers, of [10-20]% in revenues and of [10-20]% in terms of viewership. Those national data appear to suggest that the merged entity would not enjoy a relevant market power in the market for the retail supply of TV services, in particular in the premium TV segment. However, the analysis has to be carried out also in the various possible segments of the relevant market.
- (1544) Focusing on the SDU segment, the merged entity would have a market share of [20-30]% at national level in terms of households connected. In the MDU segment, the market share would be at [30-40]%. It is to be noted that the market share in the MDU segment is declining (it was [30-40]% in 2016 and [30-40]% in 2017).
- (1545) As for the alternatives that customers have in the TV market in Germany, in the general segment the main competitors are Deutsche Telekom – with a [5-10]% market share in terms of households connected ([10-20]% in SDU and [0-5]% in MDU) and of [5-10]% in terms of viewership – and Tele Columbus, with a [5-10]% market share in terms of households connected ([5-10]% in SDU and [5-10]% in MDU) and of [5-10]% in terms of viewership. Moreover, [40-50]% of the households are connected by satellite platforms ([40-50]% in SDU and [30-40]% in MDU).
- (1546) In the premium TV segment, the main competitor is Sky, with a market share of [20-30]% in terms of subscribers and [50-60]% in terms of revenue. OTT operators also represent a relevant alternative, with increasing penetration in the market ([30-40]% in terms of subscribers and [10-20]% in revenues).
- (1547) Considering for completeness the two cable footprints separately, the market shares of the merged entity would be of [40-50]% in Vodafone's footprint ([30-40]% in SDU and [40-50]% in MDU) and [40-50]% in Unitymedia's one ([30-40]% in SDU and [40-50]% in MDU). The market shares of the Parties are declining: in 2016 Vodafone had a market share of [40-50]% in its footprint ([40-50]% in SDU and [50-60]% in MDU) and Unitymedia of [40-50]% in its one ([40-50]% in SDU and [40-50]% in MDU).
- (1548) In any case, the Commission notes that in the retail supply of TV services, irrespective of the definition in terms of products, areas and technologies, the activities of the Parties do not practically overlap, as each of Vodafone and

Unitymedia is only active with cable TV in its own footprint.¹⁰⁵³ Therefore, the Transaction does not seem to bring about any substantial change with respect to the ability to foreclose rivals in this respect, in particular in terms of alternatives available to final customers of the two Parties (and, after the Transaction, of the merged entity).

- (1549) With respect to the allegation by some participants to the market investigation that the merged entity would be able leverage its dominance in the retail supply of (cable) TV signal transmission (in particular for MDU) onto the other telecommunications markets, the Commission notes that, assuming a retail TV signal transmission market for MDU limited to cable, already today each of the Parties enjoys a relevant market power in its footprint and is able to offer (and actually offers) bundled products including TV in its respective footprint. The Transaction would not cause any appreciable change to this situation, as the Parties activity in retail TV signal do not overlap. In this respect, the Parties have also provided some data showing the current penetration rate of broadband customers in their TV footprint (that is to say, for those MDU households where the relevant Party provides the basic TV service, the proportion of those households who also purchase a retail broadband or retail fixed voice service from that Party): this penetration rate (between [INFORMATION CONCERNING PARTIES' SALES]) would be fully comparable to their share of broadband customers across their whole footprint (including with respect to SDUs customers).¹⁰⁵⁴
- (1550) Similarly, with specific respect to the ability to leverage the position in the market for the retail supply of TV services or in the market for the retail supply of TV signal transmission into the mobile market, the Commission notes that the Transaction would not change the competitive scenario in Vodafone's footprint, while in Unitymedia's footprint, although both Parties already today can offer bundled products, post Transaction it will be possible to offer infrastructure-based bundled products (fixed cable products and MNO mobile services). In this respect, on the basis of information provided by the Notifying Party, after the acquisition by Vodafone of the cable activity of Kabel Deutschland, there has been a modest take-up of fixed-mobile bundle services in the KDG footprint. Currently, only [INFORMATION CONCERNING PARTIES' SALES] of households purchasing any form of cable-based fixed product from Vodafone would also have a post-pay mobile contract with Vodafone. In other words, the majority of Vodafone's fixed customers choose not to opt for mobile multi-play offers and instead purchase Vodafone services on a stand-alone basis, despite the Vodafone/Kabel Deutschland transaction giving Vodafone an improved ability to offer fixed-mobile bundles (that is to say by giving it both mobile and fixed infrastructure in the relevant footprint). In other words, Vodafone has not had the ability to successfully leverage from the fixed markets into the mobile market following that merger.¹⁰⁵⁵
- (1551) More in general, the Commission notes that in Germany bundled offers – in particular, the ones including mobile telephony – are still at an early stage: as already stated at section VII.2.6, the data from BNetzA shows that the only relevant bundled product in Germany includes retail fixed telephony and retail broadband services (23.2 million customers in 2017), corresponding to respectively 60% of fixed voice

¹⁰⁵³ As already reported in section VIII.2.6, Vodafone has a very marginal TV offer in Unitymedia's footprint ([0-5]% market share).

¹⁰⁵⁴ See Form CO, paragraphs 6.1218-6.1223.

¹⁰⁵⁵ Response to Article 6(1)(c) Decision, footnote 447.

customers and 70% of fixed broadband customers.¹⁰⁵⁶ Around 31.5% of the fixed broadband customer base (corresponding to 10.3 million subscribers) purchase a bundle including premium TV according to third party reports.¹⁰⁵⁷ Conversely, in 2017 36.4% of pay TV subscribers purchase a bundle including a fixed broadband connection.¹⁰⁵⁸ Absent the Transaction, these percentages are expected to marginally increase up to 35.2% of the fixed internet customer base and 43.8% (in December 2022) of the pay TV subscriber customer base.¹⁰⁵⁹ Only around 8.4% of households, or 10.8% of the fixed broadband base (that is 3.5 million households), purchase an FMC product.¹⁰⁶⁰

- (1552) FMC products have started being offered in Germany only in 2014 by Deutsche Telekom and Vodafone. Third party reports estimate that in 2017 5.4% of mobile customers purchase a bundle including a fixed broadband connection.¹⁰⁶¹
- (1553) The current low penetration of FMC offers in Germany is confirmed by the Parties' competitors in the market investigation. For instance, Telefónica explains that FMC products have not played a significant role in Germany. The total percentage of households that purchase FMC products in Germany is low (only 9% as of Q4 2017, as opposed to for example 47% in Belgium and 61% in Spain).¹⁰⁶² Similarly, a study submitted by United Internet shows that Germany is the country with the lowest uptake of FMC by households.¹⁰⁶³ United Internet also submitted a presentation of Vodafone of 2017 showing that Germany is the country with the slowest speed of convergence among the countries where Vodafone is active.¹⁰⁶⁴ A study submitted by EWE reports that, among 3P products, only 7% of the bundles sold included mobile instead of TV services, while 4P products have been purchased only by a few thousand customers on the basis of a single contract.¹⁰⁶⁵
- (1554) The data from the Parties reflect this limited penetration of bundled offers (with the exception of fixed voice-fixed internet offers): [INFORMATION CONCERNING

¹⁰⁵⁶ BNetzA, Jahresbericht 2017 – Netze für die Zukunft, page 51 and 54 [ID 4667].

¹⁰⁵⁷ E.g. Analysis Mason, Fixed-Mobile Convergence in Europe: Trends And Forecasts 2017–2022, Annex 6.C.XIII.1 to the Form CO.

¹⁰⁵⁸ See Parties' reply to RFI 33, question 1.1.

¹⁰⁵⁹ See Parties' reply to RFI 33, question 1.1. and Analysis Mason, Fixed-Mobile Convergence in Europe: Trends And Forecasts 2017–2022, Annex 6.C.XIII.1 to the Form CO.

¹⁰⁶⁰ See also Telefónica, submission of 26 October 2018, *Memorandum Theories of Harm*, page 10 [ID 2803]. To be noted that one participant to the market investigation has contested this conclusion and, on the basis of a result of another independent study, has stated that FMC penetration in Germany would be underestimated as in most cases, the contracts for fixed and mobile networks remain separate and that would make it more difficult to estimate the quantity of such bundled offers. This type of bundles (discounted separate contracts) would be already significantly widespread in Germany, in particular for MNOs. However, the participant acknowledges that market penetration of FMC bundles has so far been heterogeneous, in particular because non-MNOs would be at disadvantage because of non-attractive wholesale conditions (EWE Tel, submission of 16 April 2019, Observations on the "Statement of Objections" by EWE Tel GmbH, page 2 [ID 5873]). In this respect, first of all the Commission notes that the issue described is not related to the present Transaction. In any case, the current analysis of the conglomerate aspects, mainly based on the limited activity of the Parties and on the absence of merger specific effects, would not change even assuming a higher penetration on FMC bundles, of the kind alleged by this participant to the market investigation.

¹⁰⁶¹ See Parties' reply to RFI 33, question 1.2.

¹⁰⁶² Telefónica, submission of 26 October 2018, *Memorandum Theories of Harm*, page 10 [ID 2803].

¹⁰⁶³ Bain & Company, Fixed-Mobile Convergence: Quarterly State of Play 18Q4, 18 March 2019, slides 11, 12, 13 [ID 6367].

¹⁰⁶⁴ Vodafone's presentation, Fixed Convergence Open Office, 19 September 2017, slides 11 [ID 6375].

¹⁰⁶⁵ WIK-Consulting study, annex to EWE's comments on the Statement of Objections [ID 5872].

SALES] of Vodafone fixed voice/broadband customers also purchase TV at the same time. With respect to fixed/mobile offers, as above explained only [INFORMATION CONCERNING SALES] of households purchasing any form of cable-based fixed product from Vodafone also have a post-pay mobile contract with Vodafone, despite the fact that the possible integration of cable and MNO mobile offers has been on the market for several years. With respect to Unitymedia, [INFORMATION CONCERNING SALES] of their customers purchase a fixed-triple play product, with [INFORMATION CONCERNING SALES] purchasing single fixed services and [INFORMATION CONCERNING SALES] dual-play services (mainly fixed voice-internet). Only [INFORMATION CONCERNING SALES] of its fixed internet customers also purchase mobile services from Unitymedia.

- (1555) Absent the Transaction, predicted FMC penetration in Germany in 2022 is 24.3% as a proportion of the fixed broadband base or 21% as a proportion of households, ranking Germany second to last of the ten European countries covered by the data provided by the Notifying Party.¹⁰⁶⁶ Furthermore, the Transaction may somewhat speed up the uptake of fixed-mobile bundles, considering that Vodafone is more focused on mobile services, with respect to Unitymedia; nevertheless it appears that providers of standalone services would still have a sizeable share of the market at their disposal.
- (1556) One participant to the market investigation objected that, while in Germany FMC have been developing slower than in other European countries, FMC would be growing rapidly and would soon be the “new normal” also in the German telecommunications market. The forward-looking assessment of the effects of the concentration should consider this. The participant focused in particular on the growth rates of FMC sales: Vodafone would have tripled its FMC sales over the last two years and also Deutsche Telekom would show an exceptionally strong growth.¹⁰⁶⁷
- (1557) In this regard, the Commission notes that the participant itself acknowledges that, notwithstanding this rapid growth, at present Deutsche Telekom and Vodafone have converted only 20% of their customers to an FMC product.¹⁰⁶⁸ As stated above, all studies and reports show a limited penetration of FMC offers in Germany. The independent analysis submitted by the Notifying Party referred to in recital (1551) further confirms that FMC penetration should increase in the coming years, however the scenario should not change dramatically and suddenly, as suggested by the participant, but rather gradually. Again the Commission reiterates that it cannot be excluded that the Transaction may facilitate the penetration of FMC offers. However, at present it does not appear that, also following the Transaction, in the short term the competitive conditions should change to such an extent as to modify the described scenario to the complete detriment of standalone service providers.
- (1558) In conclusion, it appears that in Germany, with the exception of dual-play offers including fixed voice and fixed internet, telecommunications services are still mainly sold stand-alone, in particular mobile services. Even if the merged entity were to focus its offer in (fixed-mobile) bundles at discounted prices compared to the price of the standalone components, the possible increase in bundles in the next years does

¹⁰⁶⁶ See Form CO, Section 6, paragraph 6.1204(iii), based on Analysys Mason, Fixed-Mobile Convergence in Europe: Trends And Forecasts 2017–2022, Annex 6.C.XIII.1 to the Form CO

¹⁰⁶⁷ United Internet Reply to Questionnaire on Remedies, question 3.1 [ID 6245].

¹⁰⁶⁸ United Internet Reply to Questionnaire on Remedies, question 3.1, page 5 [ID 6245].

not seem to allow a radical and rapid change of this situation to such an extent as to marginalise providers of standalone services reducing their ability and incentive to compete. In light of that, also in a scenario of increasing relevance of FMC offers in Germany, it is unlikely that standalone operators would be marginalised.

- (1559) Considering the competitive scenario and the current development of multiple play offers in Germany, the Commission therefore considers that the merged entity will not have the ability to foreclose competitors in the adjacent markets.

5.3.2. *Incentive to foreclose*

- (1560) Even if the Commission has already concluded that the merged entity will not have the ability to foreclose competitors, the Commission has also assessed whether the merged entity will have an incentive to engage in bundling of retail supply of mobile telecommunications services, retail supply of voice services, retail supply of fixed internet services and retail supply of TV services, to foreclose rivals from effectively competing for customers who purchase more services.
- (1561) After the Transaction, the merged entity might consider introducing a price-discrimination strategy consisting of somewhat increasing the price of the standalone products and/or to lower the price of fixed-mobile or fixed bundles.¹⁰⁶⁹ As a result of such a price discrimination strategy, customers who buy single products separately could incur an increase in their total cost of ownership while customers who opt into the bundle could be better-off. Any such foreclosure strategy would only be profitable if the loss of standalone sales from the price increase is outweighed by increased sales of bundles.
- (1562) In this respect, firstly the Commission considers that the merged entity would not have any incentive to adopt a similar strategy with respect to the market for the retail supply of mobile communications services, where the merged entity would have a limited market presence and there are at least two competitors with similar (or superior) market shares. Moreover, most mobile subscriptions are still sold standalone. A price increase of standalone mobile offers would simply cause the merged entity's mobile customers to opt for alternative (standalone) suppliers of mobile services. Therefore, the analysis will focus on fixed services.
- (1563) In this regard, the Notifying Party has submitted an economic study showing that such foreclosure strategy would not be possible for the merged entity, because (i) standalone fixed prices would have to rise by an implausibly large amount in order to foreclose mobile and fixed competitors; (ii) additional effective counter-strategies are available to standalone rivals; and (iii) such a foreclosure strategy based on offering fixed-mobile discounts alone would result in an untenable profit sacrifice for the merged entity.¹⁰⁷⁰
- (1564) As regards the potential increase in the price of standalone fixed products, the Commission considers that the incentive to do so for the merged entity would be mitigated by the existence of alternative fixed offers by Deutsche Telekom, United Internet and other relevant fixed operators (see Table 2), who already offers both standalone fixed services and multiple play bundles at national level. Moreover, it is doubtful that this strategy could be viable, considering that most subscriptions in all

¹⁰⁶⁹ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 625.

¹⁰⁷⁰ Annex C.VII.1 to the Reply to the Article 6(1)(c) decision.

services, including fixed ones, are still sold standalone (see section VII.6),¹⁰⁷¹ with the exception of dual play bundles including fixed voice and fixed internet, where in any case the market conditions are similar to the conditions in the fixed internet market.¹⁰⁷²

- (1565) As regards the sale of bundles at a discount, the Commission considers this to be in the interest of consumers and unlikely to lead to the marginalisation of standalone-only players who will continue to compete to sell standalone services to customers who purchase separately retail telecommunications services (as well as to customers who purchase exclusively mobile services), considering that, as already stated, the majority of consumers in Germany still subscribes separately to fixed and mobile products. Furthermore, in any case the Transaction does not seem to give rise to material changes in the merged entity's incentive to foreclose, as already pre-Transaction both Parties have been active as providers of standalone and bundled telecommunications services in Germany. The only qualitative change brought about by the Transaction would be the fact that Vodafone would extend its cable network in the Unitymedia's footprint and for those new clients Vodafone could have an increased incentive to offer bundled products including mobile services, as Vodafone could rely on its MNO offer while at present Unitymedia has to rely on a less viable MVNO offer. However, considering the current limited share of bundled offers including mobile services and the fact that most mobile products are still sold standalone, it is doubtful that this increased incentive in a limited area of Germany could counterbalance the risk of loss in case of price increase for standalone services (normally having national prices). As for the possible offer of cheaper bundles, the Commission has already maintained that if an MNO with a fixed network can offer better products or be more cost effective than an MVNO with a fixed network, this would mean that the Transaction would allow the merged entity to offer better or cheaper products and there would be no harm to consumers.¹⁰⁷³
- (1566) The Commission therefore considers that the merged entity will not have the incentive to foreclose competitors in the adjacent markets.

5.3.3. *Impact on competition and on consumers*

- (1567) Even if the Commission has already concluded that the merged entity will not have either the ability or the incentive to foreclose competitors, the Commission has also assessed the effects of a possible foreclosure strategy on competition, and thus on consumers.
- (1568) As for the possible impact on mobile-only operators, the Commission has already stated that only relatively few customers currently use fixed-mobile bundles. In particular, only around 8.4% of households, or 10.8% of the fixed broadband base (that is 3.5 million households), purchase an FMC product. This implies that a significant demand for mobile-only products will remain on the market, also in case of a discount strategy by the merged entity and an increasing development of FMC offers. A foreclosure strategy would not plausibly lead to the marginalisation of minor standalone mobile operators or to the exit of the merged entity's main mobile rivals, in particular Deutsche Telekom, Telefónica and United Internet (that already

¹⁰⁷¹ In light of this, the Commission also considers that the merged entity will have no incentive to engage in pure bundling, that is, to exclusively offer fixed-mobile bundles.

¹⁰⁷² In other terms, voice services and internet services can be considered alternatively as separate markets or part of the same market.

¹⁰⁷³ Commission decision of 4 February 2016 in Case M.7637 - Liberty Global/Base Belgium, recital 364.

offers fixed-mobile bundles). As above stated, following the Transaction in Unitymedia's footprint Vodafone will be able to offer bundled products including mobile services based on its MNO offer, while at present Unitymedia has to rely on a less viable MVNO offer. However, as also explained the Commission has already stated in a previous case that to the extent that the Transaction does allow the merged entity to offer better connectivity, better products or save costs, the Commission does not consider that this would lead to anti-competitive effects.¹⁰⁷⁴ In any case, as also already stated in recital (1550), after the acquisition by Vodafone of the cable activity of Kabel Deutschland, there has been only a modest take-up of fixed-mobile bundle services in the KDG footprint, where Vodafone was able to offer bundled products based on its own infrastructure. Therefore, the Commission does not consider that following the Transaction, mobile only players would be marginalised .

- (1569) Similarly, the Commission considers that the Transaction would not have detrimental effect on fixed operators, through their marginalization. Firstly, most fixed operators already offers bundles including all telecommunications services and other fixed competitors (such as city carriers) could also compete by either offering discounts on their standalone fixed services or by introducing their own fixed-mobile bundles by agreeing an MVNO deal with one of the three MNOs, who all offer wholesale mobile access. Secondly, as already stated most fixed products in Germany are sold standalone or as a double-play offer including fixed telephony and fixed Internet, where the merged entity would not have a relevant market presence. Even assuming that the Transaction could speed up the convergence progress, providers of standalone fixed services would still have a relevant percentage of customers available. Furthermore, the cable network of the merged entity would not cover the entire territory of Germany, as the households connected are about [DETAILS OF CAPABILITIES] of the total German market. Outside of its footprint, the merged entity will have to rely on Deutsche Telekom's DSL wholesale offer to provide fixed services. Therefore, any hypothetical aggressive strategy based on the bundling of high-quality cable fixed services could not have effects on the remaining part of Germany.
- (1570) The Transaction might accelerate the trend towards fixed-mobile convergence and in general towards the emergence of a market of integrated communications services. By combining the two regional cable networks into a single national one, coupled with a strong mobile offer, the Transaction could somewhat speed up the uptake of fully integrated offers. However, the Commission considers that this in itself does not undermine the ability of competitors offering stand-alone services (in particular mobile services) to compete effectively for customers. In addition, the Commission considers that the Transaction generates a fully integrated player owning both a fixed and a mobile network at national level. As a result, the Commission considers that the Transaction has the potential to stimulate the Notifying Party's ability to compete in fixed-mobile bundles with the incumbent Deutsche Telekom.¹⁰⁷⁵
- (1571) With regard to the possible effects of the Transaction on the uptake of fully integrated offers, the Notifying Party has submitted a set of projections on the possible evolution in the next 2-3 years both absent the Transaction and in a scenario where the Transaction has been implemented.¹⁰⁷⁶ The estimation is based on a third party report and takes into account both a mechanical effect (customers who pre-

¹⁰⁷⁴ Commission decision of 4 February 2016 in Case M.7637 - Liberty Global/Base Belgium, recital 364.

¹⁰⁷⁵ Commission's decision of 4 February 2016 in case M.7637 - *Liberty Global/Base Belgium*, recital 364.

¹⁰⁷⁶ See Parties' reply to RFI 33, question 1.

merger purchase a service from one of the Party and the other service from the other Party and therefore, as a result of the Transaction, will purchase both services from the merged entity) and, where relevant, a synergy effect (the cross-selling of one Party's product into the customer base of the other Party):

- (a) As of December 2017, [DETAILS OF SYNERGIES] of pay TV subscribers purchased a bundle including a fixed broadband connection. Absent the Transaction, this figure would be expected to increase to [DETAILS OF SYNERGIES] by December 2020. With the Transaction, the figure is expected to increase to [DETAILS OF SYNERGIES];
- (b) As of December 2017, [DETAILS OF SYNERGIES] of mobile subscribers purchased a bundle including a fixed broadband connection. Absent the Transaction, this figure would be expected to increase to [DETAILS OF SYNERGIES] by December 2020. With the Transaction, the figure is expected to increase to [DETAILS OF SYNERGIES].

(1572) This modest forecast increase seems to confirm that the Transaction would not have a dramatic effect on the trend towards fixed-mobile convergence and in general towards the emergence of a market of integrated communications services.

5.1. Conclusion

(1573) The Commission therefore concludes that the Transaction would not significantly impede effective competition as a result of conglomerate effects in Germany.

D. CZECHIA

(1574) The Parties' activities in Czechia are generally complementary in terms of the prevailing type of activities: Vodafone is active through Vodafone Czech Republic a.s., which primarily provides mobile telecommunications services, but is also active to a negligible extent in fixed internet access services (based on wholesale access to the former incumbent's fixed network—which entirely overlaps with UPC's cable network, supplemented by broadband services that rely on its mobile network). It also has a business connectivity offering. Vodafone is not active in retail fixed telephony or retail TV services.

(1575) The Target Business is active through UPC Česká republika, s.r.o., which offers retail fixed telephony, retail fixed internet access services, and retail TV services through its predominantly cable network based on HFC infrastructure. Its cable network's footprint mainly covers large cities (for example, Prague, Brno and Ostrava) and connects [DETAILS OF CUSTOMER NUMBERS] in Czechia. Liberty Global also offers retail TV services to consumers via satellite under the brand "freeSAT". These satellite TV activities are not part of the Target Business, and has been sold to Skylink, part of the M7 Group. UPC is also active in business connectivity services, but has no presence in retail mobile telecommunications services.

(1576) Other significant players in Czechia are O2, T-Mobile, Skylink, Digi, and Nordic Telecom.

(1577) O2 is the former incumbent telecommunications operator. On June 2015, O2's parent company voluntarily separated of the former incumbent into two distinct entities, O2, active at retail level, and CETIN, active at wholesale level as the operator of the

fixed network infrastructure.¹⁰⁷⁷ CETIN owns and operates an xDSL fixed network connecting approximately 85% (that is to say, 3.8 million) of households in Czechia. CETIN's network is subject to regulated wholesale access obligations.

- (1578) O2 provides fixed internet access services mainly through CETIN's xDSL network. Since February 2017, it also offers internet access services that rely on its mobile network. Additionally, O2 is active in retail fixed telephony, business connectivity services, and retail mobile telecommunications services, as well as being acting as a retailer of TV services.
- (1579) Like Vodafone, T-Mobile is mainly active as a MNO. It also offers retail fixed internet access services relying on regulated access to CETIN's xDSL network, as well as on its own mobile network. T-Mobile also offers fixed telephony services, business connectivity services, and retail TV services (via both IPTV and satellite).
- (1580) Skylink is a retail provider of TV services. For its provision of TV services, Skylink relies on satellite technology.
- (1581) Digi is a retail provider of fixed internet access services (through regulated access to CETIN's xDSL network) and TV services (via both IPTV and satellite). Digi is also active as an MVNO under the brand name "Lama".
- (1582) Nordic Telecom provides retail mobile telecommunications services as an MVNO. It also operates a CDMA network on the 420 MHz band, but recently won two 40MHz blocks of spectrum on the 3.7GHz band. Nordic Telecom is slated to use to deploy its own LTE network in 2018, following commitments attached to its spectrum licence, which obliges it to achieve a certain nationwide coverage by 8 December 2022. Nordic Telecom is also active as a retail provider of fixed internet services and fixed telephony services, through wholesale access to CETIN's network.

1. AFFECTED MARKETS

1.1. Horizontally affected markets

- (1583) The Transaction does not give rise to any horizontally affected markets. In particular, the horizontal overlaps between the Parties activities, namely in the market for retail fixed internet access services¹⁰⁷⁸, retail business connectivity, retail internet hosting

¹⁰⁷⁷ O2 and CETIN remain part of the same corporate group.

¹⁰⁷⁸ The Commission notes that, even including in the market definition the provision of fixed internet access services provided through mobile network infrastructure ("fixed-wireless" internet access products), the combined market share of the Parties would still be below 20%. Certain respondents to the market investigation claimed that Vodafone is a very innovative and aggressive player in fixed-wireless internet access products, which the respondents claim could be an alternative to fixed internet access products. The respondents claim that post-Transaction the merged entity will have less of an incentive to utilize the mobile frequency spectrum it recently acquired, as it will be able to rely on UPC's fixed network. See O2 Czech Republic a.s.' reply to questionnaire Q1, question 66; and Nej CZ's submission of 30 October 2018, paragraphs 59-76 [ID 2400]; [CONFIDENTIAL]. The Commission does not consider that the Transaction will lead to any significant impediment to effective competition on the retail market for fixed internet access services in Czechia. First, the respondents to the market investigation indicated that Vodafone is not an aggressive or innovative player in the market. See replies to questionnaire Q1, question 17.2. Second, the market investigation also indicated that customers see fixed-wireless internet access products as complements to traditional landline solutions. See replies to questionnaire Q1, questions 12 and 12.1. Third, mobile frequency spectrum is principally used to provide mobile telecommunications services. In this regard, and given that the Transaction will not lead to any significant impediment of effective competition on the retail market for mobile telecommunications services, the Commission considers that it is unlikely that the merged entity will

services, wholesale supply of termination and hosting of calls to non-geographic numbers, and wholesale provision of domestic call transit services, do not give rise to combined market shares exceeding 20% under any possible market definition.

- (1584) As regards the wholesale market for call termination services on fixed networks, the Transaction does not give rise to any overlaps, as by definition each of the Parties' fixed networks is a separate, non-overlapping market. In any case, the Commission considers that the Transaction will not give rise to any significant impediment of effective competition as a result of horizontal non-coordinated effects in the wholesale market for call termination services on fixed networks in Czechia, because ex-ante regulation is in place in Czechia, which imposed interconnection remedies.¹⁰⁷⁹
- (1585) As regards the retail market for the supply of TV services, the Parties' activities do not currently overlap, as only UPC markets cable TV services in Czechia, while Vodafone only provides TV services through a mobile app that is available to Vodafone's existing mobile customers and on internet-enabled smart TVs . Furthermore, Vodafone submits that its mobile TV offer is simply a resale of a third party's (Sledovani) TV offer.
- (1586) In any event, the Commission considers that the Transaction will not give rise to any significant impediment of effective competition as a result of horizontal non-coordinated effects in the retail market for TV services in Czechia, because UPC's market share is low (approximately [10-20]% by subscribers and [20-30]% by revenue), the increment brought about by Vodafone's TV app customers (estimated at around [DETAILS OF CUSTOMER NUMBERS] viewers per month, which is less than [0-5]% of the total subscribers in Czechia) is negligible. Therefore, the combined market share is below the 25% threshold set out in recital (32) of the Merger Regulation to indicatively identify transactions that may be presumed compatible with the internal market. Moreover, there will be other competitors active in the market, such as Skylink, O2, Digi, and T-Mobile. Despite the fact that one complainant submitted that Vodafone is one of the most important drivers of innovation in terms of IPTV,¹⁰⁸⁰ respondents to the first phase market investigation indicated that, absent the transaction, Vodafone would have remained a relatively small player.¹⁰⁸¹
- (1587) Although the Parties' activities do not currently overlap as regards the provision of fixed bundles comprising of fixed internet access services and TV services (where only UPC is active, with an estimated market share of [30-40]%), [DETAILS OF COMMERCIAL STRATEGY].¹⁰⁸²
- (1588) The Commission considers that the Transaction is unlikely to give rise to a significant impediment of effective competition as a result of horizontal non-coordinated effects in the possible retail market for fixed-TV bundles in Czechia, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].¹⁰⁸³ This is further supported by the market investigation, where respondents stated that absent the

not make use of the acquired spectrum—at least for its mobile telecommunications services, especially given the incentive the merged entity will have to recoup the high price paid for the spectrum.

¹⁰⁷⁹

See Form CO, section 6.116 (i) and Annex 6.B.II.2.

¹⁰⁸⁰

See Nej CZ's submission of 30 October 2018, paragraph 79 [ID 2400].

¹⁰⁸¹

Replies to questionnaire Q1, questions 62 and 62.1.

¹⁰⁸²

[REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].

¹⁰⁸³

[REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].

Transaction Vodafone would have remained a relatively small player, whose TV offer is only a complementary product to its mobile services.¹⁰⁸⁴ Finally, the Commission considers that other competitors will remain active in the market, such as O2, T-Mobile, Digi, and other local and regional players.

- (1589) Finally, the respondents to the market investigation did not express any specific concerns regarding any of the markets where there is a horizontal overlap between the Parties.¹⁰⁸⁵

1.2. Vertically affected markets

- (1590) The Transaction gives rise to the following vertically affected markets:

- (a) The upstream market for the wholesale provision of call termination services on mobile networks and the downstream market for the retail provision of fixed telephony services;
- (b) The upstream market for the wholesale provision of call termination services on fixed networks and the downstream market for the retail provision of fixed telephony services; and
- (c) The upstream market for the wholesale provision of call termination services on fixed networks and the downstream market for the retail provision of mobile telecommunications services.

¹⁰⁸⁴ Replies to questionnaire Q1, questions 62 and 62.1; in particular, reply of O2 Czech Republic a.s. to questionnaire Q1, question 62.1.

¹⁰⁸⁵ The Commission notes that several market respondents raised concerns that the merged entity will increase its market power in the provision of fixed-mobile bundles. As those concerns are analysed in Section VIII.D.2 (Conglomerate Effects) below, the Commission will not discuss those further here. Moreover, one respondent submitted that post-Transaction the merged entity would not have any incentives to provide wholesale access to UPC's fixed telecommunications network. See Nej CZ's submission of 30 October 2018, paragraph 32 [ID 2400]. However, the same respondents correctly notes that already today UPC does not provide any wholesale access to its network. See Nej CZ's submission of 30 October 2018, paragraph 19 [ID 2400]. Because the Commission considers this claim not merger-specific, it will not discuss it further in this Decision. Furthermore, the same respondent submitted that the Transaction would lead to an overall reduction of innovation, which would be due to Vodafone's corporate strategy. According to the complainant, Vodafone pays larger dividends to its shareholders than Liberty Global. Because the complainant links the distribution of dividends with lower levels of investment, it claims that the change in ownership of UPC will lead to lower investments. See Nej CZ's submission of 30 October 2018, paragraphs 55-58 [ID 2400]. The Commission does not consider this claim merger-specific, as a change in ownership is not in itself a structural change in the market. Therefore, the Commission will not further discuss this complaint. Finally, the same respondent claims that post-Transaction the merged entity will be able to combine the data sets concerning UPC's and Vodafone's customers. As a result, the merged entity would have an unfair competitive advantage over its competitors. See Nej CZ's submission of 30 October 2018, paragraphs 84-89 [ID 2400]. The Commission considers that the Transaction is unlikely to result in a significant impediment of effective competition, as a result of the combination of the Parties' data sets. First, it is unclear why the Parties' data sets would be unique, as each of the merged entity's main competitors, namely O2 and T-Mobile, have access to similar data—both in terms of volume and quality. This is because both O2 and T-Mobile have access to customer datasets for mobile services that are similar (if not larger) than Vodafone's, and similar to UPC's as regards fixed internet access services. Second, other providers of telecommunications services will have access to comparable types of data with regard to the merged entity's customers' habits via alternative sources (for example, social networks or independent research companies). Third, the Commission notes that (subject to compliance with the applicable data protection rules) the combination of the Parties' data sets could also have some pro-competitive effects, as it could be argued that - in the hypothetical scenario where the merged entity made use of those combined data - the merged entity could provide better services to its customers.

- (1591) The Commission considers that the Transaction will not lead to any anticompetitive effects in the three markets listed above, for the following reasons.
- (1592) As far as the market for the wholesale provision of call termination services on mobile networks is concerned, Vodafone has by definition a market share of 100%, while UPC has a market share of less than [20-30]% by subscribers and less than [5-10]% by revenue in the retail provision of fixed telephony services in Czechia. Similarly, each of Vodafone and UPC has by definition a market share of 100% in the market for the wholesale provision of call termination services on fixed networks, while (i) Vodafone has a market share of [20-30]% by subscribers and [20-30]% by revenue in the retail provision of mobile telecommunications services, and (ii) UPC has a market share of less than [20-30]% by subscribers and less than [5-10]% by revenue in the retail provision of fixed telephony services in Czechia
- (1593) Nonetheless, the Commission considers that the Transaction will not significantly impede effective competition as a result of foreclosure effects of competitors active in the retail provision of fixed telephony services or in the retail provision of mobile telecommunications services in Czechia. This is because the Czech Telecommunications Office (“ČTÚ”) found all providers of fixed and mobile telephony services to have significant market power with regard to call termination on their respective fixed and mobile networks and imposed regulatory interconnection remedies. Therefore, the Commission finds that the merged entity will not have the ability to foreclose competing providers of retail fixed telephony or mobile telecommunications services in Czechia, because of the abovementioned regulation.
- (1594) Finally, certain respondents to the market investigation claimed that, because of the acquisition of UPC’s fixed internet access activities, the merged entity would be less prone to offer wholesale access services to competing providers of fixed-mobile bundles relying on wholesale mobile access.¹⁰⁸⁶ However, because only Vodafone is active in the retail market for mobile telecommunications services, or in the possible market for fixed-mobile bundles in Czechia, this concern is not merger specific. In fact, the Transaction will not bring about any structural change in the vertical relationship between the upstream market for the wholesale supply of access and call origination on mobile networks and the downstream markets for (i) the retail supply of mobile telecommunications services or (ii) the possible retail supply of fixed-mobile bundles.

1.3. Other markets in which the Transaction may have a significant impact

- (1595) Because Vodafone is predominantly a provider of mobile telecommunications services and UPC mainly a providers of fixed internet and TV services, the Transaction could potentially have a significant impact in the following retail markets:
- (a) The possible market for 2P bundles comprising of TV and mobile telecommunications services;
 - (b) The possible market for 3P bundles comprising of TV, fixed internet access and mobile telecommunications services.

¹⁰⁸⁶ See Nej CZ’s submission of 30 October 2018, paragraphs 81-82 [ID 2400]; CETIN’s submission of 14 January 2019 [ID 4486]

(1596) Moreover, the Commission received a number of complaints regarding the possibility that, post-Transaction, the merged entity could leverage its position in the retail provision of fixed internet access services into the market for the retail provision of mobile telecommunications services. The Commission will address that complaint in the following sections.

2. CONGLOMERATE EFFECTS

2.1. Introduction

(1597) During its market investigation, the Commission received a number of complaints alleging the possibility that the merged entity could, post-Transaction, leverage its market power in (i) the retail provision of TV services and (ii) the retail provision of fixed internet access services, into the retail market for mobile telecommunications services.

(1598) In fact, the Transaction combines Vodafone, a telecommunications operator predominantly focussed on mobile telecommunications services, with UPC, whose focus is the provision of fixed internet access services and retail TV services.

(1599) According to the Commission's Guidelines on the assessment of Non-horizontal Merger Guidelines,¹⁰⁸⁷ conglomerate effects require (a) the ability to foreclose, (b) the incentives to foreclose and (c) the likelihood that a foreclosure strategy would have a significant detrimental effect on competition and harm consumers.

(1600) The Commission will discuss the possibility that the merged entity could leverage its position in (i) retail TV services and (ii) retail fixed internet access services into the market for mobile telecommunications services in the following two sections.

2.1.1. Retail fixed internet services

(1601) The Czech market for retail broadband is highly fragmented, where local players relying on their own networks compete with nation-wide players like O2 and UPC.

(1602) UPC CZ is the only major provider of fixed internet access services that predominantly relies on its own cable network. As explained above, UPC offers retail broadband using its HFC network that passes [DETAILS OF CUSTOMER NUMBERS] households (around [30-40]% of all households) in Czechia. UPC is currently the second-largest provider of fixed internet access services in Czechia, with a market share of [10-20]% by subscribers and [10-20]% by revenues for 2017.

(1603) Vodafone has a very small presence in fixed internet access services ([0-5]% by revenue and [0-5]% by subscriber). It largely relies on regulated wholesale access to CETIN's xDSL network, [DETAILS OF CAPABILITIES], and partly through its LTE mobile network.

(1604) In addition to O2, T-Mobile, and Digi, which largely rely on CETIN's xDSL network for the provision of fixed internet access services, a large number of local alternative operators are present in Czechia. Those operators predominantly use wireless technology (62% of the technology mix), including Wi-Fi, as well as FTTH/B technology (30% of the technology mix) for the provision of their internet access services.

(1605) Table 47 shows the market position of the main players active in Czechia for 2017.

¹⁰⁸⁷ Non-horizontal Merger Guidelines, paragraph 91 and following.

Table 47: Market shares for the retail provision of fixed internet access services in Czechia (2017)

Provider	Volume	Value
Vodafone	[0-5]%	[0-5]%
UPC	[10-20]%	[10-20]%
Combined	[10-20]%	[10-20]%
O2	[20-30]%	[20-30]%
T-Mobile	[5-10]%	[0-5]%
Other local and regional players, among which:	[50-60]%	[50-60]%
Starnet	[0-5]%	N/A
PODA	[0-5]%	N/A
RioMedia	[0-5]%	N/A

Source: Form CO

- (1606) Only a certain number of players currently operate NGA networks in Czechia. The Commission defines NGA networks as internet access networks capable of delivering a speed (usually, download speed) of at least 30 Mbit/s.¹⁰⁸⁸ HFC, FTTx and VDSL networks are classified as NGA networks. As described above, UPC is the largest cable network operator in Czechia, whose network passes [DETAILS OF CUSTOMER NUMBERS] households. UPC currently adopts DOCSIS 3.0 technology, and thus offers internet speeds up to 500 Mbit/s.
- (1607) A number of local and regional operators offer FTTx technology. According to data from ČTÚ for Q2 2016, alternative FTTx providers have a combined market share of [10-20]%, covering around 509,000 customers. FTTx, in particular FTTH, allows ultrafast speeds of more than 100 Mbit/s.
- (1608) CETIN offers NGA speeds via its VDSL network. CETIN is in the process of upgrading its copper network to VDSL technology. According to publicly available data, in 2018 CETIN has upgraded 67% of its network to VDSL (approximately, 2.5 million households)¹⁰⁸⁹; 29% of its network is capable of delivering speeds of up to 100 Mbit/s, and 36% of its network up to 50 Mbit/s.
- (1609) The Notifying Party submits data showing that CETIN's current VDSL network overlaps [DETAILS OF COMPETITOR ASSESSMENT] with UPC's network. Other FTTx operators partially overlap with UPC's network, whereas no alternative HFC operator overlaps with UPC's network.

2.1.2. Retail TV services

- (1610) The main TV distribution technologies in Czechia are satellite (approximately 1.3 million subscribers) and IPTV (approximately 800,000 subscribers), followed by cable (approximately 642,000 subscribers). Pay TV market penetration is currently around 50% in Czechia.
- (1611) UPC offers retail TV services through its cable network on a standalone basis and in combination with retail fixed telephony and retail internet access services. UPC is the second-largest player ([10-20]% by subscribers and [20-30]% by revenues). UPC also offers DTH TV services ([0-5]% by subscribers and [5-10]% by revenue), but the DTH business is not part of the proposed Transaction and will ultimately be retained by Liberty Global post-Transaction. Contrary to UPC, Vodafone is not currently active in the provision of TV services in Czechia.

¹⁰⁸⁸ European Commission's Digital Economy and Society Index Report 2018 – Connectivity Broadband market developments in the EU, page 2.

¹⁰⁸⁹ https://www.cetin.cz/tiskove-centrum/-/asset_publisher/7E0pI2f3p5ci/content/cetin-zrychluje-cesko [ID 6777].

- (1612) Skylink is the largest provider of Pay TV services in Czechia. It provides TV over satellite technology and OTT on a standalone basis.
- (1613) O2 provides TV services over IPTV. It is the third-largest provider of Pay TV services in Czechia.
- (1614) T-Mobile and Digi both offer retail TV services via satellite and IPTV. Additionally, a large number of local retail TV providers are active on the Czech market.
- (1615) Table 48 shows the market position of the main retail TV players active in Czechia for 2017.

Table 48: Market shares for the retail provision of TV services in Czechia (2017)

Provider	Volume	Value
Vodafone	0%	0%
UPC	[10-20]%	[20-30]%
Combined	[10-20]%	[20-30]%
Skylink	[30-40]%	[20-30]%
O2	[5-10]%	[10-20]%
Liberty Global (satellite)	[0-5]%	[5-10]%
Digi	[0-5]%	[0-5]%
T-Mobile	[0-5]%	[0-5]%
Other local and regional players, among which:	[20-30]%	[20-30]%
NejTV/RioMedia	[0-5]%	N/A
PODA	[0-5]%	N/A

Source: Form CO

Table 49: Market shares for the retail provision of TV services in Czechia – Cable TV only (2017)

Provider	Volume	Value
Vodafone	0%	0%
UPC	[80-90]%	[80-90]%
Combined	[80-90]%	[80-90]%
NejTV	[5-10]%	[5-10]%
Itself, s.r.o.	[0-5]%	[0-5]%
ELSAT	[0-5]%	[0-5]%
Other cable operators	[5-10]%	[5-10]%

Source: Form CO

Table 50: Market shares for the retail provision of TV services in Czechia – Active users (non-linear services) (2017)

Provider	Subscribers – 000s)	Share (volume)
UPC (OTT)	[DETAILS OF CUSTOMER NUMBERS]	[30-40]%
O2 (OTT)	[...]	[10-20]%
Nova Voyo (OTT)	[...]	[10-20]%
Netflix (OTT)	[...]	[5-10]%
SmartComp a.s. (OTT)	[...]	[5-10]%
HBO GO (OTT)	[...]	[0-5]%
Skylink (OTT)	[...]	[0-5]%
DIGI (OTT)	[...]	[0-5]%
Other IPTV operators	[...]	[0-5]%
Other local OTT apps	[DETAILS OF CUSTOMER NUMBERS]	[0-5]%
Total	268	100%

Source: Form CO

2.1.3. Retail mobile telecommunications services

- (1616) There are three MNOs in Czechia, O2, T-Mobile, and Vodafone. A total of 83 MVNOs are also active in Czechia as of 1 July 2018. Nordic Telecom is active as an MVNO, but also operates certain CDMA frequencies and following the acquisition of LTE spectrum, it is expected to enter the retail market as a full MNO in the coming years.
- (1617) Vodafone is the third-largest MNO in Czechia ([20-30]% by subscribers and [20-30]% by revenue), after T-Mobile and O2. UPC is not active in the retail mobile telecommunications market.
- (1618) Table 51 shows the market position of the main retail mobile telecommunications players active in Czechia for 2017.

Table 51: Market shares for the retail provision of mobile telecommunications services in Czechia (2017)¹⁰⁹⁰

Provider	Volume	Value
Vodafone	[20-30]%	[20-30]%
UPC	[0-5]%	[0-5]%
Combined	[20-30]%	[20-30]%
O2	[30-40]%	[30-40]%
T-Mobile	[30-40]%	[30-40]%
Others:	[5-10]%	[0-5]%

Source: Form CO

2.1.4. Retail multiple play services

- (1619) Multiple play services are bundles comprising of two or more telecommunications services. In Czechia, UPC offers dual play bundles of fixed internet access services and retail TV services. UPC's bundles offer internet speeds of 150 or 300 Mbit/s. UPC does not offer multiple play bundles including mobile telecommunications services.
- (1620) Contrary to UPC, Vodafone does not offer multiple play bundles comprising of internet and TV services in Czechia. Vodafone currently provides certain dual-play bundles including fixed internet access (through regulated access to CETIN's xDSL network) and mobile telecommunications services. Therefore, there is no horizontal overlap between UPC's and Vodafone's respective multiple play offers.
- (1621) Both O2 and T-Mobile offer multiple play offers including at least two of their mobile telecommunications services, fixed internet services (through regulated access to CETIN's xDSL network), fixed telephony, and retail Pay TV services. Digi also offers multiple play services relying on wholesale access for both its fixed and mobile services.
- (1622) Other small local and regional players are able to offer multiple play bundles, which include fixed telecommunications and Pay TV services provided through their own fixed network, and mobile telecommunications provided as MVNOs.

2.2. Conglomerate effects with regard to 2P bundles comprising of TV and mobile telecommunications services and 3P bundles comprising of TV, fixed internet access and mobile telecommunications services

- (1623) One respondent to the market investigation submitted that post-Transaction the merged entity could leverage its position in retail TV into the markets for mobile

¹⁰⁹⁰

Figures for MNOs include mobile services sold by branded resellers.

telecommunications services (where Vodafone is active).¹⁰⁹¹ The complainant submits that UPC would be dominant because of its market share of [30-40]%, its nation-wide coverage and its cable infrastructure.¹⁰⁹²

- (1624) In the following sections, the Commission will analyse the possibility that the merged entity leverage its position in the market for retail TV services (or retail 2P bundles including TV and internet services) into the market for mobile telecommunications services. Because Vodafone is not active in the provision of fixed internet access or TV services in Czechia, the Commission will not analyse the possibility that the merged entity could leverage its market position in retail TV services into fixed internet access services, as that would not be merger specific. Unlike section VIII.D.2.4 —where the alleged market power is in the retail fixed internet access services market, in this section the alleged market power is in the retail TV services market.

2.2.1. The Notifying Party's views

- (1625) The Notifying Party submits that the Transaction will not lead to any conglomerate effect. In particular, it submits that the merged entity would not have the ability to foreclose competitors, as the merged entity will not be the market leader in any of the relevant markets, and none of its services is a must-have. Moreover, it submits that any foreclosure strategy will not have any impact on rivals, which already today sell convergent offers.

2.2.2. The Commission's assessment

- (1626) The Commission considers that the Transaction will not significantly impede effective competition in the retail market for mobile telecommunications services as a result of conglomerate non-coordinated effects for the following reasons.

2.2.2.1. Ability to foreclose

- (1627) The Commission considers that, the merged entity will not have the ability to foreclose competing providers of mobile telecommunications services.
- (1628) Firstly, the Commission's Non-Horizontal Merger Guidelines recognise that bundling is more likely when the two products are sold to the same customers.¹⁰⁹³ Moreover, the Guidelines state that foreclosure is a potential concern when the products are complementary, which means that there is a large common pool of customers that purchase both products together.¹⁰⁹⁴
- (1629) The market investigation showed that Pay TV (with or without fixed internet access services) and mobile telecommunications services can be considered complementary products, and that there is a small common pool of customers that purchase both products together.
- (1630) The Commission's first phase investigation showed that there is a limited potential demand for bundles comprising of retail TV and mobile telecommunications services. A recent study submitted by the Notifying Party shows that the potential customer base for TV-mobile bundles is small. According to the Market Meter report dated October 2017, only 34% of the polled Czech households purchase retail TV services and mobile telecommunications services (not necessarily from the same

¹⁰⁹¹ See, for example, Nej CZ's submission of 30 October 2018, paragraphs 39-40 [ID 2400]

¹⁰⁹² See Nej CZ's submission of 30 October 2018, paragraph 40 and footnote 9 [ID 2400].

¹⁰⁹³ Non-Horizontal Merger Guidelines, paragraph 97.

¹⁰⁹⁴ Non-Horizontal Merger Guidelines, paragraph 100.

provider)¹⁰⁹⁵: 27% of the total are subscribers of mobile, TV, and Internet services, and an additional 7% are subscribers of mobile and TV services only.

- (1631) However, the market investigation showed that the possible 2P bundle comprising mobile telecommunications services and TV services has extremely low traction in Czechia. For example, a study by ČTÚ stated that only 247 customers bought such bundle in 2017.¹⁰⁹⁶ Similarly, the first phase investigation further showed that the most popular bundle in Czechia is the 2P bundle comprising fixed internet access services and retail TV services,¹⁰⁹⁷ and not bundles comprising of retail TV and mobile telecommunications services.
- (1632) As regards 3P bundles comprising of TV services, mobile telecommunications services, and fixed internet access services, the Commission also considers that this bundle is not the most popular currently in Czechia. The Notifying Party did not submit precise data about those types of bundle. In any case, data from the ČTÚ shows that only approximately 276 000 customers bought 3P bundles for 2017, which corresponds to only 8.5% of the total fixed internet access subscribers and approximately 10% of the total retail TV subscribers in Czechia. Moreover, that Commission notes that that figure likely overestimates the current take-up of 3P bundles comprising of TV services, mobile telecommunications services, and fixed internet access services, as the ČTÚ count includes all possible combinations of 3P bundles.
- (1633) Moreover, the Commission considers that the merged entity will not be able to leverage its position in retail TV services into any other market, because TV services are often perceived as an add-on to other telecommunications services, rather than the driver of competition.¹⁰⁹⁸ In this regard, one respondent to the first phase investigation confirmed that retail TV services are mainly considered as a complementary service of fixed internet access services in Czechia¹⁰⁹⁹: the respondent submitted that “the Czech customers do not tend to buy separate TV services in large extent and perceive TV services only as complementary service bundled usually with fixed Internet access services, with the latter being substantial for consumer behaviour and preferences. Therefore, marketing efforts of respective providers are focused on the fixed Internet services.”¹¹⁰⁰
- (1634) In addition to that, the Commission notes that a significant share of customers of mobile telecommunications services do not purchase TV or fixed internet access services, or do not purchase them as part of a bundle. Data submitted by the Notifying Party in its Response to the Article 6(1)(c) Decision show that around 2.3

¹⁰⁹⁵ G82 – “Market Meter”, page 4, submitted as Annex 6.B.VIII.2 of the Form CO.

¹⁰⁹⁶ CTUZPRÁVA O VÝVOJI TRHU ELEKTRONICKÝCH KOMUNIKACÍ 2012 – 2017 SE ZAMĚŘENÍM NA ROK 2017, Page 76, available at <https://www.ctu.cz/sites/default/files/obsah/stranky/8179/soubory/zovt-finalniverze-opendata.pdf> [ID 6825].

¹⁰⁹⁷ Replies to questionnaire Q1, question 34

¹⁰⁹⁸ In addition to the opinion of respondents to the market investigation, [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS]

¹⁰⁹⁹ As further explained in section VIII.D.1.1, the Commission considers that UPC does not have market power in the retail market for fixed internet access services either. Therefore, the Commission considers that the Transaction will not significantly impede effective competition in the retail market for mobile telecommunications services as a result of conglomerate non-coordinated effects, even as regards the possible retail market for 3P bundles comprising TV, fixed internet access and mobile telecommunications services.

¹¹⁰⁰ See reply of O2 Czech Republic a.s. to questionnaire Q1, question 61.1.

million customers live in mobile-only households in Czechia.¹¹⁰¹ Similarly, the Notifying Party submits that there are around 7 million more mobile subscriptions than fixed internet subscriptions, as many households have multiple mobile subscriptions (with separate contracts for the different individuals living in the household).¹¹⁰² Therefore, the Commission considers that standalone providers of mobile telecommunications services will have a sufficient pool of customers to address post-Transaction, making their foreclosure even more unlikely.

- (1635) Finally, competing providers of telecommunications services, such as O2 and T-Mobile, are already providers of TV and mobile telecommunications services, and are likely to react to the merged entity's foreclosure strategy by promoting competitive 2P or 3P bundles.
- (1636) Secondly, the Commission considers that UPC does not have market power in the retail market for TV services (as regards 2P bundles) or in the possible retail market for 2P bundles comprising of fixed internet access services and TV services (as regards 3P bundles). The Non-Horizontal Merger Guidelines state that “[i]n order to be able to foreclose competitors, the new entity must have a significant degree of market power [...] in one of the markets concerned.”¹¹⁰³
- (1637) As regards retail TV, UPC's market share in the overall market for TV services is only [10-20]% by subscribers and [20-30]% by revenue for 2017, with competing Skylink being the largest providers of retail TV in Czechia ([30-40]% by subscribers and [20-30]% by revenue). Other providers of TV services will also remain active in the market post-Transaction (for example, O2: [5-10]% by subscribers and [10-20]% by revenue; Liberty Global: [0-5]% by subscribers and [5-10]% by revenue).
- (1638) Despite UPC's high market shares in the hypothetical market comprising cable TV only (approximately [80-90]% by subscribers and [80-90]% by revenue), the results of the market investigation indicated that UPC's product offer is not unique. With regard to UPC's TV products, the majority of respondents to the first phase investigation stated that UPC's TV offer of channels and content is on par with those of its competitors active via other infrastructures.¹¹⁰⁴ Respondents further stated that UPC does not offer any exclusive content in Czechia.¹¹⁰⁵
- (1639) The Commission considers that UPC's position in cable TV will be constrained by other TV infrastructures, such as satellite or IPTV. In particular, as regards IPTV, approximately [DETAILS OF CAPABILITIES] of UPC's cable footprint is coextensive with the footprint of other fibre and cable providers, and almost [DETAILS OF CAPABILITIES] of UPC's cable footprint is coextensive with CETIN's xDSL network.
- (1640) As regards 2P bundles comprising of fixed internet access services and TV services (which could be leveraged into mobile telecommunications services in 3P bundles), the Commission considers that the merged entity will not have market power either. In this possible market, UPC has a market share of approximately [30-40]%¹¹⁰⁶, which is generally below the market share threshold indicative of dominance. Moreover, other competitors will remain active in the market, such as O2, T-Mobile,

¹¹⁰¹ Response to the Article 6(1)(c) Decision, paragraph 539(i).

¹¹⁰² Response to the Article 6(1)(c) Decision, paragraph 539(ii).

¹¹⁰³ Non-Horizontal Merger Guidelines, paragraph 99

¹¹⁰⁴ Replies to questionnaire Q1, question 61.

¹¹⁰⁵ Replies to questionnaire Q1, question 61.1.

¹¹⁰⁶ See Parties' reply to RFI 33, question 4.

and Digi. Finally, the majority of the respondents to the first phase investigation submitted that UPC's 2P offer is not particularly aggressive or innovative.¹¹⁰⁷ In particular, one respondent stated that "UPC has conservative marketing and no aggressive discounts."¹¹⁰⁸

- (1641) Therefore, the Commission considers that the merged entity will not have the ability to foreclose competing providers of mobile telecommunications services in Czechia.
- (1642) The Commission notes that the conditions laid out in the Non-Horizontal Merger Guidelines for the finding of conglomerate effects are cumulative. Therefore, the Commission finds that lack of ability to foreclose results in the absence of conglomerate effects. Nonetheless, even considering that the merged entity will have the ability to foreclose competitors, which is not the case, the Commission will explain in the following recitals why it considers that (i) the merged entity will not have the incentive to foreclose its competitors and (ii) there will be no or limited impact on prices and choice.

2.2.2.2. Incentive to foreclose

- (1643) The Commission considers that the merged entity will not have the incentive to foreclose competing providers of mobile telecommunications services by leveraging its market position in TV services or 2P bundles comprising of TV and fixed internet access services.
- (1644) This is because, even if theoretically the merged entity could force certain rival players out of the market through deep discounts, the merged entity will not be able to raise prices to recoup lost profits at a later point in time. This is because this strategy is unlikely to foreclose large MNOs such as T-Mobile and O2, which are established players and have large variable margins to counter the merged entity's discounts, and because any foreclosure of other mobile players active in the fixed-mobile bundle market only account for approximately [0-5]% of the total market. Moreover, any foreclosed player would be able to re-enter the market using its own assets or wholesale access to fixed or mobile networks once prices exceed a certain threshold, thus constraining the capacity of the merged entity to recoup past losses with future supracompetitive prices.
- (1645) Therefore, the Commission concludes that the merged entity will not have, post-Transaction, the incentive to foreclose competing providers of mobile telecommunications services.

2.2.2.3. Impact on prices and choice

- (1646) Finally, the Commission notes that any possible foreclosure strategy based on UPC's market position in TV services would have no impact on prices or choice. This is because the majority of respondents to the first phase investigation stated that in order to remain viable on the market for retail supply of mobile telecommunications services it is not indispensable for an operator to be able to provide also other telecommunications services.¹¹⁰⁹ Moreover, the Commission concluded above that a sufficient share of mobile telecommunications customers would remain contestable by standalone providers in the future.

¹¹⁰⁷ Replies to questionnaire Q1, question 36

¹¹⁰⁸ Reply of M7 Group S.A. to questionnaire Q1, question 36.1.

¹¹⁰⁹ Replies to questionnaire Q1, question 9.

(1647) Therefore, the Commission considers that post-Transaction standalone providers of mobile telecommunications services will be able to compete in the market even if they will not offer bundles comprising of TV services.

2.3. Possible conglomerate effects with regard to mobile telecommunications services

(1648) In this section, the Commission will analyse the possibility that the merged entity leverage its position in the market for mobile telecommunications services into the market for fixed internet access services. Unlike section VIII.D.2.2—where the alleged market power is in the retail TV services market, or section VIII.D.2.4 — where the alleged market power is in the retail fixed internet access services market, in this section the alleged market power is in the retail mobile telecommunications services market.

(1649) The Commission considers that the merged entity will not be able to leverage its position in the retail mobile telecommunications services market in order to foreclose competing providers of fixed-mobile bundles.

(1650) The Commission considers that the merged entity will not have the ability to do so, given that it lacks market power in the retail provision of mobile telecommunications services in Czechia. In this regard, Vodafone’s market share in the mobile market is well below any threshold that could be indicative of market power ([20-30]% by subscribers and [20-30]% by revenue for 2017), with other players that will remain active post-Transaction (T-Mobile: [30-40]% by subscribers and [30-40]% by revenue; O2: [30-40]% by subscribers and [30-40]% by revenue; others: [5-10]% by subscribers and [0-5]% by revenue). Moreover, the Commission notes that under the LTE licences obtained as part of the 2013 spectrum auction, MNOs are obliged to provide regulated access to their LTE networks at wholesale prices¹¹¹⁰.

(1651) Finally, the Commission considers that, even if effective, the foreclosure strategy will not have any significant effect on prices or competition on the market for fixed-mobile bundles (let alone on the market for retail mobile telecommunications services), because providers of fixed-mobile bundles relying on MVNO access represent only a small share of market (less than [5-10]%).¹¹¹¹

2.4. Conglomerate effects with regard to FMC bundles

(1652) Several respondents to the market investigation raised the possibility that, post-Transaction, the merged entity would be able to bundle UPC’s high-speed fixed

¹¹¹⁰ See, Europe’s Digital Progress Report (2017), Telecom chapter, Czech Republic, page 3 (available at ec.europa.eu/newsroom/document.cfm?doc_id=44441) [ID 6882]. However, the Commission notes that the wholesale market for access and call origination on mobile networks is not currently regulated in Czechia. In 2017, the ČTÚ launched a public consultation on the fulfilment of the three criteria test for a wholesale ‘mobile services market’ (Market 15 - Access and call origination on public mobile telephone networks - in the 2003 Recommendation) covering all network technologies (2G, 3G, 4G). In 2018, the ČTÚ completed its examination and is currently preparing its competition assessment – SMP analysis. While the mobile wholesale data market is not identified in the 2014 Commission Recommendation as a market susceptible to ex ante regulation, the ČTÚ identified the ‘mobile services market’ in Czechia as susceptible to ex ante regulation. The ČTÚ concluded that the three criteria test is passed and is finalising its assessment of the potential existence of joint significant market power (SMP) of mobile operators. The ČTÚ expects to send a pre-notification of its conclusions to the European Commission in the first half of 2019. See, European Commission Digital Economy and Society Index (DESI), Telecom Chapter, Czech Republic (2019) (available at https://ec.europa.eu/newsroom/dae/document.cfm?doc_id=59859) [ID 6881]

¹¹¹¹ See Parties’ reply to RFI 37, question 5.

Internet access services (with or without UPC's Pay TV services) with Vodafone's mobile telecommunications services.¹¹¹² This would be possible because UPC's cable network can deliver speeds that are allegedly higher than its competitors', thus conferring UPC dominance in the market.¹¹¹³ They further claimed that post-Transaction the merged entity would be the only market player that owns and operates both fixed and mobile networks. The respondents stressed the importance of UPC as a provider of high-speed fixed Internet access services, in particular in those areas of the Czech country where no other NGA network is present.

- (1653) More precisely, a respondent to the market investigation stated that post-Transaction the merged entity could price aggressively in order to drive competing players out of the market¹¹¹⁴. According to that respondent, competing providers of standalone mobile telecommunications services or of fixed-mobile bundles will not be able to replicate similar prices or speeds. As regards pricing, this is because standalone mobile operators will lack attractive fixed Internet access or TV offers, and because other providers of fixed-mobile bundles will not be able to offer comparable prices due to pricing constraints at wholesale level. In fact, those providers will not be able to cross-subsidise the cost of offering mobile services at very discounted prices through their fixed Internet offers, as the majority of competing providers of Internet access services rely on CETIN's regulated offers.
- (1654) As a result of this strategy, the merged entity would be able to foreclose competing providers of mobile-only services, which could not offer both services at an attractive price. The merged entity could, to a lesser degree, even foreclose competing providers of fixed-mobile bundles, because currently all competitors partially or entirely rely on wholesale access for the provision of their telecommunications services, and would not be able to offer the same speeds or prices as the merged entity due to technical and commercial limitations inherent to those wholesale offers.
- (1655) In the following sections, the Commission will analyse the possibility that the merged entity leverage its position in the market for fixed internet access services into the market for mobile telecommunications services. Because Vodafone is not active in the provision of fixed internet access or TV services in Czechia, the Commission will not analyse the possibility that the merged entity could leverage its market position in retail TV services into fixed internet access services, as that would not be merger specific. Unlike section VIII.D.2.2—where the alleged market power is in the retail TV services market, in this section the alleged market power is in the retail fixed internet access services market.

2.4.1. *The Notifying Party's views*

- (1656) The Notifying Party submits that the proposed Transaction will not give rise to any foreclosure effects, for the following reasons.
- (1657) Firstly, the Notifying Party submits that the merged entity will not have the ability to foreclose its rivals, because the merged entity is not the market leader in either fixed Internet access services or mobile telecommunications services. Additionally, the Notifying Party explains that such foreclosure strategy will not have any impact on rivals, because they already offer fixed-mobile bundles today, or could offer them in

¹¹¹² See Nej CZ's submission of 30 October 2018, paragraph 37 [ID 2400]; reply of O2 to questionnaire Q1, question 66; CETIN's submission of 14 January 2019 [ID 4486].

¹¹¹³ See Nej CZ's submission of 30 October 2018, paragraphs 25-27 [ID 2400]

¹¹¹⁴ Reply of Nej CZ to questionnaire Q1, questions 45.1 and 49.1

the future through wholesale access to CETIN's fixed or T-Mobile's and O2's mobile networks.

- (1658) Secondly, the Notifying Party submits that the merged entity will not have the incentive to engage in such foreclosure either. It explains that the majority of Czech customers do not purchase bundled offers (only [INFORMATION RELATING TO SALES AND PRICING ARRANGEMENTS]), and that the profits of such foreclosure strategy would not compensate for its likely loss.
- (1659) In the Response to the Article 6(1)(c) Decision, the Notifying Party submits further elements as to why the Transaction will not lead to any foreclosure effects with regard to FMC bundles.
- (1660) It further submits that the merged entity will not have any ability to foreclose competing providers of retail mobile telecommunications services or FMC bundles, because UPC's fixed network only covers [DETAILS OF CAPABILITIES] of the country, whereas its mobile competitors have nationwide coverage. Moreover, an economic analysis submitted by the Notifying Party suggests that competitors of the merged entity will be able to offer similar (or higher) discounts.
- (1661) As regards lack of incentive, the Notifying Party submits an economic analysis showing that the profit loss resulting from any foreclosure strategy would be extremely high, and unlikely to be recouped at a later stage, because of on-going competitive constraints from T-Mobile and O2 and various others.
- (1662) Finally, the Notifying Party submits that any bundling by the merged entity will not lead to reduced investments in fixed telecommunications network. On the contrary, the Notifying Party submits that data on past infrastructure investments in Czechia and elsewhere support the opposite view.

2.4.2. *The Commission's assessment*

- (1663) In its Article 6(1)(c) Decision, the Commission considered that, the Transaction could give rise to serious doubts as to its compatibility with the internal market, as a result of the possible conglomerate effects in the retail market for mobile telecommunications services, the retail market for internet access services and the retail market for TV services in Czechia.
- (1664) In light of the second phase investigation and the arguments put forward by the Notifying Party in its Response to the Article 6(1)(c) Decision, the Commission considers that the Transaction would not significantly impede effective competition in the retail market for fixed internet access services, the retail market for mobile telecommunications services and the retail market for TV services in Czechia as a result of conglomerate effects.

2.4.2.1. *Ability to foreclose*

- (1665) The Commission considers that the merged entity will not have the ability to foreclose competing providers of mobile telecommunications services by leveraging its market position in fixed internet access services.
- (1666) Firstly, the Commission's Non-Horizontal Merger Guidelines recognise that bundling is more likely when the two products are sold to the same customers.¹¹¹⁵ Moreover, the Guidelines state that foreclosure is a potential concern when the

¹¹¹⁵ Non-Horizontal Merger Guidelines, paragraph 97.

products are complementary, which means that there is a large common pool of customers that purchase both products together.¹¹¹⁶

- (1667) The market investigation showed that fixed internet access services (with or without Pay TV and fixed telephony) and mobile telecommunications services could be considered complementary products, and that there is a large common pool of customers that purchase both products together.
- (1668) The Commission's first phase investigation revealed that there is a potential demand for bundles comprising of fixed and mobile telecommunications services. A recent study submitted by the Notifying Party shows that the potential customer base for fixed-mobile bundles is large. According to the Market Meter report dated October 2017, a total of 60% of the polled Czech households purchase at least fixed internet and mobile telecommunications services (not necessarily from the same provider)¹¹¹⁷: 27% of the total are subscribers of mobile, TV, and Internet services, and an additional 33% are subscribers of mobile and Internet services only.
- (1669) The Notifying Party also submitted data showing that the large majority of fixed Internet access services customers of the three main Czech MNOs purchase mobile services from the same provider¹¹¹⁸. This concerns the quasi-totality of T-Mobile's ([80-90]%) and Vodafone's ([80-90]%) customers of fixed Internet access services, and a majority of O2's fixed Internet services customers ([50-60]%).
- (1670) [CONFIDENTIAL]
- (1671) However, the Commission notes, despite the large potential customer pool, consumers in Czechia prefer other types of bundles that do not include mobile telecommunications services. For example, the first phase investigation indicated that the most popular bundle in Czechia is the 2P bundle comprising fixed internet access services and retail TV services,¹¹¹⁹ with dual-play and triple-play bundles comprising of mobile telecommunications services (that is to say, internet + mobile or internet + TV + mobile) ranking far behind.¹¹²⁰ Certain respondents stated however that the popularity of fixed-mobile bundles could increase in the near future.¹¹²¹
- (1672) Moreover, the Commission notes that the reason why the quasi-totality of T-Mobile and Vodafone's customers of fixed internet access services purchase mobile services from the same provider is likely explained by the fact that the two firms have very limited fixed internet access services activities (Vodafone, [0-5]% by subscribers, or [0-5]% if including fixed-wireless internet access services; T-Mobile, [5-10]%, or [5-10]% if including fixed-wireless), which are mainly driven by cross-selling fixed internet access services to existing mobile customers. In this regard, data submitted by the Notifying Party shows that only a small proportion of the total customer base of Vodafone ([0-5]%) or T-Mobile ([0-5]%) purchased converged products.
- (1673) In addition to that—and as already discussed in section VIII.D.2.2, the Commission notes that a significant share of customers of mobile telecommunications services do not purchase fixed internet access services, or do not purchase them as part of a bundle.¹¹²² Therefore, the Commission considers that standalone providers of mobile

¹¹¹⁶ Non-Horizontal Merger Guidelines, paragraph 100.

¹¹¹⁷ See G82 – “Market Meter”, page 4, submitted as Annex 6.B.VIII.2 of the Form CO.

¹¹¹⁸ See Form CO, Annex 6.B.VIII.1, Table 1.1.

¹¹¹⁹ Replies to questionnaire Q1, question 34.

¹¹²⁰ Replies to questionnaire Q1, question 34.

¹¹²¹ Replies to questionnaire Q1, question 34.1.

¹¹²² Response to the Article 6(1)(c) Decision, paragraph 539(i) and (ii).

telecommunications services will have a sufficient pool of customers to address post-Transaction, making their foreclosure even more unlikely.

- (1674) Secondly, the Commission considers that UPC will not have market power in the provision of internet access services in Czechia. The Non-Horizontal Merger Guidelines state that “[i]n order to be able to foreclose competitors, the new entity must have a significant degree of market power [...] in one of the markets concerned.”¹¹²³
- (1675) The Commission stresses that, post-Transaction, the merged entity will have a combined market share below 20%, which is in itself not indicative of market power. Moreover, certain respondents’ claims that the speed or local focus of UPC’s network would be indicative of market power has proved unavailing. This is because respondents to the second phase investigation stated that there is no need to subdivide the market by speed, because even download speeds between 30 and 50 Mbit/s (such as those offered by firms active via wholesale access to CETIN’s xDSL network) satisfy basic consumer demand.¹¹²⁴ This is because the market investigation has confirmed that even the most data-intensive activities require speeds below 50 Mbit/s (such as gaming, 5-6 to 50 Mbit/s; Netflix streaming on 4K UHD, 25 Mbit/s).¹¹²⁵ Respondents also stated that the market is national, where overall prices do not vary across regions.¹¹²⁶
- (1676) Furthermore, the Commission considers that competing providers of fixed Internet access services could successfully curb any hypothetical market power of the merged entity in the market for the provision of fixed internet access services.
- (1677) In fact, competing providers of telecommunications services, such as O2 and T-Mobile, are already providers of FMC bundles. According to data submitted by the Notifying Party¹¹²⁷, O2 would have a market share of [60-70]% of FMC bundles in Czechia, and T-Mobile of [20-30]%, while Vodafone’s current share would be below [10-20]%. Therefore, the Commission considers that competing providers of FMC bundles are likely to react to the merged entity’s foreclosure strategy by promoting competitive products.
- (1678) Moreover, the Commission considers that, even if post-Transaction the merged entity were to be the only infrastructure-based telecommunications provider, other providers of fixed-mobile bundles (or standalone providers of telecommunications services) will be able to offer discounts that generally match the merged entity’s. This is because competing providers that rely on their own fixed or mobile networks (such as O2 and T-Mobile) are likely to have sufficient variable margins to compete on pricing with the merged entity; competitors that rely on wholesale access to both fixed and mobile networks will be equally capable to do so.¹¹²⁸ In any case, the Commission notes that providers of bundles that rely on wholesale access to the mobile network represent only a small share of the market (approximately [5-10]%)¹¹²⁹, so that their foreclosure would not entail significant effects on competition.

¹¹²³ Non-Horizontal Merger Guidelines, paragraph 99.

¹¹²⁴ Questionnaire Q13, question 9.

¹¹²⁵ Questionnaire Q13, question 20.

¹¹²⁶ Questionnaire Q13, questions 14-15.

¹¹²⁷ See Parties’ reply to RFI 37, question 5.

¹¹²⁸ See Annex D.I.1 of the Notifying Party’s Response to the Article 6(1)(c) Decision.

¹¹²⁹ See Parties’ reply to RFI 37, question 5.

- (1679) In addition to the above, the Commission finds that allegations that UPC is the only network capable of delivering NGA speeds is incorrect. The Commission notes that only NGA networks are able to provide Internet speeds above 30 Mbit/s, which—as explained above—are able to meet customer demand. However, not only UPC, which is capable of providing speeds in excess of 30 Mbit/s across its entire cable network, but also alternative FTTx providers and CETIN’s operate NGA networks. Alternative local and regional FTTx operators have a market share of [10-20]%, and their networks are partially coextensive with UPC’s cable network: for example, [DETAILS OF CAPABILITIES] of PODA’s and [DETAILS OF CAPABILITIES] of CentroNet’s NGA networks overlap with UPC’s network, and overall, the Notifying Party estimates that approximately [DETAILS OF CAPABILITIES] of its footprint overlaps with local fibre and cable players offering speeds of at least 100 Mbit/s.¹¹³⁰
- (1680) Similarly, CETIN’s NGA network, relying on VDSL technology, provides NGA speeds. CETIN’s network overlaps [DETAILS OF CAPABILITIES] with UPC’s cable network, although only 65% of households in CETIN’s network currently get speeds of maximum 50 Mbit/s, and only 29% of maximum 100 Mbit/s. The Notifying Party estimates that CETIN’s VDSL network capable of delivering 50 Mbit/s overlaps with [DETAILS OF CAPABILITIES] of UPC’s network, and [DETAILS OF CAPABILITIES] of CETIN’s network capable of delivering 100 Mbit/s overlaps with UPC’s network. [DETAILS OF CAPABILITIES] CETIN announced that by the end of 2019, 54% of households in its network would benefit from speeds of maximum 100 Mbit/s and 79% of speeds of maximum 50 Mbit/s.
- (1681) The Commission further stresses that it is unclear if and in what areas UPC’s network is the only NGA network available: respondents to the second phase investigation stated that they could not list any areas where UPC would operate the only network capable of speeds exceeding 30 Mbit/s.¹¹³¹
- (1682) [CONFIDENTIAL]¹¹³²
- (1683) Therefore, the Commission concludes that the merged entity will not have, post-Transaction, the ability to foreclose competing providers of mobile telecommunications services.
- (1684) The Commission notes that the conditions laid out in the Non-Horizontal Merger Guidelines for the finding of conglomerate effects are cumulative. Therefore, the Commission finds that lack of ability to foreclose results in the absence of conglomerate effects. Nonetheless, even considering that the merged entity will have the ability to foreclose competitors, which is not the case, the Commission will explain in the following recitals why it considers that (i) the merged entity will not have the incentive to foreclose its competitors and (ii) there will be no or limited impact on prices and choice.

2.4.2.2. Incentive to foreclose

- (1685) In any case, the Commission considers that the merged entity will not have the incentive to foreclose competing providers of mobile telecommunications services by leveraging its market position in fixed internet access services.

¹¹³⁰ Response to the Article 6(1)(c) Decision, paragraph 526.

¹¹³¹ Questionnaire Q13, question 17.

¹¹³² Questionnaire Q13, question 19

- (1686) Even if theoretically the merged entity could force certain rival players out of the market through deep discounts, the merged entity will not be able to raise prices to recoup lost profits at a later point in time. This is because this strategy is unlikely to foreclose large MNOs such as T-Mobile and O2, which are established players and have large variable margins to counter the merged entity's discounts, and because any foreclosure of other mobile players active in the fixed-mobile bundle market only account for approximately [0-5]% of the total market. Moreover, any foreclosed player would be able to re-enter the market using its own assets or wholesale access to fixed or mobile networks once prices exceed a certain threshold, thus constraining the capacity of the merged entity to recoup past losses with future supracompetitive prices.
- (1687) To support this claim, the Notifying Party submitted an economic analysis showing that the merged entity will need to offer discounts of more than [INFORMATION RELATING TO SALES AND PRICING ARRANGEMENTS] in order to hinder competition of an MNO that has access to fixed networks.¹¹³³ Moreover, the analysis shows that such a profit loss would represent a significant share of UPC's entire turnover in Czechia (around [10-20]%).
- (1688) Therefore, the Commission concludes that the merged entity would not have, post-Transaction, the incentive to foreclose competing providers of mobile telecommunications services.

2.4.2.3. Impact on prices and choice

- (1689) In any case, the Commission considers that in any case, any foreclosure strategy based on the merged entity's market position in fixed internet access services will not have any impact on prices or choice.
- (1690) This is because UPC's network passes only around a third of the total Czech households, so that the impact of the possible foreclosure strategy will be limited.
- (1691) Finally, a respondent to the market investigation submits that the likely result of the merged entity's aggressive pricing will be the loss of additional investment in NGA networks, and especially FTTH, by competing providers. The merged entity's aggressive prices, coupled with high speeds, will make it unprofitable for alternative providers to deploy parallel FTTH networks, as they will not be able to recoup their investments¹¹³⁴.
- (1692) The Commission considers that it is unlikely that the Transaction will lead to reduced incentives to compete. This is because, as explained above, the Transaction is unlikely to lead to any significant impediment of effective competition as a result of conglomerate effects in Czechia, due to the lack of ability and incentive to engage in such a strategy.
- (1693) Therefore, the Commission considers that any possible foreclosure strategy will not have any impact on prices or choice.

2.5. Conclusion

- (1694) In light of the above, the Commission considers that the Transaction will not significantly impede effective competition in the retail market for fixed internet

¹¹³³ See Annex D.I.1 of the Notifying Party's Response to the Article 6(1)(c) Decision.

¹¹³⁴ Reply of Nej CZ to questionnaire Q1, question No. 45.1.

access services, retail TV services, and retail mobile telecommunications services as a result of conglomerate effects.

E. HUNGARY

- (1695) The Parties' activities in Hungary are generally complementary, in terms of the prevailing type of activities: Vodafone is active through Vodafone Magyarország Mobil Távközlési Zártkörűen Működő Részvénytársaság, which primarily provides mobile services, but also has a small business connectivity offering. Vodafone is not active in retail fixed telephony, or retail TV services, [DETAILS OF COMMERCIAL STRATEGY].
- (1696) The Target Business is active through UPC Magyarország Kft, which offers retail fixed telephony, retail fixed internet access and retail TV services¹¹³⁵ through its cable network. UPC's HFC network passes approximately [DETAILS OF CUSTOMER NUMBERS] households, corresponding to nearly [40-50]% of the total households in Hungary. UPC also provides mobile telecommunications services as a small MVNO, as well as business connectivity services.
- (1697) Other significant players in Hungary are Magyar Telekom, Telenor, Digi and Invitech Solutions.
- (1698) Magyar Telekom is a former state-owned enterprise, which is now a publicly listed company. It is one of the three former incumbent fixed telecommunications operators, along with Invitel and UPC. It is active in retail mobile telecommunications, retail fixed telephony and retail fixed internet access services, with its fixed network (comprising fibre, copper and cable) passing more than 3.5 million households. Magyar Telekom also provides retail TV services via IPTV, cable and satellite. Additionally, it has a business connectivity offer and provides regulated wholesale access to its network in areas where it has significant market power according to the national regulator.
- (1699) Telenor is a pure mobile telecommunications operator. It currently is the second-largest player in the market for mobile telecommunications services.
- (1700) Digi is a provider of retail fixed telephony, retail fixed internet access and retail TV services. Its fixed network passes over one million households predominantly via fibre and LAN access. It also operates a satellite TV platform in Hungary and has recently started providing mobile telecommunications services. Digi recently acquired Invitel, another former incumbent fixed telecommunications operator, which provides retail fixed telephony, retail fixed internet access and retail TV services through its copper, cable and fibre networks. Invitel also provides regulated wholesale access to its network in areas where it has significant market power according to the national regulator.
- (1701) Invitech Solutions is the owner of one of the largest fixed backbone networks in Hungary and provides business connectivity services, mainly to business customers.

¹¹³⁵ Liberty Global also offers retail TV services to consumers via satellite. These satellite TV activities are not part of the Target Business, and have been sold by Liberty Global to a third party, M7.

1. AFFECTED MARKETS

1.1. Horizontally affected markets

- (1702) In Hungary, only one market is horizontally affected as a result of the Transaction: the market for retail supply of mobile telecommunications services.
- (1703) As regards the market for retail fixed internet access services, the Transaction will not bring about any overlap in the Parties' activities, as Vodafone currently only provides fixed-wireless Internet access solutions (which are not part of the product market).¹¹³⁶ Similarly, the Parties' activities in the retail provision of TV services do not overlap, as only UPC is active in this market (with a market share of [10-20]% by subscribers and [20-30]% by revenue). As Vodafone is not active either in fixed internet access services or in TV services, there is equally no overlap as regards the provision of 2P fixed bundles comprising of fixed internet access services and TV services (where only UPC is active, with an estimated market share of [20-30]% by subscribers and [30-40]% by revenue). There is equally no overlap in the provision of FMC bundles, where only UPC is active.
- (1704) [DETAILS OF COMMERCIAL STRATEGY] Because one competitor submitted that the Transaction would remove Vodafone as a potential entrant in the fixed internet access services market¹¹³⁷, the Commission will analyse the effects of the Transaction on potential competition between the Parties.
- (1705) The Commission notes that the Transaction is unlikely to give rise to a significant impediment of effective competition as a result of horizontal non-coordinated effects in the possible retail market for fixed internet access services, TV services, or a combination of the two, even considering a possible entry of Vodafone. [DETAILS OF COMMERCIAL STRATEGY].¹¹³⁸
- (1706) This is further supported by the first phase market investigation, where the majority of respondents stated that absent the Transaction Vodafone would have remained a relatively small player for fixed internet access services.¹¹³⁹ [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].¹¹⁴⁰ Finally, the Commission considers that other competitors will remain active in both the TV and the fixed internet access markets, such as Magyar Telekom, DIGI/Invitel, and Liberty Global.

¹¹³⁶ The Commission considers that, even including in the market definition the provision of fixed-wireless internet access products, the Transaction will not lead to any significant impediment to effective competition on the retail market for fixed internet access services in Hungary. First of all, the Transaction will not significantly change the structure of the market, as the increment brought about by Vodafone is negligible. In fact, the combined market shares of the Parties will be of [20-30]% by subscribers (UPC: [20-30]%, Vodafone: [0-5]%). In this regard, the merged entity would remain the third largest provider of fixed internet services by subscribers, after Magyar Telekom (37%) and Digi/Invitel (26%). It would also remain the second largest provider by revenue (approx. [20-30]%), after Magyar Telekom (43%) and before Digi/Invitel (23%). Furthermore, the market investigation suggested the Transaction will not have any negative impact on the market: most respondents to the market investigation do not consider UPC to be the closest competitor to Vodafone, they do not consider the Parties to exercise competitive pressure on each other, and they think that, absent the merger, Vodafone would have remained a small player in the market for the provision of fixed internet access services. See replies to questionnaire Q4, questions 20-20.3, 22-23, and 24-24.1.

¹¹³⁷ See Telenor's submission of 22 November 2018, section II [ID 2902].

¹¹³⁸ See, for example, [REFERENCE TO INTERNAL DOCUMENTS].

¹¹³⁹ Replies to questionnaire Q3, question 24.

¹¹⁴⁰ [REFERENCE TO CONTENTS OF INTERNAL DOCUMENTS].

- (1707) Regarding the market for retail business connectivity services, while the Parties have overlapping activities, these do not result in an affected market, since the combined market shares post-Transaction would remain well below 20% (Vodafone: [0-5]%; UPC: [10-20]% by revenue for 2017). One respondent submits that Vodafone entered the market in 2016, and would have developed into an aggressive competitor.¹¹⁴¹ Nonetheless, the Commission considers that the Transaction would not significantly impede effective competition due to horizontal non-coordinated effects as regards the retail market for business connectivity services in Hungary. In fact, the combined market share of the Parties is well below 20% under any possible market definition.¹¹⁴² Moreover, other competitors will remain active in the market, such as Magyar Telekom (58%) and Invitech (20%), as well as Antenna Hungaria and other small providers (together, [10-20]%). Finally, the same respondent submitted during the first phase investigation that [CONFIDENTIAL]¹¹⁴³ and that the Parties focus on different types of customers (“UPC focuses on large enterprise customers, while Vodafone more on SOHO/SME”¹¹⁴⁴). As regards the wholesale market for call termination services on mobile networks, the Transaction does not give rise to any overlaps, as by definition each of the Parties’ fixed networks is a separate, non-overlapping market. In any case, the Commission considers that the Transaction will not give rise to any significant impediment of effective competition as a result of horizontal non-coordinated effects in the wholesale market for call termination services on fixed networks in Hungary, because ex-ante regulation is in place in Hungary, which imposed regulatory access remedies.¹¹⁴⁵
- (1708) Other than on mobile telecommunications services, the respondents to the market investigation did not express any specific concerns regarding any of the markets where there is a horizontal overlap between the Parties.

(1709)

1.2. Vertically affected markets

- (1710) The Transaction gives rise to the following vertically affected markets in Hungary:¹¹⁴⁶
- (a) The upstream market for the wholesale provision of access and call origination services on mobile networks and the downstream market for retail provision of mobile telecommunications services;
 - (b) The upstream market for the wholesale provision of call termination services on mobile networks and the downstream market for the retail provision of mobile telecommunications services;
 - (c) The upstream market for the wholesale provision of call termination services on mobile networks and the downstream market for the retail provision of fixed telephony services;

¹¹⁴¹ See Telenor’s submission of 22 November 2018, section II [ID 2902].

¹¹⁴² See Parties’ reply to RFI 36, question 7.

¹¹⁴³ [CONFIDENTIAL].

¹¹⁴⁴ See Telenor’s reply to questionnaire Q3, question 57.1

¹¹⁴⁵ See Form CO, section 6.1368 and Annex 6.D.II.1.

¹¹⁴⁶ Affected markets are identified on the basis of the sales market shares by either value or volume submitted by the Notifying Party.

- (d) The upstream market for the wholesale provision of call termination services on fixed networks and the downstream market for the retail provision of mobile telecommunications services.
- (1711) The Commission considers that the Transaction will not lead to any anticompetitive effects in the downstream markets to the wholesale provision of call termination services on mobile networks and to the wholesale provision of call termination services on fixed networks, for the following reasons.
- (1712) As far as the market for the wholesale provision of call termination services on mobile networks is concerned, each of Vodafone and UPC has by definition a market share of 100%, while (i) Vodafone has a market share of [20-30]% by revenue and [20-30]% by subscribers, and (ii) UPC has a market share of [0-5]% by revenue and [0-5]% by subscribers in the retail provision of mobile telecommunications services in Hungary. As for the retail provision of fixed telephony services, Vodafone is not active and UPC has a market share of [10-20]% by revenue and [10-20]% by subscribers.
- (1713) Similarly, UPC has by definition a market share of 100% in the market for the wholesale provision of call termination services on fixed networks, while (i) Vodafone has a market share of [20-30]% by revenue and [20-30]% by subscribers, and (ii) UPC has a market share of [0-5]% by revenue and [0-5]% by subscribers in the retail provision of mobile telecommunications services in Hungary.
- (1714) Nonetheless, the Commission considers that the Transaction will not significantly impede effective competition as a result of foreclosure effects of competitors active in the retail provision of mobile telecommunications services and in the retail provision of fixed telephony services in Hungary. This is because the Hungarian National Media and Infocommunications Authority (“NMHH”) found all providers of fixed and mobile services to have significant market power with regard to call termination on their respective fixed and mobile networks and imposed ex ante regulatory price and access remedies.¹¹⁴⁷ Therefore, the Commission finds that the merged entity will not have the ability to foreclose competing providers of fixed telephony or mobile telecommunications services in Hungary, because of the abovementioned regulation.
- (1715) Finally, because of a complaint received from a respondent to the market investigation, the Commission will analyse the possible vertical relationship between the upstream market for the wholesale provision of leased lines and the downstream market for retail provision of mobile telecommunications services in Hungary.¹¹⁴⁸

1.3. Other markets in which the Transaction may have a significant impact

- (1716) Because Vodafone is predominantly a provider of mobile telecommunications services and UPC mainly a providers of fixed internet and TV services, the

¹¹⁴⁷ See Form CO, section 6.1368 and Annex 6.D.II.1.

¹¹⁴⁸ The Commission also notes that a vertical relationship exists between Vodafone’s activities in the wholesale supply of international roaming services in all countries where it is active as a mobile network operator, on the one hand, and UPC’s retail supply of mobile telecommunications services in Hungary, on the other hand. Considering the negligible increment on the latter market brought about by the Transaction and the European Regulation on roaming which bound the activities of operators in the wholesale supply of international roaming services in the EEA (Regulation (EU) No 531/2012 of the European Parliament and of the Council of 13 June 2012 on roaming on public mobile communications networks within the Union (OJ L 172, 30.6.2012, p. 10–35), the Commission considers that the Transaction will not have any impact in such markets.

Transaction could potentially have a significant impact in the following retail markets:

- (1) The possible market for 2P bundles comprising of TV and mobile telecommunications services;
- (2) The possible market for 3P bundles comprising of TV, fixed internet access and mobile telecommunications services.

(1717) Moreover, the Commission received a complaint regarding the possibility that, post-Transaction, the merged entity could leverage its position in the retail provision of fixed internet access services or retail provision of TV services into the market for the retail provision of mobile telecommunications services.¹¹⁴⁹ The Commission will address that complaint in section VIII.E.4.

2. HORIZONTAL NON-COORDINATED EFFECTS IN THE RETAIL MARKET FOR THE PROVISION OF MOBILE TELECOMMUNICATIONS SERVICES

(1718) One respondent to the market investigation submitted that the Transaction would lead to anticompetitive effects in the retail market for mobile telecommunications services in Hungary, as a result of the removal of UPC as a standalone MVNO.¹¹⁵⁰ The respondent claims that UPC was one of the most successful full MVNO in Hungary, capable to exert competitive pressure on other MNOs, given its important presence in fixed telecommunications markets and the ownership of its own core mobile network.¹¹⁵¹

2.1. The Notifying Party's view

(1719) The Notifying Party submits that the Transaction would not give rise to any competitive concerns in relation to the retail market for mobile telecommunications services in Hungary for the following reasons. Firstly, the increment brought about by the Transaction is minimal, given that UPC is an MVNO with a market share of [0-5]% by subscribers and [0-5]% by revenue. Second UPC does not have a meaningful standalone presence on this market given that it primarily targets customers within its fixed retail base. Thirdly, UPC's position is replicable by third parties through wholesale agreements with Vodafone or one of the other two incumbent MNOs. Finally, post-Transaction the merged entity will face strong competitive pressure from other players in the market.

2.2. The Commission's assessment

(1720) The Commission considers it unlikely that the Transaction will lead to horizontal non-coordinated effects in the retail market for mobile telecommunications services in Hungary.

(1721) Firstly, the Transaction will bring about only a negligible increment in Vodafone's market share. In this regard, the combined market share of the merged entity will be of [20-30]% by subscribers and [20-30]% by revenue, with UPC bringing about a very small increment of [0-5]% by subscribers and [0-5]% by revenue. The Commission considers that such combined market share is well below any threshold indicative of market power. Moreover, the merged entity would remain the third largest provider of mobile telecommunications services by subscribers, after Magyar

¹¹⁴⁹ Replies to questionnaire Q3, question 69.

¹¹⁵⁰ See Telenor's submission of 22 November 2018, section I [ID 2902].

¹¹⁵¹ [CONFIDENTIAL]

Telekom with a share of [40-50]% and Telenor with a share of [20-30]%. It would also remain the second largest provider by revenue, after Magyar Telekom with a market share of [40-50]% and Telenor with a market share of [20-30]%.¹¹⁵²

- (1722) Secondly, the market investigation also supports the lack of any anticompetitive effects on this market. While respondents to the first phase investigation returned mixed results as regards the aggressiveness of UPC¹¹⁵², the majority of respondents stated that UPC does not exercise any meaningful competitive pressure on Vodafone.¹¹⁵³ One respondents explained that only MNOs may exercise any meaningful competitive pressure on Vodafone, and that UPC, as an MVNOs, cannot really do so.¹¹⁵⁴ Moreover, the majority of respondents submitted that switching is easy, thanks in particular to the introduction of regulation of number portability¹¹⁵⁵, and half of the respondents stated that entry is equally easy, especially as an MVNO.¹¹⁵⁶
- (1723) Finally, the Commission notes that during its investigation of the Transaction, Digi/Invitel entered the retail market for mobile telecommunications services in Hungary as an MNO. The entry of Digi/Invitel will render even more unlikely any hypothetical non-coordinated effects as a result of the Transaction.

2.3. Conclusion

- (1724) In light of the above, the Commission considers that the Transaction would not significantly impede effective competition due to horizontal non-coordinated effects as regards the retail market for mobile telecommunications services in Hungary.

3. VERTICAL NON-COORDINATED EFFECTS

3.1. Foreclosure of providers of mobile telecommunications services due to the merged entity's position in the wholesale market for access and call origination services on mobile networks in Hungary

3.1.1. The Notifying Party's view

- (1725) The Notifying Party claims that the Transaction will not lead to either input or customer foreclosure.
- (1726) As regards input foreclosure, the Notifying Party submits that the merged entity will lack any ability to foreclose: it submits that there is no structural change upstream, as the Transaction does not bring about any consolidation in the upstream market for wholesale access and call origination services. Moreover, additional suppliers will remain active, as other MNOs would remain as alternatives. The Notifying Party submits that the merged entity will also lack the incentive to foreclose, since it currently provides MVNO access and the addition of UPC's negligible market share will not affect Vodafone's incentives in any meaningful way. Finally, the Notifying Party submits that, in any event, any hypothetical foreclosure would have no impact on effective competition, since MVNOs represent less than [0-5]% of the market for retail telecommunications services in Hungary.

¹¹⁵² Replies to questionnaire Q3, question 9.

¹¹⁵³ Replies to questionnaire Q3, questions 10-10.1.

¹¹⁵⁴ See Digi/Invitel's reply to questionnaire Q3, question 10.1.

¹¹⁵⁵ Replies to questionnaire Q3, questions 11 and 11.1.

¹¹⁵⁶ Replies to questionnaire Q3, question 12.

(1727) As for customer foreclosure, the Notifying Party submits that any strategy carried out by the merged entity would not have any impact on competitors: because UPC is already today one of Vodafone's customers, and could not shift away its demand from Vodafone's competitors.

3.1.2. *The Commission's assessment*

(1728) In the market for wholesale access and call origination services on mobile networks, Vodafone has a market share of 100% (as it currently is the only MNO hosting the totality of the Hungarian MVNOs), while UPC is not active in this market; in the retail provision of mobile telecommunications services, Vodafone has a market share of [20-30]% by revenue and [20-30]% by subscribers, and UPC has a market share of [0-5]% by revenue and [0-5]% by subscribers.

(1729) The Commission considers that the Transaction will not lead to input foreclosure for the following reasons. Firstly, despite its high market share in the upstream market, the Commission notes that Vodafone is unlikely to have market power. This is because other providers of wholesale access services will remain active in the market, including Digi/Invitel, which only recently entered the retail market and has an incentive to host MVNOs in order to fill capacity in its network. To further support this point, the Notifying Party submits that both Magyar Telekom and Telenor have recently participated in tenders to host MVNOs.¹¹⁵⁷

(1730) The Commission further considers that the merged entity will lack any incentive to foreclose downstream competitors, because any loss of revenue at upstream level will unlikely (or minimally) be compensated by revenue in the downstream market. This is because other MNOs are likely to host the foreclosed MVNOs, and because even if the foreclosure were effective, the merged entity would only gain negligible share, as MVNOs only represent [0-5]% of the market by subscribers and only [0-5]% by revenue.

(1731) Finally, the Commission considers that any possible input foreclosure would not have any significant effects on prices and competition, exactly because MNOs are vertically integrated and would not be shut out of the market, whereas MVNOs only represent a negligible share of the overall retail market.

(1732) As regards customer foreclosure, the Commission similarly considers that such foreclosure will be unlikely.

(1733) The Commission considers that the merged entity will lack any ability or incentive to foreclose competing providers of wholesale access services, because the Transaction does not bring about any meaningful change in the market. As correctly noted by the Notifying Party, already today UPC is hosted on Vodafone's network, so that UPC would not be able to shift its demand away from other MNOs. Furthermore, Vodafone is not a customer of wholesale access services, and UPC does not represent an important customer either, given that it is not currently hosted on other MNOs' networks. Finally, as all the other providers of wholesale access services own and operate mobile networks at retail level, any hypothetical foreclosure strategy would not have any effect, as competing MNOs will continue to be active via their own network at retail level.

(1734) Therefore, the Commission considers that the Transaction would not significantly impede effective competition with respect to the vertical relationships between the

¹¹⁵⁷ See Form CO, paragraph 6.1504.

wholesale market for access and call origination services on mobile networks and the retail market for mobile telecommunications services in Hungary as a result of vertical non-coordinated effects.

3.2. Foreclosure of competing providers of mobile telecommunications services due to the merged entity's position in the wholesale market for the supply of leased lines in Hungary

A respondent to the market investigation complained that, as a result of the Transaction, the merged entity could foreclose it from the market for the retail provision of mobile telecommunications services.¹¹⁵⁸ The respondent, one of the Hungarian MNOs, claims that UPC is a major provider of backhaul access for mobile telecommunications services and that, following the Transaction, UPC will have an incentive to refuse access to its backhaul services. This is because, in its view, providers of backhaul services that are also active at retail level have an incentive to refuse access to their backhaul services to competing MNOs. The Transaction would allegedly reduce UPC's incentive to offer such services, as it will integrate with Vodafone, an MNO active at retail level.

3.2.1. The Notifying Party's view

- (1735) The Notifying Party submits that the merged entity would have neither the ability nor the incentive to engage in input foreclosure. It will not be able to foreclose access to mobile backhaul, because the Transaction will not lead to any change in the upstream market position, where UPC in any event has only a negligible position of less than [0-5]% by both volume and revenue. Additionally, alternative suppliers would remain active in the market.
- (1736) As for customer foreclosure, the Notifying party submits that neither Party is an essential customer of mobile backhaul. In any event, post-Transaction the merged entity would continue to rely on wholesale access from third party suppliers, because UPC alone would not be able to meet the needs of the merged entity.
- (1737) Finally, the Notifying Party submits that there is a single market for the wholesale provision of leased lines, which would comprise the market for the provision of wholesale mobile backhaul. It submits that leased lines would be substitutable with mobile backhaul, because the technical characteristics and requirements are the same. In its view, this is further supported by the recent regulatory review by the NMHH, which defined a single market for leased lines, and did not distinguish between mobile backhaul lines and other lines. In any event, the Notifying Party submits that the Transaction would not lead to any customer or input foreclosure, irrespective of the market definition.

3.2.2. The Commission's assessment

- (1738) The Commission considers that the Transaction is unlikely to lead to the foreclosure of the respondent, because of vertical non-coordinated or coordinated effects, and irrespective of the market definition.
- (1739) In the upstream wholesale market for leased lines, UPC has an estimated market share of [0-5]% by volume and [0-5]% by revenue, while Vodafone is not active in this market. The Notifying Party further submits that its market share would be below 30%, even if considering any possible sub-segment.

¹¹⁵⁸

See Telenor's submission of 22 November 2018, section IV [ID 2902].

- (1740) In the possible market for mobile backhaul, the Notifying Party estimates that UPC's market share is less than [0-5]% by revenue and by volume.¹¹⁵⁹ Vodafone is not active in this possible market.
- (1741) In the downstream market for mobile telecommunications services, the Parties' combined market shares post-Transaction would be of [20-30]% by subscribers and [20-30]% by revenue.
- (1742) The Commission considers that the merged entity will not have the ability or the incentive to foreclose the respondent, or any other providers of mobile telecommunications services.
- (1743) As regards ability, the Commission considers that UPC has no market power either in the wholesale market for leased lines or in the possible wholesale market for mobile backhaul, because of its limited market share. The Commission notes that the Parties and the respondent provided different figures as regards the number of mobile backhaul lines provided by UPC to the respondent.¹¹⁶⁰ Because the Parties estimate the total market to be approximately 4 000 lines, that discrepancy would not result in any meaningful difference in UPC's market share.
- (1744) In this regard, the Commission notes that other providers of mobile backhaul will remain active in the market, such as Magyar Telekom and Invitech, which together account for more than 80% of the leased lines market in Hungary. Other providers of leased lines are Antenna Hungaria, MVMNet, Nokia Solutions and Network Trafficom, Tavger and Dravanet.
- (1745) As regards incentive, the Commission considers that the Transaction will not have any meaningful impact on UPC's willingness to provide mobile backhaul services. Firstly, the Commission notes that already today, [CONFIDENTIAL] Secondly, the Commission notes that Invitech is not active at retail level, so that its incentives to provide mobile backhaul will be unchanged. For those reasons, the merged entity will not have any incentive to refuse access to its mobile backhaul lines, as losses at wholesale level will not be mitigated by profits at retail level, because other providers of mobile backhaul will simply step in.
- (1746) The Commission also considers that any coordination between the providers of mobile backhaul lines in Hungary is unlikely, because of the lack of symmetry between the market position of the different providers (with Magyar Telekom and Invitech accounting for a large share of the market, and UPC only for a minimal part). Moreover, monitoring deviations would be challenging, as the market for mobile backhaul is characterised by large and infrequent tenders, which would reduce transparency and increase instability in the market. Finally, Invitech would have an incentive to challenge any possible coordination, because it would not be in a similar position as the other providers of mobile backhaul (given its lack of retail mobile activities).
- (1747) In light of the above, the Commission considers that the Transaction would not significantly impede effective competition with respect to the vertical relationships between the market for the wholesale access to leased lines (or the possible market for the provision of mobile backhaul lines) and the retail market for mobile

¹¹⁵⁹ Parties' reply to RFI 37, question 7.3.

¹¹⁶⁰ Compare Parties' reply to RFI 37, question 7.3, footnote 9 (25 lines), with Telenor's submission of 22 November 2018, section IV [ID 2902] [CONFIDENTIAL].

telecommunications services in Hungary as a result of vertical coordinated or non-coordinated effects.

4. CONGLOMERATE EFFECTS

4.1. Introduction

- (1748) In Hungary, the Parties' activities are highly complementary, in terms of the prevailing type of activities: Vodafone is mainly a provider of mobile telecommunications services, while UPC is mainly a fixed telecommunications provider. The combination of the two companies could allow the merged entity to provide fixed-mobile multi-play services or FMC bundles based on its own fixed and mobile infrastructure.
- (1749) As explained above, there is no horizontal overlap between the Parties in the market for multiple play services in Hungary, as Vodafone does not provide FMC bundles or fixed internet-TV bundles. Nonetheless, the Commission has examined whether the Transaction would give rise to conglomerate effects by foreclosing competitors in the retail market for mobile telecommunications services, the retail market for fixed telephony services, the retail market for internet access services and the retail market for TV services.
- (1750) Moreover, during the market investigation, the Commission received a complaint alleging the possibility that the merged entity could, post-Transaction, offer highly discounted FMC bundles so as to foreclose standalone providers of mobile telecommunications services.¹¹⁶¹
- (1751) According to the Commission's Guidelines on the assessment of Non-Horizontal Mergers¹¹⁶², conglomerate effects require (a) the ability to foreclose, (b) the incentives to foreclose and (c) the likelihood that a foreclosure strategy would have a significant detrimental effect on competition and harm consumers. The Non-Horizontal Guidelines stress that conglomerate mergers are generally procompetitive, with only a limited number leading to foreclosure effects.¹¹⁶³

4.2. The Notifying Party's view

- (1752) The Notifying Party submits that the Transaction would not result in anti-competitive foreclosure of standalone providers of telecommunications services.
- (1753) The Notifying Party points to the Non-Horizontal Merger Guidelines in which the Commission recognises that conglomerate effects do not normally lead to competition problems and can produce significant procompetitive benefits.
- (1754) Firstly, it submits that the merged entity would not have the ability to foreclose competitors, since post-Transaction, the merged entity would not be the market leader in any of the relevant markets. Additionally, none of the services offered by the merged entity would be unique and therefore a "must-have". Moreover, any foreclosure strategy would have no impact on rivals, because Magyar Telekom and Digi/Invitel are already active in this market as converged players and as providers of standalone services. The Notifying Party further submits that standalone rivals would also be in a position to offer their own fixed-mobile services through regulated wholesale offers.

¹¹⁶¹ Telenor's submission of 22 November 2018, section III [ID 2902]

¹¹⁶² Non-horizontal Merger Guidelines, paragraph 91 and following.

¹¹⁶³ Non-horizontal Merger Guidelines, paragraph 91.

- (1755) Secondly, the merged entity would not have the incentive to foreclose competitors, because it is unlikely that any additional sales of bundles would compensate for any loss of standalone sales. This is because the Parties estimate that only a quarter of Hungarian households purchase fixed and mobile services from the same operator, and that, even if such a strategy were to be put in place, there is no guarantee that customers would opt for bundles offered by the merged entity. Finally, the pool of convergent customers is limited, as the renewal dates for fixed and mobile contracts are unlikely to coincide.
- (1756) Finally, the Notifying Party submits that the Transaction will create a new convergent competitor that is more cost effective and can provide a superior offering than an MVNO with a fixed network (such as UPC currently). This would increase choice for consumers and as well as the competitive constraint on the incumbent Magyar Telekom and the new convergent entrant Digi/Invitel.

4.3. The Commission's assessment

- (1757) The Commission has assessed the likely impact of the Transaction on the merged entity's ability and incentive to engage in practices related to fixed-mobile multiple play bundles that would likely result in anti-competitive foreclosure of competitors in the retail markets for mobile telecommunications services, fixed telephony services, fixed internet access services and TV services.
- (1758) As the Commission's analysis focuses on the Transaction's merger-specific effects, the Commission will investigate only the possibility that the merged entity will leverage (i) its position in mobile telecommunications services into other fixed markets, or (ii) its position in fixed telecommunications markets (either fixed telephony, fixed voice, fixed internet access services, or a combination of the three) into mobile telecommunications services. Because only UPC is currently active in fixed telecommunications services, the Commission will not analyse possible conglomerate effects between the various fixed telecommunications markets.
- (1759) In light of the market investigation, the Commission considers that the merged entity will not have either the ability or the incentive to foreclose competing providers of fixed internet access services, mobile telecommunications services, fixed telephony services, or TV services in Hungary as a result of conglomerate effects.

4.3.1. Ability to foreclose

- (1760) The Commission considers that the merged entity will not have the ability to foreclose competing providers of telecommunications services by leveraging its position in any of the fixed or mobile telecommunications markets.
- (1761) Firstly, the Commission's Non-Horizontal Merger Guidelines recognise that bundling is more likely when the two products are sold to the same customers.¹¹⁶⁴ Moreover, the Guidelines state that foreclosure is a potential concern when the products are complementary, which means that there is a large common pool of customers that purchase both products together.¹¹⁶⁵
- (1762) The market investigation showed that fixed telecommunications (that is, Pay TV, fixed telephony, and/or fixed internet access services) and mobile telecommunications services could be considered complementary products, and that there is a large common pool of customers that purchase both products together.

¹¹⁶⁴ Non-Horizontal Merger Guidelines, paragraph 97.

¹¹⁶⁵ Non-Horizontal Merger Guidelines, paragraph 100.

- (1763) The Commission's first phase investigation revealed that there is a potential demand for bundles comprising of fixed and mobile telecommunications services. A recent study submitted by a respondent shows that the potential customer base for fixed-mobile bundles is large. According to a Bell Research report dated 2017, a total of 65% of the total Hungarian households purchase at least fixed internet and mobile telecommunications services (not necessarily from the same provider)¹¹⁶⁶: 40.6% of the total are subscribers of mobile, TV, Internet, and telephony services, 21.3% are subscribers of mobile, TV, and Internet services, 0.9% are subscribers of telephony, internet, and mobile services, and 2.6% are subscribers of mobile and internet services.
- (1764) However, the Commission notes that, despite the relatively large potential customer pool, only a small share of households in Hungary purchase FMC bundles. Data submitted by the Notifying Party shows that only 24% of the total Hungarian fixed internet access households purchase FMC bundles. Moreover, estimates of Vodafone and other respondents show that this figure could be even lower.¹¹⁶⁷
- (1765) In light of those figures, the Commission notes that a significant share of customers of mobile telecommunications services do not purchase fixed internet access services, or do not purchase them as part of a bundle. Because they will have a sufficient pool of non-converged customers to target post-Transaction, the Commission considers that the merged entity is unlikely to be able to foreclose standalone providers of mobile or fixed telecommunications services.
- (1766) Secondly, in order to have the ability to foreclose rivals, the merged entity must have a significant degree of market power in at least one of the markets concerned. That is, at least one of the Parties' products must be viewed by many customers as particularly important and there must be few alternatives for that product.¹¹⁶⁸
- (1767) The Commission considers that neither of the Parties have market power in any of the markets in which they are currently active. With respect to the market shares for retail mobile telecommunications services in Hungary, the merged entity's market share will be at [20-30]% by subscribers and [20-30]% by revenue for 2017. The merged entity will remain the second largest player in the market, with one operator being the market leader (Magyar Telekom at [40-50]% by subscribers and [40-50]% by revenue) and another operator having similar market shares as the merged entity (Telenor at [20-30]% by subscribers and [20-30]% by revenue). As laid out in section VIII.E.2, the Transaction is unlikely to strengthen the merged entity's market power in the retail market for mobile telecommunications services, because of the merged entity's limited market share, the ease of switching, and the presence of alternative providers.
- (1768) As regards the market for retail TV services, only UPC is active, with a market share of [10-20]% by subscribers and [20-30]% by revenue for 2017. If considering a possible market comprising cable TV only, UPC has a market share of [30-40]%. Among others, other players are Magyar Telekom, with a market share of [20-30]% by subscribers and [30-40]% by revenue, Digi/Invitel with [30-40]% by subscribers and [20-30]% by revenue and Liberty Global, with [5-10]% by subscribers and [10-20]% by revenue. If considering a possible market for cable TV only, the largest

¹¹⁶⁶ See Telenor's submission of 22 November 2018, section III [ID 2902].

¹¹⁶⁷ See Form CO, paragraph 6.1487, footnote 1099; see Telenor's submission of 22 November 2018, section III [ID 2902].

¹¹⁶⁸ Non-Horizontal Merger Guidelines, paragraph 99.

player is Digi/Invitel, with [40-50]% by subscribers. Other players are Magyar Telekom, with [5-10]% and smaller providers (together, [20-30]%). Because of the reasons already explained in section VIII.E.1.1, the Commission considers that the merged entity will not have market power in the retail market for TV services.

- (1769) Similarly, the Commission considers that the merged entity will not have market power in any of the remaining markets, as its market share will not exceed 30%. In the retail market for fixed Internet access services, post-Transaction the merged entity will have a market share of [20-30]% by subscribers and [20-30]% by revenue. Magyar Telekom has a market share of [30-40]% by subscribers and [40-50]% by revenue, while Digi/Invitel has a market share of [20-30]% by subscribers and [20-30]% by revenue in this market.
- (1770) Moreover, in the retail market for fixed telephony services, post-Transaction the merged entity will have a market share of [10-20]% by subscribers and [10-20]% by revenue (and in any case below 30% even considering possible separate markets for residential and non-residential customers¹¹⁶⁹) and will remain the third largest player in the market, after Magyar Telekom and Digi.
- (1771) Finally, in the possible retail market for 2P bundles comprising of fixed internet access services and retail TV services, where only UPC is active, the merged entity will have an estimated market share of [20-30]% by subscribers and [30-40]% by revenue for 2017, with Magyar Telekom being the largest provider (approximately [40-50]% by subscribers and [50-60]% by revenue) and Digi/Invitel closely following UPC ([20-30]% by subscribers and [10-20]% by revenue).
- (1772) Therefore, the Commission concludes that the merged entity will not have the ability to foreclose competing providers of telecommunications services by leveraging its position in any of the fixed or mobile telecommunications markets.
- (1773) The Commission notes that the conditions laid out in the Non-Horizontal Merger Guidelines for the finding of conglomerate effects are cumulative. Therefore, the Commission finds that lack of ability to foreclose results in the absence of conglomerate effects. Nonetheless, even considering that the merged entity will have the ability to foreclose competitors, which is not the case, the Commission will explain in the following recitals why it considers that (i) the merged entity will not have the incentive to foreclose its competitors and (ii) there will be no or limited impact on prices and choice.

4.3.2. *Incentive to foreclose*

- (1774) In any case, the Commission assessed whether the merged entity will have any incentive to foreclose competing providers of telecommunications services by leveraging its position in any of the fixed or mobile telecommunications markets.
- (1775) After the Transaction, the merged entity might consider introducing a price discriminatory strategy consisting of somewhat increasing the price of the standalone products and/or to lower the price of fixed-mobile or fixed bundles.¹¹⁷⁰ As a result of such a price discrimination strategy, customers that buy standalone products could be forced either to pay supracompetitive prices or to purchase the bundle. Any such

¹¹⁶⁹ See Parties' reply to RFI 35, question 6.

¹¹⁷⁰ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 625.

foreclosure strategy would only be profitable if the loss of standalone sales from the price increase was outweighed by increased sales of bundles.

- (1776) The Commission considers that any short-term losses on standalone prices will not be compensated by increased sales of bundles products. This is because, as explained above, a large majority of Hungarian customers (approximately 76% of the total) do not purchase fixed telecommunications services and mobile telecommunications services as part of a FMC bundle. This means that other standalone providers of fixed or mobile telecommunications services will be able to react to such foreclosure strategy with discounts.
- (1777) Similarly, the Commission considers it unlikely that the merged entity will be able to recoup losses through increased prices for bundles, as other providers of FMC bundles (such as Magyar Telekom) will remain active in the market.
- (1778) Moreover, the Commission notes that Digi/Invitel has recently launched retail mobile telecommunications services via its own mobile network. In this sense, Digi/Invitel will have an incentive to provide competitive pricing (either as a provider of standalone mobile services, or of FMC bundles) in order to attract customers and fill the spare capacity in its new mobile network.
- (1779) Therefore, the Commission concludes that the merged entity will not have any incentive to foreclose competing providers of telecommunications services by leveraging its position in any of the fixed or mobile telecommunications markets.

4.3.3. *Impact on prices and choice*

- (1780) In any case, the Commission has also assessed whether a foreclosure strategy based on the merged entity's market position in fixed or mobile telecommunications services would have any impact on prices and choice.
- (1781) Other providers of fixed telecommunications services (such as Magyar Telekom and Digi/Invitel) already today are able to offer FMC bundles based on their own infrastructure, and are unlikely to be foreclosed from either the standalone markets or the possible FMC market. Moreover, other providers of telecommunications services could enter the FMC market via wholesale access to the fixed¹¹⁷¹ or the mobile telecommunications networks. Additionally, providers of standalone fixed or mobile services will be able to compete in the market by addressing the large share of customers that do not purchase convergent offers. Finally, [CONFIDENTIAL]¹¹⁷².
- (1782) Therefore, the Commission considers that in any case, any foreclosure strategy based on the merged entity's market position in fixed or mobile telecommunications services would not have any impact on competition and consumers.

4.4. **Conclusion**

- (1783) In light of the above, the Commission concludes that the Transaction would not significantly impede effective competition in the retail market for fixed internet access services, the retail market for mobile telecommunications services, the retail market for fixed telephony services, and the retail market for TV services in Hungary as a result of conglomerate effects.

¹¹⁷¹ The Notifying Party estimates that regulatory obligations granting wholesale access to the three incumbents' fixed networks will continue to apply to approximately 80% of the Hungarian households. See Form CO, paragraph 6.1374.

¹¹⁷² Replies to questionnaire Q3, questions 68 and 68.1.

F. ROMANIA

- (1784) The Parties' activities in Romania are generally complementary, in terms of the prevailing type of activities: Vodafone is active through Vodafone Romania S.A., which primarily provides mobile services, but also has a small business connectivity offering. Vodafone is not active in retail fixed telephony, or retail TV services¹¹⁷³, although it has plans to enter the latter market.
- (1785) The Target Business is active through UPC Romania S.R.L., which offers retail fixed telephony, retail fixed internet access and retail TV services¹¹⁷⁴ through its cable network. It also has a small business connectivity offer. UPC's HFC network passes [DETAILS OF CUSTOMER NUMBERS] (of nearly 7.5 million) households and is mainly concentrated in urban centers. UPC is not active in mobile telecommunications services.
- (1786) Other significant players in Romania are RCS & RDS (Digi), Telekom Romania and Orange.
- (1787) RCS & RDS (Digi) is one of the biggest telecommunications companies in Central and Eastern Europe. In Romania, it is the market leader in both retail fixed internet access and retail TV services and the second largest provider of retail fixed telephony and business connectivity. Its fibre network passes 5 million households. It provides retail TV services via satellite and cable. Digi is also active in the retail mobile telecommunications market, where it is the fourth largest player.
- (1788) Telekom Romania is the former incumbent and market leader in retail fixed telephony and business connectivity, as well as the number two player in the market for retail fixed internet access and retail TV services. Its predominantly fibre network passes 5.8 million households. It provides retail TV services via satellite, cable and IPTV. Additionally, it is the third largest player in the market for mobile telecommunications services. Telekom Romania also provides third parties with commercial (non-regulated) wholesale access to its fibre network, cable TV network and mobile network.
- (1789) Orange is the largest player in the market for retail mobile telecommunications services. Until recently, it offered limited retail fixed telephony and retail fixed internet services through its mobile network. In December 2015, it signed a wholesale access agreement with Telekom Romania for fixed access to its fibre network in urban areas (2.6 million households passed). Orange also offers retail TV services through its own satellite service and via cable based on its wholesale agreement with Telekom Romania.

1. AFFECTED MARKETS

1.1. Horizontally affected markets

- (1790) In Romania, there are no horizontally affected markets. In all of the plausible relevant markets where there is a horizontal overlap between the Parties' activities, namely the market for retail fixed internet access, the market for retail TV services, the market for retail business connectivity, the wholesale market for supply and

¹¹⁷³ Vodafone currently only offers an OTT service called Vodafone TV as an app for use on mobile devices.

¹¹⁷⁴ Liberty Global also offers retail TV services to consumers via satellite. These satellite TV activities are not part of the Target Business, and have been sold by Liberty Global to a third party, M7.

acquisition of TV channels as well as the wholesale market for licensing and acquisition of TV rights, their combined market share post-Transaction will not exceed 20%.¹¹⁷⁵ Moreover, the respondents to the market investigation did not express any specific concerns regarding any of the markets where there is a horizontal overlap between the parties.¹¹⁷⁶

- (1791) As regards the market for retail supply of multiple play services, there is no overlap between the parties in either fixed-mobile or fixed-TV multiple play offers, since UPC is not active in the market for retail supply of mobile telecommunications services and Vodafone is not active in the market for retail fixed telephony services. As for the market for retail TV services, Vodafone offers an OTT service that is only available as an app for use on mobile devices.
- (1792) Moreover, the Commission has also considered the likelihood of Vodafone, absent the Transaction, becoming a significant player in the market for retail fixed internet access and the effect the Transaction might have on this potential competition between the Parties. In this respect, the Commission noted that UPC currently has a market share of [10-20]% by both subscribers and revenue. [DETAILS OF COMMERCIAL STRATEGY]. However, Vodafone would face strong competition from a number of infrastructure-based operators like Telekom Romania, Digi and UPC as well as other access-seekers like Orange. Moreover, the Parties would not be close competitors, given that UPC operates based on its own infrastructure while Vodafone is an access-seeker that would rely on Telekom Romania's network. Finally, none of the respondents to the market test raised any concerns regarding the lack of potential competition between the Parties in this market.
- (1793) The Commission has also considered the likelihood of Vodafone, absent the Transaction, becoming a significant player in the market for retail TV services and the effect the Transaction might have on this potential competition between the Parties. In this respect, the Commission noted that UPC has a market share of [10-20]% by subscribers and [10-20]% by revenue. Vodafone is in the process of developing its own retail TV offering based on the wholesale access agreement with Telekom Romania, [DETAILS OF COMMERCIAL STRATEGY]. However, large competitors like Digi and Telekom Romania would remain on the market. Moreover, Vodafone and UPC would not become close competitors, [DETAILS OF COMMERCIAL STRATEGY], while UPC does not have any own mobile activities. Finally, none of the respondents to the market test raised any concerns regarding the lack of potential competition between the Parties in this market.

1.2. Vertically affected markets

- (1794) The Transaction gives rise to vertically affected markets in relation to the links between the following markets:¹¹⁷⁷
- (a) The upstream wholesale market for call termination on mobile networks and the downstream market for retail fixed telephony services;

¹¹⁷⁵ This is the case also in relation to the supply of fixed internet access services, should Vodafone's fixed internet access services based on its mobile network be included in the relevant market.

¹¹⁷⁶ Replies to questionnaire Q2, questions 8, 8.1, 14, 14.1; replies to questionnaire Q4, questions 10, 10.1, 26, 26.1, 49, 49.1, 58, 58.1, 64, 64.1. One respondent stated that the merger might have a negative impact on its business as non-fixed operator and provider of satellite TV – these concerns will be addressed in Section 3 of the Competitive Assessment.

¹¹⁷⁷ Affected markets are identified on the basis of the sales market shares by either value or volume submitted by the Notifying Party.

- (b) The upstream wholesale market for call termination on fixed networks and the downstream market for the retail supply of mobile telecommunications services;
 - (c) The upstream wholesale market for call termination on fixed networks and the downstream market for the retail supply of fixed telephony services;
 - (d) The upstream wholesale market for leased lines and the downstream market for retail supply of mobile telecommunications services;
 - (e) The upstream wholesale market for leased lines and the downstream market for retail business connectivity.
- (1795) The Commission considers that the Transaction will not lead to any anticompetitive effects in the downstream markets to the wholesale provision of call termination services on mobile networks and to the wholesale provision of call termination services on fixed networks, for the following reasons.
- (1796) Regarding the upstream wholesale market for call termination on mobile networks, Vodafone has a market share of 100%, while UPC is not active on this market. On the downstream market for retail fixed telephony services, Vodafone is not active and UPC has a market share of [10-20]% by revenue or [10-20]% by subscribers. As for the upstream wholesale market for call termination on fixed networks, each of the Parties has a market share of 100% on its own network.¹¹⁷⁸ On the downstream market for retail supply of mobile telecommunications services, Vodafone has a market share of [30-40]% by revenue or [30-40]% by subscribers, while UPC is not active. In addition, on the downstream market for retail fixed telephony services, the Parties have the market shares stated above.
- (1797) Consequently, both upstream wholesale markets and the respective downstream markets are technically vertically affected. However, the Commission notes that both markets are regulated ex-ante by the National Management and Regulatory Authority for Communications in Romania (“ANCOM”).¹¹⁷⁹ In particular, the regulatory obligations include access to specific network facilities, transparency, non-discrimination and price control. Therefore, the Commission considers that the Transaction would not significantly impede effective competition as a result of foreclosure effects of competitors active in the retail supply of fixed telephony services and in the retail supply of mobile telecommunications services the respective downstream markets as a result of vertical non-coordinated effects.

1.3. Other markets in which the Transaction may have a significant impact

- (1798) Because Vodafone is predominantly a provider of mobile telecommunications services and UPC mainly provides fixed internet access and TV services, the Transaction could potentially have a significant impact in the following retail markets:
- (1) The possible market for 2P bundles comprising of TV and mobile telecommunications services;
 - (2) The possible market for 3P bundles comprising of TV, fixed internet access and mobile telecommunications services.

¹¹⁷⁸ Vodafone’s market share is limited to calls to its business customers.

¹¹⁷⁹ Commission Decision of 10 November 2017 regarding the cases RO/2017/2017 and RO/2017/2018; Romanian Government Emergency Ordinance no. 111/2011 approved, with amendments, by Law no. 140/2012 (as subsequently amended and supplemented).

2. VERTICAL NON-COORDINATED EFFECTS

2.1. Foreclosure of wholesale access to leased lines of providers of mobile telecommunications services in Romania

2.1.1. The Notifying Party's view

(1799) The Notifying Party concedes that there is a vertically affected market in respect to the downstream retail mobile telecommunications market, but not with respect to the downstream market for business connectivity services. It claims that the Transaction will not lead to input foreclosure. The merged entity would not have the ability to foreclose access to leased lines, because the Transaction will not lead to any change in the upstream market position, alternative suppliers will remain and the merged entity would have no incentive to engage in such a foreclosure strategy because it would lose upstream revenues with no upside in either downstream market. Additionally, the Notifying Party claims that the Transaction will not lead to customer foreclosure, because neither Party is an essential customer of leased lines and because the merged entity would not be able to rely on self-supply post-Transaction.

2.1.2. The Commission's assessment

(1800) In the upstream wholesale market for leased lines, UPC has an estimated market share of [20-30]%, while Vodafone is not active in this market. In the downstream market for retail business connectivity, the Parties' combined market shares post-Transaction would be [10-20]%. Given that the market shares in each of these markets lie below 30%, the Transaction will not lead to any change in the upstream market position and alternative suppliers like Digi and Telekom Romania will remain, the merged entity is unlikely to have the ability to engage in either input or customer foreclosure in these markets.

(1801) As regards the upstream wholesale market for leased lines and the downstream retail market for mobile telecommunications services, the Parties' combined market shares post-Transaction on the upstream market would remain below 30%, while Vodafone has a market share of [30-40]% by revenue or [30-40]% by subscribers on the downstream market. However, the Commission considers that, post-Transaction, the merged entity will have neither the ability nor the incentive to engage in customer foreclosure. Vodafone is not an essential customer of leased lines and the merged entity's rivals in the upstream market would continue to be able to offer their services to other downstream operators including Orange, Telekom Romania and Digi. Moreover, any customer foreclosure strategy would have no effects on competition and thus on consumers, since the merged entity's downstream competitors could easily switch to another provider of wholesale leased lines, should the merged entity try to foreclose them.

(1802) Therefore, the Commission considers that the Transaction would not significantly impede effective competition with respect to the vertical relationships between the market for wholesale leased lines and the retail markets for mobile telecommunications services and business connectivity services in Romania as a result of vertical non-coordinated effects.

3. CONGLOMERATE EFFECTS

3.1. Introduction

(1803) In Romania, Vodafone has a relevant presence in the mobile telecommunications market as MNO, while the addition of the UPC cable network would allow the

merged entity to provide fixed-mobile multi-play services based on its own infrastructure.

- (1804) Considering that, as explained above, there is no horizontal overlap on the market for multiple play services in Romania, the Commission has also examined whether the Transaction would give rise to conglomerate effects by foreclosing competitors in the retail market for mobile telecommunications services, the retail market for fixed telephony services, the retail market for internet access services and the retail market for TV services.
- (1805) According to the Commission's Guidelines on the assessment of Non-Horizontal Mergers¹¹⁸⁰, conglomerate effects require (a) the ability to foreclose, (b) the incentives to foreclose and (c) the likelihood that a foreclosure strategy would have a significant detrimental effect on competition and harm consumers. In order to be taken into account, any conglomerate effect must be merger specific. In other words, the conglomerate effect must result from Vodafone's acquisition of UPC.

3.2. The Notifying Party's view

- (1806) The Notifying Party submits that the Transaction would not result in anti-competitive foreclosure of standalone service providers.
- (1807) The Notifying Party points to the Non-Horizontal Merger Guidelines in which the Commission recognises that conglomerate effects do not normally lead to competition problems and can produce significant procompetitive benefits.
- (1808) In any event, the merged entity would have no significant market power in any fixed or mobile markets and none of the Parties' products is particularly important or unique. Post-Transaction, the merged entity's share on a national basis will be below 30% in the retail fixed broadband and (access to) retail TV markets, and only marginally above [30-40]% in the retail mobile market, but not at levels that would give rise to market power. Moreover, in each of these markets the merged entity will continue to face competition from several operators, as Digi, Telekom Romania and Orange in both the fixed and mobile markets.
- (1809) The Notifying Party submits that a foreclosure strategy would have no impact on rivals, because all major suppliers of mobile services and broadband services in Romania are already capable of supplying converged offers (and already do so), all of them (including the merged entity) also offer their services on a standalone basis and standalone rivals would also be in a position to offer their own fixed-mobile services.
- (1810) The merged entity would therefore not be able to profitably raise prices on any of these standalone markets in order to leverage its market power from either the standalone fixed or mobile markets into the fixed-mobile segment.
- (1811) Additionally, the merged entity would not have the incentive to foreclose competitors, because it is unlikely that any additional sales of bundles would compensate for any loss of standalone sales. Around two-thirds of Romanian customers currently buy telecommunications services on a standalone basis (or as fixed only bundles), there is no guarantee that they would opt for bundles offered by the merged entity and the renewal dates for fixed and mobile contracts are unlikely to coincide.

¹¹⁸⁰

Non-horizontal Merger Guidelines, paragraph 91 and following.

- (1812) Finally, the Notifying Party submits that, since the parties do not currently generate any revenues through fixed-mobile multi-play offers in Romania, the Transaction will create a new competitor in the converged space increasing choice for consumers and increasing the competitive constraint on the market leader as well as other players offering converged services.

3.3. The Commission's assessment

- (1813) The Commission has assessed the likely impact of the Transaction on the merged entity's ability and incentive to engage in practices related to multiple play bundles which would likely result in anti-competitive foreclosure of competitors in the retail market for mobile telecommunications services, in the retail market for fixed telephony services, in the retail market for internet access services and the retail market for TV services.
- (1814) The majority of respondents to the market investigation did not express any concerns regarding the possibility for the merged entity to foreclose standalone operators by offering multiple play bundles. They assessed the impact of the Transaction as generating more competition, without driving other providers of standalone services out of the market.¹¹⁸¹ One respondent stressed the lack of regulated access to fixed networks and that this could marginalise mobile-only players and have a negative impact on competition. However, the Commission notes that access to fixed networks remains possible through wholesale agreements, as the ones currently used by Vodafone and Orange and that in any event, the Transaction is unlikely to drive providers of standalone services out of the market, since there is still a high demand for this type of services in Romania.

3.3.1. Ability to foreclose

- (1815) In order to have the ability to foreclose rivals, the merged entity must have a significant degree of market power in at least one of the markets concerned. That is, at least one of the Parties' products must be viewed by many customers as particularly important and there must be few alternatives for that product.¹¹⁸²
- (1816) With respect to the market shares for retail mobile telecommunications services in Romania, the merged entity's market share will be at [30-40]% by subscribers and [30-40]% by revenue. However, the merged entity will remain the second largest player in the market, with another operator having a similar market position (Orange at [30-40]% by subscribers) and two other operators with significant market shares (Telekom Romania at [10-20]% and Digi at [10-20]% by subscribers). There will also be no increment brought about by the Transaction, since UPC is not active in this market. The Commission is therefore of the view that based on its position in the market for retail mobile telecommunications services in Romania, it is unlikely that after the Transaction the merged entity will have the ability to leverage its position in this market into the retail market for fixed telephony services, the retail market for internet access services and/or the market for retail TV.
- (1817) Similarly, the merged entity's market shares will not exceed 30% in any other retail market. In the retail fixed Internet access market, where post-Transaction Vodafone would have a market share of [10-20]% by subscribers and [10-20]% by revenue. Digi has a market share of [50-60]% and Telekom Romania a market share of [20-

¹¹⁸¹ Replies to questionnaire Q4, questions 49 and 49.1.

¹¹⁸² Non-Horizontal Merger Guidelines, paragraph 99.

30]% by subscribers in this market. Therefore, any relevant market power of the merged entity seems excluded.

- (1818) With respect to the market for retail supply of TV services, the merged entity would have an estimated market share of [10-20]%, while Digi has a market share of [40-50]% and Telekom Romania a market share of [20-30]% by subscribers. Therefore, any relevant market power of the merged entity seems excluded.
- (1819) Finally, in the retail market for fixed telephony services, where post-Transaction Vodafone will have a market share of [10-20]% by subscribers and [10-20]% by revenue and it will take over UPC's position as third largest player in the market, after Telekom Romania and Digi. Therefore, any relevant market power of the merged entity seems excluded.

3.3.2. *Incentive to foreclose*

- (1820) The Commission has also assessed whether the merged entity will have an incentive to engage in bundling of retail supply of mobile telecommunications services, retail supply of voice services, retail supply of fixed internet services and retail supply of TV services, to foreclose rivals from effectively competing from customers who purchase more services.
- (1821) After the Transaction, the merged entity might consider introducing a price discriminatory strategy consisting of somewhat increasing the price of the standalone products and/or to lower the price of fixed-mobile or fixed bundles.¹¹⁸³ As a result of such a price discrimination strategy, customers who buy single products separately could incur an increase in their total cost of ownership while customers who opt into the bundle could be better-off. Any such foreclosure strategy would only be profitable if the loss of standalone sales from the price increase is outweighed by increased sales of bundles.
- (1822) In this respect, the Commission considers that the merged entity would not have any incentive to adopt a similar strategy with respect to any of the markets, since it not only has competitors with similar or superior market shares in all of the markets, but also around two-thirds of Romanian customers currently buy telecommunications services on a standalone basis. A price increase of standalone products would cause the merged entity's customers to opt for alternative suppliers.
- (1823) As regards the sale of bundles at a discount, the Commission considers this to be in the interest of consumers and unlikely to lead to the marginalisation of standalone-only players who will continue to compete to sell standalone services to customers who purchase separately telecommunications services (as well as to customers who purchase exclusively mobile services). In this respect, as stated, the majority of consumers in Romania still subscribes separately to fixed and mobile products.

3.3.3. *Impact on prices and choice*

- (1824) The Commission has also assessed the effects of a possible foreclosure strategy on competition, and thus on consumers.
- (1825) Given that the merged entity would have neither the ability nor the incentive to foreclose customers and that bundled offers are not very wide spread in Romania, the Transaction might have a positive effect on competition, accelerating the trend

¹¹⁸³ Commission decision of 3 August 2016 in case M.7978 – *Vodafone/Liberty Global/Dutch JV*, paragraph 625.

towards fixed-mobile convergence and in general towards the emergence of a market of integrated communications services. However, the Commission considers that this does not in itself undermine the ability of competitors offering standalone services (in particular mobile services) to effectively compete for customers. In addition the Commission considers that the Transaction generates a fully integrated player owning both a fixed and a mobile network at national level. As a result, the Commission considers that the Transaction has the potential to stimulate the Notifying Party's ability to compete in fixed-mobile bundles with the market leader as well as other players offering converged services.

3.4. Conclusion

- (1826) Based on the above considerations, the Commission concludes that the Transaction would not significantly impede effective competition due to conglomerate effects in Romania.

G. INTERNATIONAL MARKETS

- (1827) In addition to the activities carried out within each Member States, Vodafone is also active in two relevant markets that are broader than national in scope, namely (i) the market for wholesale international carrier services and (ii) the market for wholesale internet connectivity. The Target Business is not active in either of these markets and therefore there is not any horizontal overlap. However, some vertical relationships could arise between Vodafone presence in these upstream markets and the Parties' downstream activities in the telecommunications and TV markets in each Member States.

4. WHOLESALE INTERNATIONAL CARRIER SERVICES

- (1828) Vodafone is active in the supply of wholesale international carrier services through its Vodafone Carrier Services business. The Target Business is not active in this market. A series of vertical relationships arises between Vodafone's presence in the upstream wholesale carrier services market and the Parties' downstream retail fixed, mobile and business connectivity activities in the Czech Republic, Germany, Hungary and Romania. To the extent that the Target Business' market share or the combined market share is 30% or more in any of those downstream markets as illustrated in sections VIII.C, D, E and F, the market for the wholesale international carrier services is a vertically affected market, as it is each relevant downstream market.
- (1829) The Commission considers that the Transaction would not impede effective competition due to vertical effects connected with the market for wholesale international carrier services:
- (1) Vodafone's market share in this market is limited, estimated at [10-20]% [...] in Europe and significantly lower at global level. Furthermore, the Transaction would not cause any increment to this share;¹¹⁸⁴
 - (2) there will continue to be several established providers of wholesale international carrier services that will compete to provide access to downstream retail players, including Deutsche Telekom, AT&T, Orange, BT, Proximus and

¹¹⁸⁴

See Form CO, paragraph 6.1798.

Telefónica. Additional competitive pressure will be exerted by new and recent entrants that use low-cost models and advanced technology services;

- (3) the Commission has not received any specific complaint regarding this market.

5. WHOLESALE INTERNET CONNECTIVITY

- (1830) Vodafone is active in the provision of wholesale internet connectivity services. The Target Business is not itself active in the provision of such services and uses services provided by a Liberty Global business unit that is not part of the Transaction.
- (1831) A series of vertical relationships could arise between Vodafone's presence in the upstream wholesale internet connectivity market and the Parties' downstream retail internet (and internet-related) activities in Czech Republic, Germany, Hungary and Romania. To the extent that the Target Business' market share or the combined market share is 30% or more in any of those downstream markets as illustrated in sections VIII.C, D, E and F, the market for wholesale internet connectivity services is a vertically affected market, as it is each relevant downstream market.
- (1832) As regard the ability of the merged entity to foreclose downstream markets, the Commission notes, firstly, that Vodafone has a limited position on the market for wholesale internet connectivity. According to a third party report, Vodafone would have a market share in Europe of about 8% and significantly lower at global level.¹¹⁸⁵ Moreover, there would not be any increment in Vodafone's position in the wholesale internet connectivity market as a result of the Transaction, since the Target Business does not provide such services.
- (1833) Secondly, there will continue to be a number of competing large providers of wholesale internet connectivity services in Europe and globally (including Cogent, Orange, GTT, Level 3, NTT and Tata). In this respect, the Notifying Party has submitted that individual content providers only require transit services from at least one internet connectivity provider, through which they will acquire connectivity to the internet as a whole. It would not be necessary for a transit provider to have a direct IP interconnect relationship with Vodafone in order for that provider to offer transit services to its network, and traffic can easily be re-directed to competing networks. As such, those seeking connectivity services will continue to have ample choice and the market for these services will remain highly competitive.
- (1834) Thirdly, EU Regulation n. 2015/2120¹¹⁸⁶ enshrines the principle of open internet access: internet traffic shall be treated without discrimination, blocking, throttling or prioritisation. Equal treatment allows reasonable day-to-day traffic management according to objectively justified technical requirements, and which must be independent of the origin or destination of the traffic and of any commercial considerations. This would further limit the ability the merged entity to increase congestion on transit interconnections, including by foreclosing other transit providers.

¹¹⁸⁵ See Form CO, paragraph 6.1804.

¹¹⁸⁶ Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union, in OJ L 310, 26.11.2015, p. 1–18.

- (1835) As for the possible incentives to foreclose, the Commission considers that given the availability of other wholesale providers, any attempt by Vodafone to restrict access would simply result in Vodafone losing wholesale revenues without benefiting downstream at the retail level, since the potential customer will continue to compete downstream using access via another internet connectivity provider. By restricting interconnection/traffic towards Vodafone's own networks, Vodafone would be degrading its service levels and harming its own customers, leading to a significant commercial cost.
- (1836) In conclusion, the Commission considers that the Transaction would not impede effective competition due to vertical effects connected with the market for wholesale internet connectivity services.

IX. COMMITMENTS

1. ANALYTICAL FRAMEWORK

- (1837) When a concentration raises competition concerns, the merging parties may seek to modify the concentration in order to resolve those competition concerns and thereby obtain clearance for the merger.¹¹⁸⁷
- (1838) Under the Merger Regulation, the Commission must show that a concentration would significantly impede effective competition in the internal market, or in a substantial part of it. It is then for the notifying party/parties to the concentration to propose appropriate commitments.¹¹⁸⁸ The Commission only has the power to accept commitments that are deemed capable of rendering the concentration compatible with the internal market so that they will prevent a significant impediment to effective competition in all relevant markets in which competition concerns were identified.¹¹⁸⁹
- (1839) The commitments must eliminate the competition concerns entirely and must be comprehensive and effective in all respects. The commitments must also be proportionate to the competition concerns identified.¹¹⁹⁰ Furthermore, the commitments must be capable of being implemented effectively within a short period of time as the conditions of competition on the market will not be maintained until the commitments have been fulfilled.¹¹⁹¹
- (1840) In assessing whether the proposed commitments will likely eliminate the competition concerns identified, the Commission considers all relevant factors including *inter alia* the type, scale and scope of the proposed commitments, judged by reference to the structure and particular characteristics of the market in which the competition

¹¹⁸⁷ Commission notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 (the "Remedies Notice"), OJ C 267, , 22.10.2008, p.1, paragraph 5.

¹¹⁸⁸ Remedies Notice, paragraph 6.

¹¹⁸⁹ Remedies Notice, paragraph 9.

¹¹⁹⁰ Recital 30 of the Merger Regulation. The General Court set out the requirements of proportionality as follows: "*the principle of proportionality requires measures adopted by Community institutions not to exceed the limits of what is appropriate and necessary in order to attain the objectives pursued; when there is a choice between several appropriate measures recourse must be had to the least onerous, and the disadvantages caused must not be disproportionate to the aims pursued*" (Case T-177/04 *easyJet v Commission* [2006] ECR II-1931, paragraph 133).

¹¹⁹¹ Remedies Notice, paragraphs 9, 10, 11, 63 and 64.

concerns arise, including the position of the parties and other participants on the market.¹¹⁹²

- (1841) In order for the commitments to comply with those principles, commitments must be capable of being implemented effectively within a short period of time.¹¹⁹³ However, where the parties submit remedies proposals that are so extensive and complex that it is not possible for the Commission to determine with the requisite degree of certainty, at the time of its decision, that they will be fully implemented and that they are likely to maintain effective competition in the market, an authorisation decision cannot be granted.¹¹⁹⁴
- (1842) Regarding the form of acceptable commitments, the Merger Regulation leaves discretion to the Commission as long as the commitments meet the requisite standard.¹¹⁹⁵ Divestiture commitments are generally the best way to eliminate competition concerns resulting from horizontal overlaps, although other structural commitments, such as access remedies, may be suitable to resolve concerns if those remedies are equivalent to divestitures in their effects.¹¹⁹⁶
- (1843) It is against that background that the Commission analysed the proposed commitments in this case.

2. PROCEDURE

- (1844) In order to render the concentration arising from the Transaction compatible with the internal market, the Notifying Party submitted commitments pursuant to Article 8(2) of the Merger Regulation on 6 May 2019 (the "First Commitments"), consisting of two elements: the "Wholesale Cable Broadband Access ("WCBA") Commitment" and the "OTT Commitment".
- (1845) In parallel, the Notifying Party informed the Commission that it had entered into a framework agreement (the "Framework Agreement") on 17 April 2019 with Telefónica, which was identified as the potential remedy taker of the WCBA Commitment in the First Commitments.
- (1846) The Commission launched a market test of the First Commitments on 7 May 2019 (the "Market Test"). Questionnaires were sent to (i) the Parties' competitors in the retail market for fixed internet access services (including 2P bundles consisting of fixed internet access and fixed telephony services) in Germany, (ii) broadcasters and TV retailers active in the German market, (iii) their respective industry associations as well as (iv) interested third parties (even if not covered under (i) to (iii)). In total, the Commission contacted about 90 market participants and received more than 55 replies. In addition, the German telecommunications regulator BNetzA and the national competition authority FCO were consulted.
- (1847) The Commission gave the Parties detailed feedback on the outcome of the Market Test during calls on 20 May 2019 and 24 May 2019 as well as during a meeting on 28 May 2019.

¹¹⁹² Remedies Notice, paragraph 12.

¹¹⁹³ Remedies Notice, paragraph 9.

¹¹⁹⁴ Remedies Notice, paragraphs 13, 14 and 61 et seq.

¹¹⁹⁵ Case T-177/04 *easyJet v Commission* [2006] ECR II-1913, paragraph 197.

¹¹⁹⁶ Remedies Notice, paragraph 19.

- (1848) On 11 June 2019, following certain modifications, a final set of commitments was submitted (the "Final Commitments"). In addition, Vodafone amended the Framework Agreement with Telefónica on [CONFIDENTIAL CONTRACT INFORMATION] and submitted the revised version on the same day. These Final Commitments are annexed to this Decision and form an integral part thereof.

3. ASSESSMENT OF THE COMMITMENTS

3.1. The First Commitments

3.1.1. Description of the First Commitments

3.1.1.1. WCBA Commitment

- (1849) The WCBA Commitment consists of a fix-it-first commitment to enter into an agreement (the "Cable Broadband Access Agreement") with Telefónica (the "New Cable Provider"). Under the WCBA Commitment and the Cable Broadband Access Agreement, Vodafone will provide wholesale cable broadband access to the New Cable Provider, enabling the New Cable Provider to offer retail fixed internet access services, fixed telephony services and OTT TV services to end customers. Such access would be provided on the following basis:
- (1850) The implementation of the WCBA Commitment shall be enabled as soon as practicable and in any event within [CONFIDENTIAL CONTRACT INFORMATION] of the completion of the Transaction (the "Access Date"), subject to any delays caused by acts or omissions of the New Cable Provider or otherwise outside the control of the Parties.
- (1851) In terms of geographic coverage, the WCBA Commitment is made available on the network (the "Cable Network") across the combined Vodafone and Unitymedia's cable footprints (the "Combined Footprint"), which together are present in all Federal States in Germany. The WCBA is provided via 11 interconnection points across Germany: two in each of Dusseldorf and Frankfurt, and one each in Hannover, Nuremberg, Hamburg, Berlin, Leipzig, Munich and Stuttgart.
- (1852) The New Cable Provider commits, on an annual upfront basis, to purchase a minimum number of cable connections in each year of WCBA and pay monthly variable fees for active cable connections. The main terms and conditions are described in the following recitals and summarised in Table 52 and 53.
- (a) Under the Cable Broadband Access Agreement Vodafone commit to enter into, the New Cable Provider shall pay EUR [CONFIDENTIAL CONTRACT INFORMATION], on an annual upfront basis, for a minimum number of predetermined connections (the "Minimum Commitment"), as illustrated in Table 52.

Table 52: upfront payment for Minimum Commitment
[CONFIDENTIAL CONTRACT INFORMATION]

	Minimum Commitment	Upfront cash payment
	Cable connections	EUR
Year 1	[...]	[...]
Year 2	[...]	[...]
Year 3	[...]	[...]
Year 4	[...]	[...]
Year 5 and beyond	[...]	[...]

Source: First Commitments, Annex A.4.

- (b) The New Cable Provider may adjust the annual actual purchase commitment upwards or downwards [CONFIDENTIAL CONTRACT INFORMATION]

provided that the quantity purchased does not fall below the Minimum Commitment. In the event that the New Cable Provider exceeds the number of active connections it has agreed to purchase in a given year, it shall pay an additional EUR [CONFIDENTIAL CONTRACT INFORMATION] per month for each active connection in excess of such amount.

- (c) In terms of speeds, under the WCBA Commitment, wholesale access is offered at multiple download (the fastest of which at 300 Mbit/s) and upload bandwidths. Upload speeds may be increased at the option of the New Cable Provider at an additional charge. The New Cable Provider shall pay the monthly fees for each active cable connection depending on the speed. Table 53 illustrate the speeds made available under the WCBA Commitment and the related monthly fee.

Table 53: Speeds and monthly fees
[CONFIDENTIAL CONTRACT INFORMATION]

Bandwidth profile	Downstream	Upstream	Upstream increase	Monthly fee	Upload Upgrade
-	Mbit/s	Mbit/s	Mbit/s	EUR	EUR
50/4	50	4	10	[...]	[...]
100/6	100	6	50	[...]	[...]
300/25	300	25	50	[...]	[...]

Source: First Commitment, Annex A.4.

- (1853) After the [CONFIDENTIAL CONTRACT INFORMATION] anniversary of the Access Date, the New Cable Provider can request Vodafone to include a product with a download speed of 500 Mbit/s, with an upload speed equal to the standard upload speed Vodafone offers its customers for its 500 Mbit/s product in the Combined Footprint, [CONFIDENTIAL CONTRACT INFORMATION]. Vodafone will provide such a product within [CONFIDENTIAL CONTRACT INFORMATION] of the request. The monthly fee for the 500 Mbit/s product will be [CONFIDENTIAL CONTRACT INFORMATION].
- (1854) [CONFIDENTIAL CONTRACT INFORMATION].
- (1855) Regarding capacity expansions and support services, Vodafone commits to make available sufficient capacity on the Cable Network to accommodate traffic of the New Cable Provider and, to the extent necessary, to make any capacity expansions that are necessary to accommodate traffic from the New Cable Provider.
- (1856) Vodafone commits to provide access under the WCBA Commitment on a non-discriminatory basis, meaning that Vodafone shall treat the traffic of access seekers in the same way as Vodafone's own traffic on the Cable Network. In particular, Vodafone commits to apply (subject to the cooperation of the New Cable Provider) the same prioritisation rules to the New Cable Provider's traffic as Vodafone applies to its own traffic on the Cable Network.¹¹⁹⁷
- (1857) Regarding voice traffic, Vodafone commits to handle the New Cable Provider's voice traffic in the Combined Footprint (including handover to the New Cable Provider) on the same basis as it handles its own voice traffic in the Combined Footprint.¹¹⁹⁸

¹¹⁹⁷ Excluding any differences in quality of service due to elements installed, owned or controlled by the New Cable Provider and which are outside the scope of the WCBA Commitment.

¹¹⁹⁸ The New Cable Provider shall be solely responsible for all other services required in order to be able to offer retail voice services.

- (1858) Regarding technical support, Vodafone commits to provide the second and third line technical support services required by the New Cable Provider.¹¹⁹⁹
- (1859) In terms of duration, the WCBA Commitment is offered for a minimum term of [CONFIDENTIAL CONTRACT INFORMATION] from the Access Date, which shall be extendable by [CONFIDENTIAL CONTRACT INFORMATION] unless terminated by either of the parties (Vodafone and the New Cable Provider) on at [CONFIDENTIAL CONTRACT INFORMATION] notice prior to the end of the initial [CONFIDENTIAL CONTRACT INFORMATION] term.

3.1.1.2. OTT Commitment

- (1860) The OTT Commitment consists of two parts:
- (a) A commitment not to contractually restrict, directly or indirectly, the possibility for Broadcasters, defined as a provider of one or more linear TV channels, who are carried on Vodafone's TV Platform¹²⁰⁰ to distribute their content via an OTT service, and
 - (b) A commitment to maintain sufficient direct interconnection capacity between the merged entity's internet network covering Germany and third party providers of internet interconnectivity (transit) services.
- (1861) More precisely, under the first part of the OTT Commitment at recital (1860)(a), Vodafone commits not to enter into or renew any agreement (whether in writing or oral and whether formal or informal, including but not limited to e-mails, side letters or other) with a Broadcaster that includes the distribution of such Broadcaster's linear channels, and catch-up TV services relating to content in such linear channels, via Vodafone's TV platform in Germany and that contains terms that would directly or indirectly restrict such Broadcaster's ability to offer to third parties and/or end-users, on a stand-alone basis or in partnership with another entity or third party:
- (a) An "OTT Service" in Germany, defined as any service that allows consumers access to audio-visual content, whether linear or non-linear, over the internet, howsoever delivered, via one or more devices;
 - (b) Its linear channels via OTT Service in Germany; or
 - (c) Any content owned and controlled by such Broadcaster (that is to say any content in respect of which that Broadcaster holds the relevant intellectual property rights for OTT distribution in Germany, for so long as it is so owned and controlled), including content from such linear channels, for inclusion in an OTT Service in Germany.
- (1862) To the extent that any such terms are included in existing agreements with Broadcasters regarding the distribution of linear channels and catch-up TV services relating to content on such linear channels of such Broadcasters on Vodafone's TV Platform in Germany, Vodafone commits:
- (a) Not to enforce such terms;

¹¹⁹⁹ Annex A.5 sets out in detail which responsibilities Vodafone and the New Cable Provider will assume with regard to technical support services.

¹²⁰⁰ Vodafone's TV Platform is defined as television content distributed pursuant to a contract for such distribution on the merged entity's cable network and IPTV platforms, as well as their mobile network, in Germany.

- (b) Promptly after the adoption of this Decision, to inform the relevant Broadcaster that it waives its rights to enforce such terms and to commit to remove such terms from its existing agreements.
- (1863) Furthermore, Vodafone commits not to make the entry into or renewal of agreements with Broadcasters regarding the distribution of linear channels and catch-up TV services relating to content on such linear channels of such Broadcasters on Vodafone's TV Platform in Germany in any way conditional upon the conclusion of a separate agreement with such Broadcasters relating to any OTT Service and/or the (linear and non-linear) content of such OTT Service.
- (1864) Under the second part of the OTT Commitment at recital (1860)(b), the Notifying Party commits to ensure the effectiveness of the distribution of OTT content by maintaining sufficient interconnection capacity for parties seeking to distribute services over the internet to the merged entity's Broadband Customers.¹²⁰¹
- (1865) To this end, Vodafone will ensure that the daily peak utilization¹²⁰² across the merged entity's interconnection points with each of a group of at least three reputable interconnectivity providers ("ICPs") who are willing to sell transit services via one or more physical interconnection points in Germany over which traffic may flow to broadband customers, will not exceed 80%. That is to say that there will be at least 20% capacity available above the daily peak as calculated in arriving at daily peak utilization. Vodafone further commits that the capacity available above the daily peak across that group of at least three reputable ICPs shall be at least 20 Gbit/s. That figure would be reviewed annually by the Monitoring Trustee.
- (1866) The group of at least three reputable ICPs may vary from time to time, but no more than once per quarter generally and once per year.¹²⁰³ At least one of the three reputable ICPs should be selected from a list of the ten largest ICPs annexed to the Commitments. The list of the ten largest ICPs may be changed from time to time in coordination with the Commission and the Monitoring Trustee, in particular by the addition of other reputable ICPs.¹²⁰⁴
- (1867) Vodafone commits to request each ICP, with whom the merged entity directly interconnects in Germany and over which interconnection points traffic may flow to the merged entity's broadband customers, for permission to publish in arrears on a monthly basis the highest daily peak utilization in the preceding month, as a percentage of available aggregated direct capacity between that ICP and the merged entity. As long as at least half of such ICPs agree to such publication, Vodafone shall publish, on a publicly available website and on a monthly basis, this information with respect to any such ICP who is and remains willing for this to be published. Where fewer than half such ICPs agree to such publication Vodafone shall publish, on a publicly available website and on a monthly basis, only an aggregated figure based on the highest daily peak utilization in the preceding month of aggregated direct interconnect capacity in Germany.

¹²⁰¹ Defined as consumers located in Germany that have a subscription to the merged entity's broadband internet services either on a stand-alone basis or as part of a bundle.

¹²⁰² Defined as the daily 95th percentile over 5-minute average bits transferred sample intervals.

¹²⁰³ By way of exception, where there is an urgent need to upgrade capacity with a particular ICP and it does not prove possible to agree or implement such upgrade in a timely manner, Vodafone will seek the approval of the Commission via the Monitoring Trustee to replace that ICP with another ICP.

¹²⁰⁴ To be noted that the OTT Commitment does not impose the public disclosure of the three selected ICPs.

(1868) In terms of duration, the OTT Commitment is offered for a period of eight years from the date of the adoption of the Decision.

3.1.1.3. Monitoring and Arbitration

(1869) Vodafone commits to propose one or several Monitoring Trustees to the Commission for approval no later than two weeks after the date of the adoption of the Decision and to appoint the Monitoring Trustee within one week of the Commission's approval. The Monitoring Trustee shall assume its specified duties in order to ensure compliance with the First Commitments.

(1870) In the event that a third party (in the case of the WCBA Commitment, the New Cable Provider) claims that Vodafone is failing to comply with the requirements of the WCBA Commitment, the Commitments provide for a fast track dispute resolution procedure. The third party will send a written request to Vodafone (with a copy to the Monitoring Trustee) setting out in detail the reasons leading it to believe that Vodafone is failing to comply with the requirements of the First Commitments. The third party and Vodafone will use their commercially reasonable efforts to resolve all differences of opinion and to settle all disputes that may arise through co-operation and consultation within a reasonable period of time not exceeding fifteen working days after receipt of the request. The Monitoring Trustee shall present its own proposal for resolving the dispute within eight working days, specifying in writing the action if any, to be taken by Vodafone in order to ensure compliance with the First Commitments vis-à-vis the third party and be prepared, if requested, to facilitate the settlement of the dispute. Should the third party and Vodafone fail to resolve their differences, the third party may, within twenty calendar days of such failure, make a request for arbitration to the International Chamber of Commerce.

(1871) The arbitration shall be conducted in London (or, at the option of the third party, Dusseldorf) in the English language under the Rules of the Arbitration Court of the International Chamber of Commerce, with such modifications or adaptations as foreseen in the First Commitments or necessary under the circumstances. The procedure shall be a fast track procedure, that is to say, with shortened applicable procedural time-limits.

(1872) The Commission shall be allowed and enabled to participate in all stages of the procedure. In the event of disagreement between the parties to the arbitration regarding the interpretation of the First Commitments, the arbitral tribunal may seek the Commission's interpretation of the First Commitments before finding in favour of any party to the arbitration and shall be bound by the interpretation.

3.1.2. *Results of the Market Test*

(1873) At the outset, the Commission notes that respondents to the Market Test raised concerns that the First Commitments do not address a number of issues not identified by the Commission as a competition concern in the Statement of Objections as well as the concern of the potential foreclosure of retail suppliers of TV signal transmission to MDU customers in Germany which was raised in the Statement of Objections.

(1874) In this regard, the Commission refers to section VIII of this Decision, which sets out the Commission's competitive assessment of all affected markets and identifies the markets and the theories of harm on the basis of which the Commission considers that the Transaction would significantly impede effective competition. In particular, section VIII.C.4.2. explains the reasons why which the Commission considers that the Transaction would not significantly impede effective competition as a result of

the potential foreclosure of retail suppliers of TV signal transmission to MDU customers in Germany.

3.1.2.1. WCBA Commitment

- (1875) Respondents to the Market Test expressed the view that the WCBA Commitment does not fully address the Commission's competition concerns. The large majority of market participants providing an informative reply stated that the WCBA Commitment does not include all the necessary elements for the New Cable Provider to effectively compete in the retail supply of fixed internet access services (as well as in the possible market for 2P bundles comprising of fixed Internet access and fixed telephony services).¹²⁰⁵ Telefónica, on the other hand, submitted that the WCBA Commitment will enable the New Cable Provider to compete more effectively in the fixed retail telecommunications markets including TV services in Germany.¹²⁰⁶
- (1876) As regards the additional elements needed for the New Cable Provider to effectively compete, respondents explained the following.
- (1877) With regard to speed, the large majority of respondents stated that the available speeds are not sufficient for the New Cable Provider to effectively compete and to replicate the competitive constraint that would be lost as result of the Transaction.¹²⁰⁷ Several respondents referred to the fact that Vodafone and Unitymedia already offer bandwidths of 1 Gbit/s based on their cable network, while regional players and Deutsche Telekom are able to offer the same based on FTTH/B. United Internet and Freenet referred to a press release of Vodafone stating that: *"In the fourth quarter over 70% of new customers for cable opted for tariffs with 200 Mbit/s or more, while about 20% of new customers in the gigabit development area already chose for a connection with 1000 Mbit/s"*.¹²⁰⁸ As the New Cable Provider would not be able to match speeds above 300 Mbit/s¹²⁰⁹, respondents stated that the New Cable Provider would not be able to effectively compete, at least in the longer term.¹²¹⁰ Respondents suggested that the New Cable Provider should have non-discriminatory access to all existing and future broadband products of the merged entity.
- (1878) Tele Columbus made the additional point that the New Cable Provider would be limited in its product range as it can only offer download speeds of 50 Mbit/s, 100 Mbit/s and 300 Mbit/s.¹²¹¹ Therefore, the New Cable Provider would neither be able to exert competitive pressure at the upper end nor at the lower end of the market, as Unitymedia's Eazy brand does with its cheap 20 Mbit/s entry offer (which is also available as 2P bundle with fixed telephony services).

¹²⁰⁵ Replies to the Market Test, question 3 and 4. Most respondents (both retail fixed internet competitors and broadcasters) indicated that they do not know whether the WCBA Commitment includes all the necessary elements for the New Cable Provider to operate as an effective distributor of OTT TV services, see Replies to the Market Test, question 7.

¹²⁰⁶ Telefónica's replies to the Market Test, question 3 and 4 [ID 6255].

¹²⁰⁷ Replies to the Market Test, question 5.

¹²⁰⁸ United Internet's reply to the Market Test, question 5, Annex 10 ("Press Release Group Results") [ID 6245]. Original German text: *„Im vierten Quartal haben sich über 70% der Kabel-Neukunden für Tarife mit 200 Mbit/s oder mehr entschieden, rund 20% der Neukunden im Gigabit-Ausbaugebiet haben bereits einen Anschluss mit 1000 Mbit/s gewählt"*. Freenet's reply to the Market Test, question 5 [ID 6235].

¹²⁰⁹ The conditions under which the New Cable Provider would be able to offer 500 Mbit/s were not disclosed in the non-confidential version of the First Commitments submitted in the market test.

¹²¹⁰ Breko's reply to the Market Test, question 10 [ID 6425].

¹²¹¹ Tele Columbus' reply to the Market Test, question 5 [ID 6202].

- (1879) Telefónica, on the other hand, emphasised that the speeds of 300 (and 500 Mbit/s under certain conditions) available to the New Cable Provider are higher than those currently available with Deutsche Telekom's super-vectoring technology, which can only achieve speeds of up to 250 Mbit/s (and on the basis of which Vodafone operates in Unitymedia's footprint). The available speeds would enable New Cable Provider to satisfy the needs of consumer demand in Germany.¹²¹²
- (1880) With regard to the cost structure, the majority of respondents stated the non-confidential version of the First Commitments did not disclose sufficient information in order to make an assessment.¹²¹³ The broadcaster Sky made the general point that the wholesale access prices under Vodafone's WCBA Commitment are closely comparable to Deutsche Telekom's Layer 3 wholesale rates.¹²¹⁴ Such rates would not enable the New Cable Provider to aggressively compete against infrastructure-based players such as the merged entity and would not enable to replicate the constraint exercised by Unitymedia, which is, together with Vodafone cable business, the most price aggressive player in the German market for the retail supply of fixed internet access services. Deutsche Telekom also believes that a wholesale-based offer cannot replicate the loss of a competitor with its own infrastructure as an access seeker will always have a worse cost structure than the owner of the infrastructure.¹²¹⁵ Telefónica, on the other hand, emphasised that the terms under the WCBA Commitment are better than the available VDSL terms and conditions offered by Deutsche Telekom.¹²¹⁶ In Telefónica's view, the lower wholesale costs would grant the New Cable Provider more price flexibility and lead to significant variable costs reductions.
- (1881) As regards the ability of the New Cable Provider to offer TV services, United Internet points out that the WCBA Commitment does not include the IPTV standard. In United Internet's view, OTT TV linear services do not offer the same quality as IPTV services, require specific TV equipment and are not as cost-effective as IPTV (due to higher costs for broadcasting rights) or cable TV services (due to cost structure and cable network operators' ability to generate feed-in fees).¹²¹⁷ In addition, according to United Internet, some special interest pay TV channels would not be available via OTT.
- (1882) Respondents also submitted that OTT TV services have limited relevance, irrespective of the question whether the New Cable Provider can be an effective distributor of OTT TV services. Respondents submitted that OTT TV linear services are not a valid substitute for cable TV. Therefore, they are unlikely to be distributed successfully to tenants living in MDU buildings who already pay for basic cable TV through their rent and generally, few German households are watching TV solely via unmanaged OTT.
- (1883) Nonetheless, about three quarters of broadcasters stated that they would be interested in their channels being included in the New Cable Provider's OTT TV platform or in third parties' OTT TV platform distributed by the New Cable Provider via the WCBA.¹²¹⁸ This view has been expressed by all types of broadcasters, including

¹²¹² Telefónica's reply to the Market Test, question 5 [ID 6255].

¹²¹³ Replies to the Market Test, question 6.

¹²¹⁴ Sky's reply to the Market Test, question 6 [ID 6558].

¹²¹⁵ Deutsche Telekom's reply to the Market test, question 6 [ID 6384].

¹²¹⁶ Telefónica's reply to the Market test, question 6 [ID 6255].

¹²¹⁷ United Internet's reply to the Market Test, question 7 [ID 6245].

¹²¹⁸ Replies to the Market Test, question 8.

public and private, providers of FTA and Pay TV channels as well as small and large ones. For example:

- (a) ARD: *“The state public service broadcasters of the ARD would also like to distribute their programmes by an own OTT TV platform of the new cable provider as well as by OTT TV platforms of other providers which could then be distributed by the new cable provider. On the part of the state public service broadcasters there is a special interest to make their programme offer available on every possible platform and distribution opportunity as it is part of their primary care duty and the existing Must-Carry status. .”*¹²¹⁹
- (b) Bible TV: *“Bible TV is a single Provider in the TV Market. Behind us is no strong Media Group. To grow successfully, we need every Distribution and free Access to all OTT platforms.”*
- (c) Bw family TV: *“Sure, a broadcaster enlarges the technical reach, which leads to higher market shares and advertising income.”*
- (d) Discovery: *“Discovery is interested to provide its entire portfolio to any new operator.”*
- (e) Home Shopping: *“As a teleshopping company all forms of distribution are important for us.”*
- (f) RTL: *“As a broadcaster, RTL is generally interested in the distribution on any OTT TV platform.”*
- (g) Silverline: *“As a small Pay TV Channel it would be very good to be included in any platform that is available. No matter if it is a new platform or an already existing platform. As we are dependent on Vodafone and Unity, because they are our most important business partner platforms it would be VITAL for us to be included in the new platform.”*
- (h) Viacom: *“OTT services are a significant growing market and it is in the interest of any German broadcaster to be included in any OTT TV platform with a viable business model. Having access of such a new platform to the footprint of Vodafone’s broadband is essential given its customer base and reach.”*

(1884) As regards the duration of the WCBA Commitment, respondents did not provide a unequivocal conclusion, with replies ranging from five years to 20-25 years and several respondents suggesting that the ten years duration would be appropriate.¹²²⁰

3.1.2.2. OTT Commitment

(1885) As regards the definition of OTT Service and the definition used for contractual clauses that are covered by the first part of the OTT Commitment, the majority of respondents (broadcasters) stated that the proposed definitions are suitable to cover all the relevant forms of innovative distribution over the internet and to ensure the

¹²¹⁹ Original text in German: „Die Landesrundfunkanstalten der ARD würden ihre Programme auch über eine eigene OTT TV-Plattform des neuen Kabelanbieters sowie über OTT TV-Plattformen anderer Unternehmen verbreiten wollen, die von dem neuen Kabelanbieter verbreitet werden könnten. Seitens der Landesrundfunkanstalten der ARD besteht bereits aufgrund ihres Grundversorgungsauftrags und des bestehenden Must-Carry-Status ein besonderes Interesse, mit ihrem Angebot auf sämtlichen Plattformen und über sämtliche Verbreitungswege verfügbar zu sein.“

¹²²⁰ Replies to the Market Test, question 9.

effectiveness of the commitment.¹²²¹ ARD suggested that the proposed definition also covers HbbTV signals.¹²²² Some competing retail TV providers explained that a similar commitment should be made with regard to broadcasters' ability to offer the channels or content via (i) third party's OTT platforms, and (ii) any alternative transmission technologies (satellite, terrestrial, IPTV). Sky stated that the definition needed to be supplemented to cover also agreements not relating to a broadcaster's linear channels distributed via Vodafone's own retail TV platform product but relating to signal transmission of entire third-party retail TV platforms,¹²²³ and to cover other practices, including unilateral, that could directly or indirectly restrict broadcasters' OTT activities.¹²²⁴

- (1886) With regard to the effectiveness of the first part of the OTT Commitment regarding contractual restrictions, respondents did not identify any major problems.¹²²⁵ However, several respondents submitted that the OTT Commitment, even if effectively implemented, would not be sufficient to limit the merged entity's increased market power vis-à-vis broadcasters, in particular in light of the limited relevance of OTT TV services in Germany. ProSiebenSat.1 submitted that the OTT Commitment merely reflects the legal situation in Germany.¹²²⁶
- (1887) With regard to possible *de facto* restrictions on the broadcasters' ability to offer their channels and content via OTT Services, several respondents stated that the merged entity would find indirect ways to achieve its objectives despite such a commitment and that *de facto* restrictions should also be examined by the Monitoring Trustee.¹²²⁷ This is also reflected in the replies regarding possible implementation risks.¹²²⁸ Several broadcasters expressed the concern that the burden to enforce such commitment will be on the broadcasters. Tele München specifically stated that it expects infringements to be marginal (yet effective), so that it would be difficult to argue its case under the risk of costly judicial proceedings.¹²²⁹
- (1888) The majority of respondents could not express a view as to whether the first part of the OTT Commitment would influence their companies' content distribution via OTT.¹²³⁰ Broadcasters explained that the OTT Commitment does not significantly change the current market situation.
- (1889) As regards the second part of the OTT Commitment, that is to say, the commitment to maintain sufficient interconnection capacity, the majority of respondents (broadcasters) stated that they were not in a position to assess the technical details of the commitment.¹²³¹ Several competing retail TV providers explained that a cable network is a shared medium and therefore it is important that the peak capacity is

¹²²¹ Replies to the Market Test, question 13 and 14.

¹²²² ARD's reply to the Market Test, question 13 and 14 [ID 6208].

¹²²³ Sky offers linear channels and VoD content to end-customers in Germany within its own retail TV platform that it distributes through various distribution paths, including cable. Sky's signal transmission agreement with the cable network operator like Vodafone therefore relate to signal transmission of its entire retail TV platform, without its linear channels being directly available on the cable network operators' own retail TV platform product.

¹²²⁴ Sky's reply to the Market Test, question 14 [ID 6558].

¹²²⁵ Replies to the Market Test, question 15.

¹²²⁶ ProSieben.Sat.1's reply to the Market Test, question 15 [ID 6470].

¹²²⁷ Replies to the Market Test, question 16.

¹²²⁸ Replies to the Market Test, question 18.

¹²²⁹ Tele München's reply to the Market Test, question 18 [ID 6474].

¹²³⁰ Replies to the Market Test, question 17.

¹²³¹ Replies to the Market Test, questions 19-21.

available across the whole network. Capacity problems would mainly arise on the last mile where all customers have to share the limited capacity of the coaxial cable, including in the access and in the core network. This would be critical in order to ensure the seamless transmission of OTT signals to the end customer for a stutter-free and reliable TV experience.¹²³² In United Internet's view, the OTT Commitment should not only rely on the best-effort principle but also ensure the transmission of data based on reserved capacity (IP service class).¹²³³ Sky added that the proposed interconnectivity commitment should be expanded to include the right for OTT broadcasters to establish and maintain direct, uncongested access to Vodafone's internet network in Germany and the obligation for Vodafone to grant access to its network under fair, non-discriminatory and transparent terms.¹²³⁴

- (1890) As regards the duration of the OTT Commitment, replies to the market investigation were mixed.¹²³⁵ While some respondents considered the duration of eight years to be sufficient, other respondents requested an open-ended or at least long-term duration of 20 years.

3.1.2.3. Monitoring and Arbitration

- (1891) As regards the provisions concerning monitoring and arbitration, the majority of respondents did not submit any views.¹²³⁶ A few respondents stated possible ways to improve the monitoring and arbitration provisions by (i) clarifying definitions (for example, working day) and (ii) adding a clear price review mechanism.

3.1.2.4. Overall results of the Market Test

- (1892) Overall, the majority of respondents providing an informative reply (broadcasters and providers of retail fixed internet access services and 2P bundles including fixed internet access services and fixed telephony services) stated that the First Commitments would not ensure that the current competitive conditions in the retail supply of fixed internet access services and 2P bundles including fixed internet access services and fixed telephony in Germany remain unchanged.¹²³⁷ Providers of retail fixed internet access services and 2P bundles including fixed internet access services and fixed telephony services suggested many different remedy proposals, primarily the commitment (i) the divestment of Vodafone's DSL business in Unitymedia's footprint and (ii) the divestment of parts of the Parties' cable networks.
- (1893) The majority of respondents providing an informative reply (broadcasters and providers of retail fixed internet access services and 2P bundles including fixed internet access services and fixed telephony services) stated that the First Commitments would not ensure that the current competitive conditions in the wholesale supply of TV signal transmission in Germany remain unchanged.¹²³⁸ In particular, respondents criticised that the First Commitments do not address the merged entity's market power with respect to TV signal transmission via cable. Respondents re-iterated their requests for additional measures aimed at limiting the bargaining power of the merged entity going forward. Broadcasters suggested a

¹²³² Deutsche Telekom's reply to the Market Test, questions 19-21 [ID 6384]; Tele Columbus' reply to the Market Test, questions 19-21 [ID 6202].

¹²³³ United Internet's reply to the Market Test, questions 19-21 [ID 6245].

¹²³⁴ Sky's reply to Market Test, question 20 [ID 6558].

¹²³⁵ Replies to the Market Test, question 22.

¹²³⁶ Replies to the Market Test, question 23.

¹²³⁷ Replies tot the Market Test, questions 26-27.

¹²³⁸ Replies to the Market Test, question 28 and 29.

number of many different remedy proposals, the main ones being the commitment (i) not to increase feed-in fees (ii) to guarantee FRAND terms, (iii) to extend existing agreements with Pay TV channels and not to exclude TV channels from the merged entity's network, (iv) not to hamper other innovative TV services, such as HbbTV and (v) to grant access to user and usage data. Both broadcasters and competing retail TV providers asked for the merged entity's commitment not to enter into exclusive content agreements.

3.1.3. *The Commission's assessment of the First Commitments*

- (1894) At the outset, the Commission recalls that to be acceptable, the proposed commitments must be capable of rendering a concentration compatible with the internal market as they prevent a significant impediment to effective competition in all relevant markets in which competition concerns were identified. In this case, the commitments needed to eliminate the competition concerns identified by the Commission with respect to: (i) the retail supply of fixed internet access services in Germany, (ii) the retail supply of 2P bundles including fixed telephony services and fixed internet access service in Germany and (iii) the wholesale TV signal transmission in Germany.
- (1895) In accordance with the principles of the Merger Regulation on the acceptability of commitments, the Commission has assessed whether the First Commitments
- (a) are suitable and sufficient to eliminate the competition concerns; and
 - (b) capable of being implemented effectively within a short period of time.

3.1.3.1. WCBA Commitment

(i) Scope

- (1896) In a number of cases, the Commission has accepted remedies foreseeing the granting of access to key infrastructure, networks, key technology, including patents, know-how or other intellectual property rights, and essential inputs. Normally, the parties grant such access to third parties on a non-discriminatory and transparent basis.¹²³⁹
- (1897) Commitments granting access to infrastructure and networks may be submitted in order to facilitate market entry by competitors. If those commitments actually make the entry of sufficient new competitors timely and likely, they can be considered to have a similar effect on competition in the market as a divestiture. If it cannot be concluded that the lowering of the entry barriers by the proposed commitments will likely lead to the entry of new competitors in the market, the Commission will reject such a remedies package.¹²⁴⁰
- (1898) As preliminary remark, the Commission recalls that the identified competition concerns in the provision of fixed internet access and 2P bundles comprising of fixed internet access and fixed telephony services in Germany mainly stem from the elimination of the competitive pressure exercised by Vodafone's DSL business in Unitymedia's footprint. On the contrary, the Commission did not find that Unitymedia is an important competitive force in terms of infrastructure investment or that Vodafone's and Unitymedia's cable business exert an important competitive constraint on each other.

¹²³⁹ Remedies Notice, paragraph 62.

¹²⁴⁰ Remedies Notice, paragraph 63.

- (1899) As regards the scope of the WCBA Commitment in terms of volumes, the Commission notes that the New Cable Provider created under the WCBA Commitment would sufficient to replace the competitive constraint exerted by Vodafone's DSL business, in particular with regard to Unitymedia's footprint. As shown in Table 55, over the business years (from 2015/2016 to 2017/2018), in relation to the supply of fixed internet access and 2P bundles of fixed internet access and fixed telephony service, Vodafone grew its DSL business by [CONFIDENTIAL SUBSCRIBER INFORMATION] subscribers (net adds) nationwide and by [CONFIDENTIAL SUBSCRIBER INFORMATION] subscribers (net adds) in Unitymedia's footprint. Moreover, the increase was [CONFIDENTIAL SUBSCRIBER INFORMATION]. The WCBA requires the New Cable Provider to acquire [CONFIDENTIAL SUBSCRIBER INFORMATION] connections (allowing to serve an equivalent number of subscribers) by year 5, that is to say, on average [CONFIDENTIAL SUBSCRIBER INFORMATION] subscribers per year.¹²⁴¹ After year 5, the Minimum Commitment remains at [CONFIDENTIAL SUBSCRIBER INFORMATION] connections. The New Cable Provider may adjust the annual purchase commitment [CONFIDENTIAL SUBSCRIBER INFORMATION] upwards or downwards provided that the quantity does not fall below the minimum sizes. Therefore, the New Cable Provider has no upper limit as to the number of subscribers it can acquire, while it would of course have a strong economic incentive in utilising all the connections it committed to purchase to serve an equivalent number of customers.

Table 55: Vodafone's DSL subscribers in the supply of fixed internet access and 2P bundles of fixed internet access and fixed telephony service ('000) [CONFIDENTIAL SUBSCRIBER INFORMATION]

	2015/2016	2016/2017	2017/2018
Nationwide			
Gross adds	[...]	[...]	[...]
Net adds	[...]	[...]	[...]
Subscribers	[...]	[...]	[...]
Unitymedia Footprint			
Gross adds	[...]	[...]	[...]
Net adds	[...]	[...]	[...]
Subscribers	[...]	[...]	[...]

Source: Form CO.

- (1900) However, the Commission notes the WCBA Commitment does not include any clause [CONFIDENTIAL CONTRACT INFORMATION]. In order to replicate the competitive constraint exerted by Vodafone's DSL business in Unitymedia's footprint [CONFIDENTIAL CONTRACT INFORMATION].
- (1901) The Commission notes that the WCBA Commitment would give the New Cable Provider physical access to the Parties' geographically complementary Level 3 cable networks in Germany at 11 interconnection points. In total, the geographic scope amounts to 23.7 million marketable households, including the entire Vodafone footprint where there is no direct overlap between the Parties' retail activities. All 23.7 million marketable households would have access to speeds of 50 and 100 Mbit/s and [CONFIDENTIAL CONTRACT INFORMATION] million households would have access to 300 Mbit/s. In addition, [CONFIDENTIAL CONTRACT INFORMATION] years after the Access Date, the New Cable Provider would be

¹²⁴¹

The Mimimum Commitment foresees a nonlinear increase with the New Cable Provider acquiring more new customers towards the end of first five year period than towards the beginning (for example, [CONFIDENTIAL CONTRACT INFORMATION]).

able to request speeds of 500 Mbit/s under certain conditions (see recital (1853)). The vast majority of households in the Vodafone and Unitymedia cable footprints would be reachable with 500 Mbit/s by this point.¹²⁴²

- (1902) Higher speed products of 175 Mbit/s (or greater) are available on DSL infrastructure through Deutsche Telekom's super-vectoring technology. By the end of 2019, Deutsche Telekom expects that its super-vectoring technology will be rolled out to 28 million households.¹²⁴³ Vodafone has presented elements indicating that actual availability of the 250 Mbit/s speed might be lower than stated by Deutsche Telekom.¹²⁴⁴ Moreover, with respect to fibre, while at the time of the adoption of this Decision the outcome of the market review on fibre by BNetzA and the shape of any regulation it could potentially adopt is uncertain, BNetzA expects requiring only non-discriminatory access for other service providers on the fibre network. The stated aim is to encourage the development of the fibre market, as investors can negotiate their own price agreements and cooperation.¹²⁴⁵ Therefore, it remains uncertain under which conditions access seekers would have access to wholesale products above 250 Mbit/s.
- (1903) Table 56 shows the speeds currently offered by the Vodafone's DSL Business (and generally available to any access seeker using Deutsche Telekom's DSL infrastructure) as well as the number of customers of Vodafone in the Unitymedia footprint using these speeds and the total marketable households that are able to access each speed within the national DSL footprint.

Table 56: Vodafone DLS Business – available speeds¹²⁴⁶ [CONFIDENTIAL SUBSCRIBER INFORMATION]

Bandwidth profile	Downstream	Upstream	Vodafone DSL customers in Unitymedia's footprint	Total marketable households
-	Mbit/s	Mbit/s	(%)	Millions (%)
<16/1	16	1	[...]	[...]
50/10	50	10	[...]	[...]
100/40	100	40	[...]	[...]
175/40	175	40	[...]	[...]
250/40	250	40	[...]	[...]

Source: Form RM, Table 2.1.

¹²⁴² In the Vodafone cable footprint, at least [CONFIDENTIAL SUBSCRIBER INFORMATION] of households will be reachable with 500 Mbit/s by the end of the 2019/2020 financial year. It fully expects that [CONFIDENTIAL SUBSCRIBER INFORMATION] of households will have access to this speed by [CONFIDENTIAL SUBSCRIBER INFORMATION] years after implementation of the cable access remedy. While Unitymedia is not able to provide the number of households that are reachable with 500 Mbit/s, almost [CONFIDENTIAL SUBSCRIBER INFORMATION].

¹²⁴³ Deutsche Telekom's Q1 2019 earnings presentation (transcript), available at <https://www.telekom.com/de/investor-relations/finanzpublikationen/finanzergebnisse#570972> [ID 6851].

¹²⁴⁴ However, even where the technology has been fully enabled, many households will still not be able to benefit from the fastest available product (250 Mbit/s). This is because, in order to obtain such a speed, the length of the copper wiring running from a household to the nearest street cabinet (the so-called 'copper loop length') cannot exceed a certain distance – the further the distance from the cabinet, the higher the likelihood that the household will not be able to obtain a 250 Mbit/s speed but a slower speed instead.

¹²⁴⁵ See section VIII.C.2.2.1.(ii).

¹²⁴⁶ These figures are based on data that is around one year old and based on a third party data source. Vodafone does not expect that the relative proportions with access to particular speeds have changed materially since then. The overall pattern is the same when looking at the nationwide DSL footprint.

- (1904) The majority of customers (some [CONFIDENTIAL SUBSCRIBER INFORMATION]) are on the slowest speeds of no more than 16 M/bits using legacy ADSL technology. Nearly [CONFIDENTIAL SUBSCRIBER INFORMATION] are on speeds of no more than 50 Mbit/s. Under [CONFIDENTIAL SUBSCRIBER INFORMATION] – around [CONFIDENTIAL SUBSCRIBER INFORMATION] of Vodafone’s customers – have access to speeds of 175 Mbit/s and 250 Mbit/s. Given this subscriber breakdown, it can be implied that, albeit, as explained in recital (457), Vodafone’s strategy is to continue upselling VDSL to ADSL customers and migrating its DSL customers to new technology, Vodafone’s DSL business in Unitymedia’s footprint [CONFIDENTIAL SUBSCRIBER INFORMATION]. This is confirmed by figures at national level provided by Vodafone, according to which almost [CONFIDENTIAL SUBSCRIBER INFORMATION] of Vodafone’s gross adds nationwide are for customers on speeds of 100 Mbit/s or lower.¹²⁴⁷
- (1905) As market participants pointed out, based on access to the Parties’ cable network, speeds of over 200 Mbit/s could have an increasing customer take-up. In this respect, the WCBA Commitment will create a competitor that is closer to the Parties’ cable business than the other access-based competitors are, and in particular potentially closer than Vodafone’s DSL business currently is Unitymedia. In particular, the Commission considers that the condition under which the New Cable Provider can request access to 500 Mbit/s, which is not yet a mass-market product, is appropriate. Moreover, the New Cable Provider does not need access to a product below 50 Mbit/s in order to be competitive. The reference in the market test to Unitymedia’s budget brand Eazy is not relevant as Eazy customers represent [CONFIDENTIAL SUBSCRIBER INFORMATION].¹²⁴⁸
- (1906) Based on the above, the Commission considers that the speeds available under the WCBA Commitment offer significant advantages compared to those available over Deutsche Telekom’s DSL infrastructure. In particular, it offers speeds that are higher than the fastest product technically available with DSL infrastructure and create a competitor that is closer to the Unitymedia than Vodafone’s DSL business in terms of speed. Overall, the Commission considers that the available speeds are an improvement compared to Deutsche Telekom’s wholesale offer and will be sufficient to effectively compete in the retail market for the supply of fixed internet access services in the foreseeable future.
- (1907) In terms of pricing, the WCBA Commitment is aligned with the pricing structure of the Vodafone DSL Business for Layer 3 VDSL access (the “DSL Kontingentmodell”). As explained in section VIII.C.2.2.1.(ii), the Kontingentmodell is a pricing model used by Deutsche Telekom to grant bitstream access to its DSL infrastructure for a specified number of subscribers. Overall, the DSL Kontingentmodell is a form of risk-sharing pricing structure, whereby the access seeker makes an upfront (sunk) payment and annual volume commitment, in return for lower monthly costs for on-going access. It incentivises access seekers to compete hard in order to recoup the upfront payment. Vodafone, Telefónica and United Internet (amongst others) currently use this model for Layer 3 VDSL access.
- (1908) Table 57 sets out a comparison of the DSL Kontingentmodell and the WCBA Commitment.

¹²⁴⁷ See Parties’ reply to RFI 40, Table 1.

¹²⁴⁸ See Parties’ reply to RFI 22, questions 35 und 36.

Table 57: Comparison [CONFIDENTIAL CONTRACT INFORMATION]

	DSL Kontingentmodell	WCBA Commitment
Speeds	Bandwidth monthly fees	
50	EUR 13.38	[...]
100	EUR 15.38	[...]
250	EUR 24.82	[...]
300	N/A	[...]
500	N/A	[...]
Other pricing terms		
Annual upfront fee/connection	EUR 25.30	[...]
Fee for exceeding minimum commitment	any additional usage charged at (higher) standard pricing	[...]
Activation fee	EUR 46.43	[...]
Termination fee	EUR 12.68	[...]
Interfaces	Activation: EUR 523.97 Termination: EUR 204.65 Annual fee for each 10 Gbit/s interface: EUR 22 583	[...]
Other terms		
Handover points	73	[...]

Source: Form RM, Table 2.3.

(1909) Several elements make the commercial conditions of the WCBA Commitment more attractive than the DSL Kontingentmodell:

- (a) Monthly fees: The WCBA Commitment offers lower monthly prices for each speed offered compared with the equivalent speeds available under the DSL Kontingentmodell. In particular, the proposed price of the 300 Mbit/s product (EUR [CONFIDENTIAL CONTRACT INFORMATION]) is significantly lower than the slower 250 Mbit/s product available under the DSL Kontingentmodell (EUR 24.82). These lower monthly fees lead to lower variable costs for the New Cable Provider which are likely to be passed on to consumers.
- (b) Activation fee: [CONFIDENTIAL CONTRACT INFORMATION]
- (c) Interface fee: [CONFIDENTIAL CONTRACT INFORMATION]
- (d) Interconnection points: Under Layer 3 DSL access, there are currently 73 interconnection points with the DSL network respectively while there are [CONFIDENTIAL CONTRACT INFORMATION] interconnections points under the WCBA Commitment. This ensures that the New Cable Provider's upfront costs are minimised. [CONFIDENTIAL CONTRACT INFORMATION]

(1910) Based on the above, the Commission considers that the commercial conditions available under the WCBA Commitment are more favourable than those available under Deutsche Telekom's DSL wholesale offer. In particular, the WCBA Commitment offers lower monthly pricing (significantly lower in case of the 300 Mbit/s product), lower build-out costs given fewer handover points for the physical access to the merged entity's network and more attractive interface fees. Overall, the Commission considers that the commercial terms will improve the New Cable Provider's cost structure, in particular its variable costs, compared to access seekers on Deutsche Telekom's DSL infrastructure and will therefore increase its incentive to compete. This will enable and incentivise the New Cable Provider to effectively compete in the retail market for the supply of fixed internet access services and retail

supply of 2P bundles including fixed telephony services and fixed internet access service in Germany.

- (1911) With regard to the future evolution of the commercial terms, the WCBA Commitment foresees that [CONFIDENTIAL CONTRACT INFORMATION]
- (1912) [CONFIDENTIAL CONTRACT INFORMATION]
- (1913) In the Commission's view, the WCBA Commitment includes sufficient provisions to ensure non-discriminatory treatment of the New Cable Provider's traffic in the Cable Network alongside binding ancillary service obligations to ensure that the New Cable Provider has the necessary infrastructure access and support to be able to compete effectively (including the provision of sufficient capacity to accommodate the New Cable Provider's traffic). Consistent with Vodafone's treatment of its own traffic on the Cable Network, the New Cable Provider's voice traffic would be prioritised while all other traffic would be transported on a best-effort and non-discriminatory basis.
- (1914) With regard to the New Cable Provider's ability to make available OTT TV services, the Commission considers that the WCBA Commitment improves the New Cable Provider's ability to offer these services to some extent by accelerating take-up of high-speed internet connections. With regard to respondents of the market test asking for access to IPTV or DVB-C, the Commission notes:
- (a) IPTV: Given the competition concerns identified by the Commission concerning the retail supply of fixed internet access services (and 2P bundles), there is no need to include an IPTV product. As explained in section VIII.C.2.6, there is a limited overlap in the supply of retail TV services, due to the supply by Vodafone of IPTV in Unitymedia's. Recently Vodafone has replaced its IPTV product with an OTT TV product, which is essentially equivalent to IPTV. Moreover, OTT TV services are rapidly growing and are priced at competitive prices. For instance, Telefónica recently launched O2 TV in collaboration with waipu.tv at a starting price of EUR 4.99 per month. The product is available via smartphone, tablet, PC, laptop and TV, and its portfolio contains over 100 TV channels, with over 70 of these in HD quality, together with catch-up/VOD services and other features.¹²⁴⁹
- (b) DVB-C: With regard to cable TV, the Commission has not identified any competition concerns either due to the non-overlapping nature of the Parties' cable networks.¹²⁵⁰ Therefore, there is no need to include a cable TV product.
- (1915) The duration of the WCBA Commitment for a minimum of at least [CONFIDENTIAL CONTRACT INFORMATION] is longer than the current arrangements under which the Vodafone DSL Business has Layer 3 access to Deutsche Telekom's DSL infrastructure, which are in place for eight years and due

¹²⁴⁹ See Parties' reply to RFI 39, question 5.

¹²⁵⁰ That said, Vodafone notes that Level 4 operators (that is to say, independent entities that own / operate the in-house Level 4 network) can source TV signal from Level 3 cable operators present in the relevant area under Level 4 signal delivery arrangements with MDU customers. Moreover, the only way it would be technically feasible to provide wholesale access for TV over the cable network is via a resale arrangement. This does not allow the Level 4 operator to develop its own TV offering – simply to resell the same white-label basic TV package as the Parties sell to their own end customers. This would hence not reduce the merged entity's market position in wholesale TV signal transmission. [CONFIDENTIAL INFORMATION ON PARTIES' CAPABILITIES].

to expire in 2021. Therefore, the Commission considers that the duration of the WCBA Commitment is in line with industry practice.

- (1916) The WCBA Commitment creates a significantly strengthened national retail competitor in the provision of fixed internet access and fixed telephony services in Germany. By accelerating the uptake of high-speed internet connections, it would also benefit the distribution of OTT TV services by providers such as broadcasters, third party OTT platforms or the New Cable Providers' own OTT platform.
- (1917) Overall, the Commission considers that the scope of the WCBA Commitment is sufficiently comprehensive to eliminate competition concerns in the retail supply of fixed internet access services and 2P bundles in Germany and contributes to the elimination of competition concerns in the market for wholesale TV signal transmission in Germany. In particular, the WCBA Commitment would have the potential of replicating the competitive constraint exerted in those markets by Vodafone's DSL business. However, there are two important areas of improvement: [CONFIDENTIAL CONTRACT INFORMATION]

(ii) Effective implementation and monitoring

- (1918) In order for the commitments to be capable of being implemented within a short period of time, there has to be an effective implementation and ability to monitor the commitments. Whereas divestitures, once implemented, do not require any further monitoring measures, other types of commitments require effective monitoring mechanisms in order to ensure that their effect is not reduced or even eliminated by the parties.¹²⁵¹
- (1919) As regards the implementation time, the Commission notes that the period until the Access Date of up to [CONFIDENTIAL CONTRACT INFORMATION] is a sufficiently short period of time.
- (1920) Besides, the Commission notes that the WCBA Commitment is not too extensive or too complex in order for the Commission to determine with the requisite degree of certainty, at the time of this Decision, that it will be fully implemented and it will likely maintain effective competition in the market.¹²⁵² However, as explained in recital (1912) and as identified as implementation risk by market participants (see recital (1891)), the Commission considers that [CONFIDENTIAL CONTRACT INFORMATION] creates an unnecessary burden and high level of uncertainty on the New Cable Provider.
- (1921) Overall, the Commission considers that the effectiveness of the WCBA Commitment is provided for, except with regard to the possible risks stemming from [CONFIDENTIAL CONTRACT INFORMATION].

3.1.3.2. OTT Commitment

- (1922) Preliminarily, the Commission recalls that it has concluded that, as a result of the Transaction, the merged entity would increase its market power vis-à-vis TV broadcasters in the market for the wholesale supply of TV signal transmission in Germany. The Commission has identified two types of possible harmful effects resulting from this increased market power. Firstly, the Transaction could lead to a partial foreclosure of Pay and FTA TV channels through the worsening of the contractual and financial conditions, which could have substantial effects on the

¹²⁵¹ Remedies Notice, paragraph 13.

¹²⁵² Remedies Notice, paragraph 14.

quality and breadth of the TV offer in Germany. Secondly, the merged entity could hamper the emergence of innovative TV services such as transmission of HbbTV signals and OTT offers and consequently harm consumers downstream through a reduced quality of the viewer experience and reduced choice. Therefore, in order to be considered acceptable, the OTT Commitment, singularly or in combination with the other commitments, should be able to address those competition concerns. This result could be achieved either (i) by sufficiently mitigating the increased market power of the merged entity vis-à-vis TV broadcasters, or (ii) by directly intervening on the specific harmful effects identified. An effective remedy could also cover both aspects, at least to a certain extent.

The concerns related to the emergence of innovative TV services such as HbbTV signals and OTT Services

- (1923) The Commission considers that the OTT Commitment appears to directly address the competition concern related to the merged entity's ability to hinder the provision of OTT services by TV broadcasters.
- (1924) With the OTT Commitment, the Notifying Party effectively commits to terminate any agreement between the Parties and TV broadcasters that relates to the carriage of the TV broadcasters linear and catch-up services on the merged entity's TV platform and which restricts their ability to offer their channels and related content via an OTT service in Germany. The Notifying Party also commits that the Parties will not enter into such agreements in the future. The OTT Commitment covers all kind of agreements that could have as a direct or indirect effect the restriction of the TV broadcasters' ability to offer their channels and content in Germany via an OTT service. The reference to "indirect restriction" implies that all contractual clauses are covered, such as for example minimum purchase obligations, that de facto restrict the TV broadcasters' ability to offer their content via OTT services.
- (1925) The OTT Commitment applies in relation to contracts that TV Broadcasters conclude with the Parties for the distribution of TV channels and associated catch-up content via the merged entity's TV platform. That is appropriate, given that Vodafone would enjoy market power at the level of the market where those agreements are concluded. The definition of broadcasters appears also appropriate and the Notifying Party has expressly confirmed that it includes also third-party retail TV platforms that provide one or more linear TV channels on the merged entity's TV platform.¹²⁵³
- (1926) The commitment not to contractually restrict broadcasters in their OTT activities, applies also to the Parties' affiliated undertakings. The commitment covers also agreements for the distribution of broadcasters channels via the merged entity's mobile network and TV services delivered over the internet. The Commitments cover new and existing agreements between the Parties and TV broadcasters.
- (1927) The OTT Commitment contains additional safeguards that ensure their viability and effectiveness.
- (1928) In order to prevent de facto restrictions on the TV broadcasters' ability to offer their channels and content via OTT services, the Notifying Party commits in particular not to make the conclusion or renewal of a separate agreement to distribute TV channels and associated content via the merged entity's TV platform conditional on the acceptance of such restrictive agreements. That safeguard is important to ensure that

¹²⁵³

Vodafone's email to the case team dated 06.06.2019 at 20:16.

the OTT Commitment is not circumvented during commercial negotiations between the merged entity and TV broadcasters. It preserves a balance in the bargaining power between the merged entity and the TV broadcasters.

- (1929) In order to ensure the effectiveness of the distribution of OTT content, the Notifying Party also commits to maintain sufficient interconnection capacity for parties seeking to distribute data to its broadband customers. In particular, the merged entity will ensure that there would be at least three uncongested routes into the merged entity's IP network in Germany. Moreover, regulation on net neutrality should prevent the merged entity from adopting restrictive unilateral practices aimed at circumventing the commitment, such as traffic reprioritisation or discrimination.¹²⁵⁴
- (1930) The OTT Commitment is capable of being implemented effectively and immediately. It applies from the date of the adoption of this decision. It applies to contracts that are concluded after that date, as well as contracts that are already in place at that date. Therefore, from the date of adoption of this Decision, TV broadcasters can insist upon, and monitor, the Notifying Party's compliance with the OTT Commitment.
- (1931) The OTT Commitment would apply for a period of eight years, which appears in line with the investment cycle that OTT service providers take into account when making decisions to launch and maintain OTT services.¹²⁵⁵ The Commission therefore considers that a longer duration would not be necessary and proportionate, also in light of the rapid evolution of the TV sector.
- (1932) However, the OTT Commitment does not seem to prevent the risk that the merged entity could hinder the broadcasters' ability to provide HbbTV services. Although the availability of direct-to-consumer OTT offerings over broadband thanks to the OTT Commitment could also facilitate the use of HbbTV services, the Commission considers that this alone could not prevent the merged entity from hampering this direct, interactive contact, to the damage of final customers. In other words, the OTT Commitment does not appear to be a clear-cut remedy for the concern expressed with respect to the provision of HbbTV services.

The concerns related to partial foreclosure of Pay and FTA TV channels

- (1933) In this respect, the Commission notes, on the basis of the market investigation; the relevance and the rapidly growing importance of OTT TV services, for Pay TV channels and for non-linear services, or for TV packages including Pay TV channels on top of FTA ones (see section VIII.C.2.11.3.6). Therefore, the Commission considers that the OTT Commitment could counterbalance the market power of the merged entity mainly with respect to Pay TV broadcasters. The mere possibility that Pay TV broadcasters might for example start offering their existing and new TV channels OTT directly or through OTT premium operators after having concluded a carriage agreement for those TV channels with the Notifying Party, should confer a degree of leverage on those TV broadcasters.
- (1934) Moreover, the availability on the merged entity's cable network of another (OTT) TV offer by the New Cable Provider could help further reduce the market power of

¹²⁵⁴ Regulation (EU) 2015/2120 of the European Parliament and of the Council of 25 November 2015 laying down measures concerning open internet access and amending Directive 2002/22/EC on universal service and users' rights relating to electronic communications networks and services and Regulation (EU) No 531/2012 on roaming on public mobile communications networks within the Union, in OJ L 310, 26.11.2015, p. 1.

¹²⁵⁵ Commission Decision of 30 May 2018 in case M.7000, *Liberty Global/Ziggo*, paragraph 806.

the merged entity vis-à-vis mainly Pay TV broadcasters, as they could be able to reach cable customers through the OTT TV offer of the New Cable Provider (or of third parties active via an agreement with the New Cable Provider). As already reported in Section IX.3.1.2, the majority of the TV broadcasters stated that they would be interested in their channels being included in the New Cable Provider's OTT TV platform or in third parties' OTT TV platform distributed by the New Cable Provider via the WCBA, in particular because the OTT services are rapidly expanding and the new platform will be active in the footprint of the merged entity. TV broadcasters would be free to distribute their TV channels on OTT via the New Cable Provider's high-speed broadband access offering. The general application of the OTT Commitment and the availability of new Pay TV offers by OTT premium operators on the cable network thanks to the WCBA Commitment can offer the appropriate market conditions in order for a proper and rapid development of Pay TV OTT offers, as a counterbalance of the market power of the traditional TV platforms. In other words, the OTT Commitment would remove the possible obstacles that the merged entity could pose to the full development of real alternative OTT offers, in particular by OTT premium operators. The merged entity would have less incentive to degrade its Pay TV offer to the detriment of final viewers through total or partial foreclosure of TV channels, as its customers would have the realistic possibility to switch to alternative OTT offers, in particular by OTT premium operators, available also on cable due to the Commitments. The offers of OTT premium operators would then be available to all the merged entity's cable customers, even to those who already acquire basic TV services from the merged entity. Furthermore, the OTT Commitment, together with the WBCA Commitment, could thus also represent a valid alternative for small Pay TV channels not broadcast by the merged entity.

- (1935) However, the Commission considers that the OTT Commitment is not completely effective in addressing the competition concerns with respect to the increased market power of the merged entity vis-à-vis FTA TV broadcasters. As explained in section VIII.C.2.11.3.6 and in accordance with the results of the market investigation, the role of OTT services for the stand-alone distribution of FTA linear channels is still relatively limited, in particular for certain category of customers. Although the market is evolving rapidly, the competitive constraint of OTT FTA linear offers, even considering the possible development following the implementation of the Commitments, does not seem sufficiently relevant to counterbalance the increased market power of the merged entity in the wholesale TV signal market as regard FTA TV channels. As explained in section VIII.C.2.11.3.6, OTT services have already a relevant role in the provision of premium services and of some FTA non-linear services (VOD). The OTT Commitment could allow FTA TV broadcasters to provide some additional services through their direct offers, but considering the present limited diffusion of OTT linear distributors and that basic TV (MDU) customers of the Parties are normally less contestable (as they generally pay basic TV services as part of their rent), it is doubtful that this remedy would be sufficient on its own to completely offset the competitive concerns resulting from the Transaction as regards FTA TV.
- (1936) Therefore, the OTT Commitment would have only a partial effect on the FTA TV offers and it does not in itself sufficiently counterbalance the risk that the merged entity would be able to reduce the breadth and the quality of the TV offer to retail customers.

3.1.3.3. Overall assessment

- (1937) In light of all the above, the Commission considers that the First Commitments were insufficient to eliminate the competition concerns raised by the Transaction.

3.2. The Final Commitments

3.2.1. Description of the Final Commitments

3.2.1.1. WCBA Commitment

(1938) The revised WCBA Commitment is identical in all material aspects except for the following changes:

- (a) [CONFIDENTIAL CONTRACT INFORMATION]
- (b) [CONFIDENTIAL CONTRACT INFORMATION]

3.2.1.2. OTT Commitment and additional commitments to limit the merged entity's market power vis-à-vis broadcasters in the wholesale TV signal transmission market

(1939) The revised OTT Commitment is identical in all material aspects except for the following change:

- (a) Definition of the agreements covered: it has been added that the OTT Commitment applies also to commercial negotiations and agreements that include the distribution of a broadcaster's platform offering linear channels and catch-up TV services relating to content on such linear channels via DVB-C in Germany.

(1940) In addition, Vodafone submitted additional commitments aimed at limiting the merged entity's market power vis-à-vis broadcasters in the wholesale TV signal transmission market.

(1941) Under the **Feed-in Fee Commitment**, Vodafone seeks to ensure that it will not have the ability to increase the feed-in fees¹²⁵⁶ paid by FTA broadcasters. For this purpose, Vodafone shall send no later than four weeks from the date of the adoption of this Decision an irrevocable offer, annexed to the Final Commitments to all FTA broadcasters¹²⁵⁷ setting out Vodafone's obligations as follows:

- (a) Vodafone and Unitymedia will not increase the fees per connected household;
- (b) Vodafone and/or Unitymedia may, with the broadcaster's consent, amend the structure or other aspects of the feed-in fees, for example for the purposes of network integration. Under any amended feed-in contract¹²⁵⁸, the feed-in fees will not exceed the sum of the feed-in fees due under each of Vodafone's and Unitymedia's current rate cards for feed-in fees, annexed to the Commitment. This obligation also applies if the feed-in contract has ended and Vodafone and/or Unitymedia enter into a new feed-in agreement or agree on the feed-in of additional TV programs.

¹²⁵⁶ Defined as fees per connected household that a FTA broadcaster pays to Vodafone and/or Unitymedia (or the merged entity) for the transmission of the FTA broadcaster's free-to-air TV channels in their respective cable networks (or in the merged entity's combined cable network) to the connected households.

¹²⁵⁷ Defined as any broadcaster providing free-to-air TV channels (a list is annexed to the Final Commitments).

¹²⁵⁸ Defined as framework/cooperation as well as further agreements between one of the Parties and a FTA broadcaster, including for example separate feed-in agreements (that is to say, any feed-in fee agreement between one of the Parties (or the merged entity) and a FTA Broadcaster with respect to the wholesale signal transmission by that Party over its cable network (or by the merged entity over the combined cable network) of the FTA Broadcaster's free-to-air TV channels in exchange for the payment of feed-in fees by the FTA Broadcaster to that Party (or to the merged entity) as well as any further agreements.)

- (1942) Where the merged entity enters into a feed-in agreement with a FTA broadcaster that does not currently have a feed-in agreement with one of the Parties, the feed-in fees included in that feed-in agreement shall not exceed the rates set out in Vodafone's and Unitymedia's standard rates cards for FTA channels.
- (1943) All other provisions of the feed-in agreements remain unaffected by the Feed-in Fee Commitment.
- (1944) Under the **HbbTV Commitment**, Vodafone seeks to ensure that it will have no ability to refuse to continue carrying the HbbTV signal¹²⁵⁹ of FTA broadcasters over its Cable Network. For this purpose, Vodafone shall send no later than four weeks from the date of the adoption of the Decision an irrevocable offer (annexed to the Final Commitments) to all FTA broadcasters setting out Vodafone's obligations as follows:
- (a) Vodafone and Unitymedia will continue to transmit HbbTV signals together with any TV programs Vodafone transmits in DVB-C format;
 - (b) Vodafone and/or Unitymedia may, with the broadcaster's consent, amend any obligation to transmit HbbTV signals. Under any amended feed-in contract providing for the transmission of TV signal in the DVB-C standard, Vodafone and Unitymedia will transmit the broadcaster's HbbTV signals in their cable networks at least under the following minimum technical terms and without charging any fees for such transmission: HbbTV signal consists of AIT (application information tables) and stream events (in the transmission standard DSM-CC), which will be included in the HbbTV signal. The HbbTV signal may have a maximum data rate of 15 kbit/s per TV program (SD or HD). The obligation also applies to any agreement to transmit HbbTV signal together with TV programs in the DVB-C standard that is not currently covered by an agreement to transmit HbbTV or upon expiry of such agreement and/or feed-in contract.
- (1945) The obligation to transmit HbbTV signals in the cable network does not include any obligation of Vodafone or Unitymedia in connection with the functionality of their or any third parties' customer premises equipment, in particular, no obligation to design or change customer premises equipment in such a way that they react to HbbTV signals.
- (1946) In terms of duration, the Feed-in Fee and HbbTV Commitment are offered for a period of eight years from the date of the adoption of the Decision.

3.2.1.3. Monitoring and Arbitration

- (1947) Finally, the provisions concerning monitoring and arbitration of the Final Commitments are identical in all material aspects except for the following changes:
- (a) The definition of a "Working Day" has been clarified;
 - (b) The application of the Fast Track Dispute Resolution Mechanism has been clarified stating that it can only be relied upon if the New Cable Provider is not using any other formal dispute resolution procedure in relation to the same dispute;

¹²⁵⁹

Defined as the hybrid broadcast broadband TV signal of a FTA Broadcaster with respect to one or more of its channels, consisting of application information tables and stream events included in the DVB-C broadcast.

- (c) BNetzA's advisory role with regard to certain aspects of the WCBA Commitment has been included. At any point in time, the Monitoring Trustee may seek the expert advisory opinion of BNetzA on specific issues concerning: (i) the German regulatory framework for telecommunications, (ii) changes to the publically regulated Deutsche Telekom Layer 3 DSL bitstream contingent pricing, and (iii) technical aspects of the implementation of the WCBA Commitment.

3.2.2. *The Commission's assessment of the Final Commitments*

3.2.2.1. WCBA Commitment

- (1948) As regards the revised WCBA Commitment, the Commission considers that the improvements made under the Final Commitments fully address the Commission's concerns with regard to the WCBA Commitment under the First Commitments.
- (1949) Firstly, the revised final WCBA Commitment includes [CONFIDENTIAL CONTRACT INFORMATION].
- (1950) As discussed in recital (1938)(a), [CONFIDENTIAL CONTRACT INFORMATION].
- (1951) Secondly, the final WCBA Commitment includes [CONFIDENTIAL CONTRACT INFORMATION].
- (1952) Finally, the Commission notes that BNetzA will have an advisory role within the Monitoring Trustee's review of Vodafone's compliance with the WCBA Commitment, in particular in relation to changes to the publically regulated Deutsche Telekom Layer 3 DSL bitstream contingent pricing.
- (1953) With regard to all other aspects, the Commission confirms its analysis carried out in section IX.3.1.3.1, where the Commission concluded that the WCBA Commitment's scope and effectiveness are sufficient in order to eliminate competition concerns in the retail supply of fixed internet access services and 2P bundles in Germany and contributes to the elimination of competition concerns in the market for wholesale TV signal transmission in Germany.

3.2.2.2. OTT Commitment

- (1954) The revised OTT Commitment enlarges the scope of application, as it has been added that the OTT Commitment is applicable also to negotiations and agreements with third-party retail TV platforms for the distribution and/or carriage of their TV content on the merged entity's TV platform. This amendment expressly clarifies that the OTT Commitment also covers negotiations and agreements that relate to the transmission, on the merged entity's network, of all signals composing a third-party retail platform.
- (1955) Therefore, the Commission confirms its analysis carried out in section IX.3.1.3.2, where the Commission concluded that the OTT Commitment would be able (i) to address the competition concern related to the merged entity's ability to hinder the provision of OTT services by TV broadcasters, and (ii) to counterbalance the increased market power of the merged entity vis-à-vis Pay TV broadcasters, so that the breadth and the quality of the TV offer would not be significantly reduced to the detriment of the retail customers.

3.2.2.3. Feed-in Fee Commitment

- (1956) With the Feed-in Fee Commitment the Notifying Party commits not to increase the feed-in fees paid by FTA broadcasters for the transmission of linear TV channels via

Vodafone's cable network in Germany for eight years. The commitment would apply to both current and new FTA agreements.

- (1957) The Commission recalls that feed-in fees are directly connected to the TV signal transmission and are calculated on a non-discriminatory basis. In the complex financial relation between cable TV platforms and FTA TV broadcasters, feed-in fees represent the natural and most relevant payment flow from TV broadcasters to cable TV platforms. Feed-in fees are the price paid by FTA TV broadcasters for the supply of the TV signal by the cable TV platforms. Therefore, this commitment is directly related to the conditions in the wholesale market for the supply of cable TV signal.
- (1958) It has already been highlighted that the fact that the Parties are able to obtain feed-in fees from public and private FTA broadcasters, while not all other TV platforms are able to do so, is a clear indication of the Parties' market power, also because of the economic relevance of the feed-in fees (Section VIII.C.2.11.3.6). The importance of feed-in fees and the risk that increased market power determined by the Transaction could lead to their increase has been underlined by some participants to the market investigation.¹²⁶⁰
- (1959) The Commission considers that although the recent development of value-added TV services has contributed to an increase in the revenues flow from TV platforms to TV broadcasters', feed-in fees still represent an extremely relevant financial element in the contractual relationship between FTA broadcasters and cable TV platforms. Moreover, some elements in the file suggest that the effect of the Transaction on the revenues flow from the merged entity to the TV broadcasters is likely to be limited (section VIII.C.2.11.3.9(ii)), while nothing in the file suggests the same for the feed-in fees. Therefore, a commitment not to increase feed-in fees seems able to counterbalance the risk that the breadth and the quality of the TV offer to retail customers could be reduced, as a result of a significant worsening of the contractual conditions imposed by the merged entity on FTA TV broadcasters. The Feed-in Fee Commitment appears complementary to the OTT Commitment, as it intervenes directly on the financial relationship between the merged entity and the FTA TV broadcasters in relation to traditional, linear TV offers, while the OTT Commitment, as explained, would have an effect for the provision of additional services.
- (1960) Moreover, as already stated (section VIII.C.2.11.3.5), feed-in fees are calculated on a non-discriminatory basis, so that a commitment not to increase them will apply equally in favour of all FTA broadcasters.
- (1961) The Commission further notes that the Feed-in Fee Commitment could be implemented immediately after the adoption of this Decision and could be monitored effectively by market participants.
- (1962) Finally, the Feed-in Fee Commitment would apply for a period of eight years, in line with the OTT Commitment. The Commission considers that this duration is proportionate, considering on the one hand the necessity of an adequate protection for FTA broadcasters and, on the other hand, the rapid evolution in the media sector

¹²⁶⁰

See above, section VIII.C.2.11.3.9, and in particular footnote 791. See also ProSiebenSat's reply to questionnaire Q10, question 37.1 [ID 4058] and Deutsche Telekom, submission of 25 January 2019, *Detrimental effects of the merged entity's significantly increased bargaining power on the audio-visual value chain*, page 14 [ID 3982].

that could lead to significant changes in the competitive scenario in the coming years.

- (1963) With respect to the objections of some respondents of the market test asking for access to IPTV or DVB-C also for the purposes of reducing the market power of the merged entity in the wholesale TV signal transmission, the Commission refers to section IX.3.1.3.1(i) where it has already addressed this issue in respect to the WCBA Commitment. The Commission considers that the OTT Commitment, the Feed-in Fee Commitment and the HbbTV Commitment, considered together, are able to address the competition concerns identified in the wholesale TV signal transmission market and therefore access to IPTV or DVB-C would not be necessary. As explained by the Notifying Party, the Parties and the merged entity would not have sufficient capacity to carry additional channels, with respect to their current offer. Therefore, the only way to provide wholesale access for TV over the cable network would be via a resale arrangement. As a result, the Commission doubts that this solution would effectively reduce the market power of the merged entity vis-à-vis TV broadcasters, considering that any new cable operator on the merged entity's network could only resell to viewers the TV signal of the merged entity.
- (1964) Similarly, the Commission considers that a regulated access obligation to the merged entity's network would be disproportionate and not necessary, as the proposed commitments appear able to address the competition concerns without imposing on the merged entity an open access obligation.
- (1965) Therefore, the Commission concludes that the Feed-in Fee Commitment allows addressing the competition concern related to the merged entity's ability to reduce the breadth and the quality of the TV offer to retail customers, through partial foreclosure of FTA channels, as a consequence of the worsening of the contractual and financial conditions imposed by the merged entity to TV broadcasters.

3.2.2.4. HbbTV Commitment

- (1966) With the HbbTV Commitment, the Notifying Party commits to continue transmitting FTA broadcasters' hybrid broadcast broadband TV signal via the merged entity's cable network in Germany. In particular, the merged entity would both (i) continue to transmit HbbTV signal under the terms of the current existing agreements, and (ii) provide HbbTV signal transmission on at least specified minimum technical terms (in line with current standard terms) for new agreements and new FTA broadcasters.
- (1967) The Commission considers that the HbbTV commitment is adequate to eliminate the concern that the merged entity could hinder the broadcasters' ability to provide additional and innovative services through HbbTV signal as:
 - (a) It is a clear-cut remedy to ensure the continued transmission of FTA Broadcasters' HbbTV Signal by the merged entity following the Transaction.
 - (b) It will ensure that FTA broadcasters can continue to use their HbbTV signal to provide additional services and in particular to direct linear TV viewers to the TV broadcasters' OTT environment.
- (1968) The Commission further notes that the HbbTV Commitment could be implemented immediately after the adoption of this Decision and could be monitored effectively by market participants.
- (1969) The HbbTV Commitment would apply for a period of eight years, in line with the OTT Commitment. The Commission considers that this duration is proportionate, also considering that the HbbTV services are connected with the availability of OTT services (see recital (1931)).

- (1970) The Commission further notes that the HbbTV Commitment, considered together with the OTT Commitment, would allow FTA TV broadcasters to provide other relevant additional services, due to the direct interaction with the final viewers: with the HbbTV signal the TV broadcasters can transmit an IP address with their broadcast signal over the cable network and the viewer can react with the remote control and navigate to the IP address to download/stream additional OTT content. This would further limit any negative effect of the Transaction on the breadth and the quality of the TV offer for German viewers.
- (1971) With regard to the request, made by some participants to the market investigation, that the merged entity adopt customers' receivers technically programmed to process the HbbTV signals, the Commission has already stated that the Parties' decision not to enable their set-top-boxes for HbbTV appears a legitimate commercial decision and in any case it has a limited impact, as most of the Parties' TV customers currently do not have a set-top-box (section VIII.C.2.11.3.9(iii)). Moreover, it has been verified that neither Party had plans to change its approach absent the Transaction. Therefore, the Commission considers that such a commitment would be disproportionate.
- (1972) The Commission concludes that the HbbTV Commitment allows addressing the competition concern related to the merged entity's ability to hinder the provision of HbbTV services – and, via these services, additional innovative services – by TV broadcasters.

3.2.2.5. Overall assessment

- (1973) In light of the considerations made in sections IX.3.1.1 to IX.3.2.2.4, the Commission concludes that the Final Commitments in their entirety are suitable and sufficient to eliminate the competition concerns expressed, according to which the Transaction would result in a significant impediment to effective competition. The Commission also concludes that the Final Commitments are capable of being implemented effectively within a short period of time.

4. SUITABILITY OF TELEFÓNICA AS NEW CABLE PROVIDER

- (1974) The Commission considers that Telefónica complies with the standard purchaser requirements detailed in the Remedies Notice in terms of independence, financial resources and the absence of prima facie competition concerns.

4.1. Independence

- (1975) Based on the submissions of the Notifying Party¹²⁶¹ and Telefónica¹²⁶², the Commission considers that there is no control relationship between Vodafone and Telefónica. It also considers that the limited pre-existing business relationships between the companies does not qualify as control and does not call into question the independence of Unitymedia vis-à-vis the Parties.¹²⁶³ Similarly, the business relationship created by the Cable Broadband Access Agreement does not affect the independence of Telefónica. None of these contractual relationships goes beyond a typical commercial agreement negotiated at arm's length and do not in any way

¹²⁶¹ Parties' suitability paper of 13 June 2019.

¹²⁶² Telefónica's submission 16 May 2019 [ID 6806].

¹²⁶³ In particular, Telefónica and Vodafone have several agreements to terminate fixed, mobile, SMS, MMS and voice traffic on each other's networks, while Telefónica and Unitymedia also have several agreements to terminate fixed voice traffic on each other's fixed networks.

interfere with the operational and/or financial independence of Telefónica vis-à-vis the Parties.

4.2. Financial resources

- (1976) The Commission considers that Telefónica has more than sufficient financial resources to meet the upfront and on-going costs of the WCBA Commitment, and to operate as a viable and active competitive force in competition with the merged entity and other competitors. Based on its 2018 annual report, in Germany the Telefónica Group has revenues of EUR 7.3 billion and generated operating cash flow of EUR 839 million and operating income before depreciation and amortisation of EUR 1.8 million in 2018. Worldwide Telefónica Group generated revenue of EUR 48.7 billion in the financial year 2018, while its pre-tax operating profit for the year was around EUR 5.6 billion.

4.3. Proven expertise

- (1977) The Commission considers that Telefónica have proven expertise to operate as a viable and active competitive force in competition with the merged entity and other competitors. Telefónica is part of the Telefónica Group, a telecommunications and TV provider operating in 17 countries globally. As discussed in section VIII.C Telefónica is already active in Germany in the provision of fixed internet access services and 2P bundles including fixed internet access services and fixed voice services, albeit, as explained in section VIII.C.2.2.2.4.(iii), its ability to compete on the basis of wholesale access to Deutsche Telekom's xDSL network is limited. Telefónica is also active in retail TV services in Germany.

4.4. Ability and incentive to operate as a viable and active competitor

- (1978) In the Market Test, respondents expressed mixed views as to the suitability of Telefónica as New Cable Provider. In particular, half of respondents did not consider that Telefónica would have the ability to effectively compete in the retail supply of fixed internet access services, as well as in the possible market for 2P bundles comprising of fixed Internet access and fixed telephony services, and to operate as an effective distributor of OTT TV services based on the WCBA Commitments, but most of the respondents were not able to provide answers.¹²⁶⁴ Respondents explained that, based on the WCBA Commitment, Telefónica (i) could not replicate infrastructure-based competitors, such as Unitymedia, (ii) would not have the ability or incentive to compete aggressively but will rather migrate its existing customers, and (iii) would continue to have a strategic focus on the mobile rather than the fixed telecommunications markets.
- (1979) While the majority of broadcasters could not provide an answer as to whether Telefónica would be able to operate as an effective distributor of OTT TV services, the majority of broadcasters providing an informative reply considered that Telefónica would be an effective distributor of OTT TV services. Respondents explained that Telefónica's success will depend on whether it can provide a competitive consumer-focused product. About three quarters of broadcasters stated that they would be interested in their channels to be included in Telefónica's OTT TV platform.
- (1980) Some respondents emphasised that Telefónica recently launched an OTT TV service in cooperation with waipu.tv and based on Deutsche Telekom's wholesale offer

¹²⁶⁴

Replies to the Market Test, question 10 and 11.

(xDSL network).¹²⁶⁵ Several broadcasters stated that they are already included in Telefónica's OTT TV offer emphasizing that Telefónica is only a reseller, while waipu.tv., which is owned by Exaring, holds the end customer relationships and licensees the rights to distribute the channels.¹²⁶⁶

- (1981) Telefónica submits that the WCBA Commitment will enhance its ability to compete in the retail supply of fixed internet access services in Germany and in the possible market for 2P bundles comprising of fixed internet access and fixed telephony services and to operate as an effective distributor of OTT TV services.¹²⁶⁷
- (1982) On 12 June 2019, Telefónica provided the Commission with an initial business plan setting out its projections with regard to developing its operations in the supply of fixed internet access services, 2P bundles including fixed internet access services and fixed telephony services and the distribution of OTT TV based on wholesale access to the Combined Network under the WCBA Commitment.¹²⁶⁸
- (1983) As regards the supply of fixed internet access services and 2P bundles including fixed internet access services and fixed telephony services, [CONFIDENTIAL]

Figure25: Telefónica' business plan

[CONFIDENTIAL]

Source: Telefónica's business plan [ID 6810].

(1984) [CONFIDENTIAL]

(1985) [CONFIDENTIAL]

Figure 26: Fixed internet access services subscriber development

[CONFIDENTIAL]

Source: Telefónica's business plan [ID 6810].

(1986) As regards FMC, the Commission notes that [CONFIDENTIAL].¹²⁶⁹
[CONFIDENTIAL]

(1987) [CONFIDENTIAL]

(1988) [CONFIDENTIAL]

(1989) In any event, the Commission notes that, not only [CONFIDENTIAL], but also, under the WCBA Commitment and Cable Broadband Access Agreement, for the first six years of operations on the basis of cable wholesale access, Telefónica has to achieve at least 50% of the Minimum Commitment by acquiring new customers. As explained in section IX.3.2.2.1, this threshold ensures that Telefónica will replace the important competitive constraint that it would be lost as a result of the Transaction in the market for the retail supply of fixed internet access service (and 2P bundles), that is to say Vodafone' DSL business in Unitymedia's footprint. Such constraint was not exerted on the basis of ownership of the network infrastructure, but of wholesale access at advantageous commercial conditions, which are replicated by the WCBA Commitment.

(1990) As regards the supply of TV retail services, [CONFIDENTIAL]

(1991) In light of the above, the Commission considers that, based on the WCBA Commitment, Telefónica have the ability and the incentive to operate as a viable and

¹²⁶⁵ Deutsche Telekom's reply to the Market Test, question 7 [ID 6384].

¹²⁶⁶ RTL's reply to the Market Test, question 8 [ID 6458].

¹²⁶⁷ Telefónica's reply to the Market Test, question 10 and 11.

¹²⁶⁸ Telefónica's reply to RFI 27 [ID 6835].

¹²⁶⁹ In this regard see section VII.6.

active competitive force in competition with the merged entity and other competitors in the markets for the retail supply of fixed internet access service and 2P bundles including fixed internet access service and fixed telephony services as well as retail TV services in Germany.

4.5. Absence of prima facie competition problem

- (1992) The Commission has not identified any prima facie competition concern arising from the implementation of the WCBA Commitment with Telefónica as New Cable Provider.
- (1993) As explained in section VIII.C.2.2.2.4.(iii)., while Telefónica is already active in the retail supply of fixed internet access as well as 2P bundles consisting of fixed internet access and fixed telephony services, Telefónica is not a strong competitor in these markets. Telefónica has by all metrics shares around 5-6%, both at national level and in the Unitymedia footprint. Importantly, Telefónica's growth rate has been negative in recent years. [CONFIDENTIAL]. Telefónica's position is also evidenced in the Parties' internal documents showing that the Parties perceive Telefónica as weak competitor for which the fixed telecommunications markets are not a strategic priority.
- (1994) The WCBA Commitment would strengthen Telefónica as national competitor in the retail supply of fixed internet access (as well as 2P bundles consisting of fixed internet access and fixed telephony services). In light of Telefónica's current limited market position, its negative growth rate in the last years and [CONFIDENTIAL], the Commission considers that the strengthening of Telefónica would not raise any competition concerns. Moreover, while the commercial terms under WCBA Commitment are more attractive than under Deutsche Telekom's Kontingentmodell improving Telefónica's business case as set out in previous section IX.4.4., the increase in Telefónica's competitiveness is not such that it would create competition problems in itself.
- (1995) In the Market Test, respondents raised concerns regarding negative effects of the WCBA Commitments with Telefónica as New Cable Provider in relation to (a) fibre investment and (b) competition in the retail supply of FMC bundles and wholesale access and call origination services.¹²⁷⁰
- (1996) With regard to fibre investments, several respondents claimed that the selection of Telefónica as New Cable Provider would decrease third parties' incentives to invest in fibre infrastructure. According to those respondents, due to the large investment costs for FTTH/FTTB, fibre investors heavily rely on a minimum network utilisation. Such capacity utilisation could not be achieved by the network owner's retail business solely, but would also be achieved via wholesale customers. In the respondents' view, following the entry into force of the WCBA Commitment, business plans and payback periods for the investments would worsen and investments in FTTH/FTTB would become less attractive. Deutsche Telekom states that the potential loss of Telefónica as a wholesale customer, in addition to the loss of Vodafone in Unitymedia's footprint, would decrease the number of municipalities in which fibre investments are economically viable. City carriers see Telefónica as a potential wholesale customer of their own and fear that Telefónica will divert retail customers from fibre to cable.

¹²⁷⁰

Replies to the Market Test, questions 26, 27 and 29.

- (1997) Firstly, as explained in section VIII.C.2.2.2.4.(i), the Commission considers that the assumptions on which these complaints are postulated do not appear to take into account the interaction between investments and retail competition. In particular, the Commission notes that Telefónica's customer acquisition on and migration to the merged entity's cable network could be recaptured as a result of retail competition. In order to compete against the cable providers, Deutsche Telekom and others would have an incentive to invest in fibre to protect their existing retail customers and win new retail customers.
- (1998) Secondly, it is highly uncertain whether and to what extent Telefónica, absent the WCBA Commitment would have relied on wholesale access to fibre (the terms of which remain uncertain and will most likely not be regulated (see section VIII.C.2.2.2.1.(ii)), rather than remaining on the regulated wholesale access to Deutsche Telekom's DSL network, and therefore would have constituted a potential wholesale customer for city carriers.
- (1999) Thirdly, as regards Deutsche Telekom's potential loss of a wholesale customer, the Commission notes that the WCBA Commitment is limited to one beneficiary, Telefónica, and that [CONFIDENTIAL]
- (2000) Finally, the Commission notes that, in any event, wholesale competition may also have a positive effect on Deutsche Telekom's and third parties' fibre investment. Given that the WCBA Commitment is limited at speeds of 300 Mbit/s and 500 Mbit/s under certain conditions, alternative wholesale suppliers will have an incentive to offer faster speeds based on fibre in order to limit Telefónica's migration to cable or achieve it as a new wholesale customer. The increased incentives to invest in fibre through wholesale competition come in addition to the increased incentives through retail competition.
- (2001) With regard to competition in the retail supply of FMC bundles, several respondents expressed the concern that the strengthening of Telefónica through the WCBA Commitment could foster the oligopoly between the three main providers of mobile telecommunications services, Deutsche Telekom, Vodafone and Telefónica, and extend such oligopoly from mobile telecommunications services to fixed telecommunications services and then to FMC bundles.¹²⁷¹ Respondents referred to the already existing and growing market of FMC products and expressed the view the WCBA Commitment could accelerate fixed-mobile convergence in Germany. Moreover, in the respondents' view, the WCBA Commitment may worsen Telefónica's incentives to provide wholesale access and call origination services to alternative fixed network operators. These respondents suggest that the WCBA Commitment should be extended to other players in order to avoid foreclosure of smaller players.
- (2002) In this regard the Commission notes that, as explained throughout this Decision (sections VII.6., VIII.C.2.8., VIII.C.2.10. and VIII.C.5), FMC penetration is very low in Germany. According to third party reports, in 2017 around 8.4% of households, or 10.8% of the fixed broadband base, that is to say, 3.5 million households, purchase an FMC product.¹²⁷² Conversely, third party reports estimate that in 2017 5.4% of

¹²⁷¹ [CONFIDENTIAL] However, this concern has not be raised by either the FCO or the BNetzA who were both aware of the conclusion of the agreement between Vodafone and Telefónica during the ongoing 5G auction [CONFIDENTIAL]

¹²⁷² E.g. Analysis Mason, Fixed-Mobile Convergence in Europe: Trends And Forecasts 2017–2022, Annex 6.C.XIII.1 to the Form CO. See also the other studies cited in the previous footnote.

mobile customers purchase a bundle including a fixed broadband connection.¹²⁷³ The current low penetration of FMC offers in Germany is confirmed by the Parties' competitors in the market investigation. For instance, a study submitted by United Internet shows that Germany is the country with the lowest uptake of FMC by households.¹²⁷⁴ United Internet also submitted a presentation of Vodafone of 2017 showing that Germany is the country with the slowest speed of convergence among the countries where Vodafone is active.¹²⁷⁵ Absent the Transaction, predicted FMC penetration in Germany in 2022 is 24.3% as a proportion of the fixed broadband base, (21% as a proportion of households) or 16% as proportion of mobile contracts, ranking Germany, respectively, second and third to last of the ten EU Member States covered by the data provided by the Notifying Party.¹²⁷⁶

(2003) [CONFIDENTIAL]

(2004) In light of the limited current FMC penetration and its predicted evolution, the Commission considers that the strengthening of Telefónica's fixed business is not likely to lead to a foreclosure of operators active in the supply of standalone fixed or mobile telecommunications services. Firstly, Telefónica has already been active in the FMC segment pre-Transaction. Secondly, the WCBA Commitment leads to a moderate increase in Telefónica's ability and incentive to offer FMC bundles. Thirdly, even if Telefónica was significantly strengthened based on the WCBA Commitment, while increasing competition in the FMC segment, this would not lead to a foreclosure of standalone players given the limited the size of the FMC segment.

(2005) For similar reasons, the Commission considers that the WCBA Commitment will have limited effects with regard to Telefónica's incentive to provide wholesale access and call origination services on public mobile networks. Firstly, the WCBA Commitment is not likely to significantly increase Telefónica's position in the FMC segment. Secondly, even if Telefónica's position in the FMC segment was significantly strengthened, due to the limited size of the FMC segment, its incentives to foreclose standalone fixed operators would remain limited. Thirdly, Telefónica is in any case under the obligation to provide wholesale access at "best prices" until [CONFIDENTIAL] (see section VIII.C.4.1. for more details).

5. THE FRAMEWORK AGREEMENT

(2006) Finally, the Commission has assessed the Framework Agreement between Telefónica and Vodafone and related amendment. The Commission considers that the terms of the Framework Agreement are consistent with the Final Commitments.

6. CONCLUSION

(2007) In the light of the above, the Commission considers the Final Commitments capable of rendering the Transaction compatible with the internal market and the EEA Agreement as it will not create a significant impediment to effective competition in all relevant markets in which competition concerns were identified.

¹²⁷³ See Parties' reply to RFI 33, question 1.2.

¹²⁷⁴ Bain & Company, Fixed-Mobile Convergence: Quarterly State of Play 18Q4, 18 March 2019, slides 11, 12, 13 [ID 6367].

¹²⁷⁵ Vodafone's presentation, Fixed Convergence Open Office, 19 September 2017, slides 11 [ID 6375].

¹²⁷⁶ See Form CO, Section 6, paragraph 6.1204(iii), based on Analysys Mason, Fixed-Mobile Convergence in Europe: Trends And Forecasts 2017–2022, Annex 6.C.XIII.1 to the Form CO. See Parties' reply to RFI 33, question 1.2.

- (2008) Moreover, the Commission considers that the Framework Agreement (as amended) between the Vodafone and Telefónica is compliant with the Final Commitments and that Telefónica is a suitable New Cable Provider pursuant to the Final Commitments.

X. CONDITIONS AND OBLIGATIONS

- (2009) Pursuant to the second subparagraph of Article 8(2) of the Merger Regulation, the Commission may attach to its decision conditions and obligations intended to ensure that the undertakings concerned comply with the commitments they have entered into vis-à-vis the Commission with a view to rendering the concentration compatible with the internal market.
- (2010) The fulfilment of a measure that gives rise to a structural change of the market is a condition, whereas the implementing steps which are necessary to achieve this result are generally obligations on the parties. Where a condition is not fulfilled, the Commission's decision declaring the concentration compatible with the internal market is no longer applicable. Where the undertakings concerned commit a breach of an obligation, the Commission may revoke the clearance decision in accordance with Article 8(6) of the Merger Regulation. The undertakings concerned may also be subject to fines and periodic penalty payments under Articles 14(2) and 15(1) of the Merger Regulation.
- (2011) In accordance with the basic distinction described in recital (2009) as regards conditions and obligations, this Decision should be made conditional on the full compliance by the Notifying Party with the Section B.I (including annexes A.1 to A.5) and Section B.II (including annexes B.1 to B.3, C.1 and C.2) of the Final Commitments and all other Sections should be obligations within the meaning of Article 8(2) of the Merger Regulation. The full text of the Final Commitments is set out in the Annex to this Decision and forms an integral part thereof.

HAS ADOPTED THIS DECISION:

Article 1

The notified operation whereby Vodafone Group Plc acquires sole control of Liberty Global Plc's telecommunications businesses in Czechia, Germany, Hungary and Romania is hereby declared compatible with the internal market and the EEA Agreement pursuant to Article 8(2) of Regulation (EC) No 139/2004 and Article 57 of the EEA Agreement.

Article 2

Article 1 is subject to compliance with the conditions set out in Section B.I, including annexes A.1 to A.5, and Section B.II, including annexes B.1 to B.3, C.1 and C.2, of Annex II.

Article 3

Vodafone Group Plc shall comply with the obligations set out in the Sections C to G of Annex II not referred to in Article 2 of this Decision.

Article 4

This Decision is addressed to:

Vodafone Group Plc
One Kingdom Street
Paddington Central
London, W2 6BY
United Kingdom

Done at Brussels,

For the Commission

(Signed)
Margrethe VESTAGER
Member of the Commission

Annex I: Market reconstruction

- (1) This annex describes the methodology and presents the results of the Commission's market reconstruction. The Commission has analysed subscriber market shares for the retail supply of fixed Internet services for the financial years 2016/17, 2017/18 and 2018 Q2 at different geographical levels. The market shares have been computed on national and Unitymedia footprint level, distinguishing further between federal states and districts within Unitymedia's footprint.
- (2) The Commission has collected subscriber data for fixed broadband services at national level and, within the Unitymedia footprint, at postal code level from the Parties¹, Deutsche Telekom², NetCologne³ and EWE⁴. Deutsche Telekom provided data for both its retail and wholesale business at postal code level. The subscriber data for wholesale customers relying on Deutsche Telekom's access products excludes Vodafone. In addition, Vodafone provided data on wholesale lines rented out to United Internet.
- (3) The total market size at each regional level is calculated by aggregating subscriber data for the Parties and third-party competitors, including Vodafone's reselling business to United Internet and Deutsche Telekom's wholesale business (with firms other than Vodafone).
- (4) The postal code data are aggregated to district, federal state, Unitymedia footprint and national level.⁵ A district (and its postal codes) do not always map accurately to the Unitymedia cable footprint. This is because within a district, there may be some homes that are passed by Unitymedia's network, but others that are not passed by Unitymedia's network. Thus, Unitymedia may have only partial coverage within a district. The inclusion of low network coverage areas therefore underestimates Unitymedia's market share at Unitymedia footprint, federal state and district level.

¹ Vodafone, reply to data RFI 7, 8, 15, 17, 21 and RFI 24. Unitymedia, reply to data RFI 7, 8, 16 and 18. Vodafone could not provide subscriber data for fixed voice and fixed broadband products separately (at postal code level) and thus their data also contain subscribers of fixed voice only products. However, according to Vodafone's subscriber data by product bundles at national and footprint level, fixed voice only subscribers account for a negligible share of subscribers (cf. data RFI 7 and 17). If regards Unitymedia, data for which the postal code is unidentified or assigned to "99999" are only considered at national level.

² Deutsche Telekom, reply to data RFI 1. Most figures are only available at prefix level and not at postal code level. In order to calculate the number of subscribers (wholesale and retail) on the postal code level, data by Nexiga were used. This data provide information on the number of households in each prefix and post code area as well as the number of households in the intersections of these two areas. Deutsche Telekom's wholesale data might include fixed voice only products offered by access seekers. However, these products are of low relevance for access seekers and most of the offer fixed voice only in a product bundle with fixed broadband.

³ NetCologne, reply to data RFI 3 and 25. Only subscribers served via Net Cologne's own infrastructure are considered as NetCologne subscribers in the analysis. The remaining customers of NetCologne are included in the wholesale data from Deutsche Telekom.

⁴ EWE, reply to data RFI 23. Only subscribers served via EWE's own infrastructure are considered as EWE subscribers in the analysis. The remaining customers of EWE are included in the wholesale data from Deutsche Telekom. EWE has not provided data at postal code level, therefore its data is only included in the analysis at national level.

⁵ The analysis at district, footprint and federal state level includes only districts that are covered by Unitymedia's cable network in Baden-Württemberg, Hessen and Nordrhein-Westfalen.

- (5) In addition to market shares, the Commission has calculated the number of households based on Deutsche Telekom data and Unitymedia's network coverage (homes passed) for the year 2017/18.
- (6) The combined market share of the Parties and the increment for the years 2016/17, 2017/18 and 2018 Q2 are shown in Table 1.

Table 1: Parties' subscriber shares for the retail supply of fixed Internet services for the years 2016/17, 2017/18 and 2018q2
[CONFIDENTIAL]

Aggregation	No. of households	Network coverage (%)	2016/17		2017/18		2018 Q2	
			Combine d market share (%)	Incre- ment(%)	Combine d market share (%)	Incre- ment(%)	Combine d market share (%)	Incre- ment(%)
National	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
UM footprint	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Baden-Württemberg	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Hessen	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
Nordrhein-Westfalen	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
BW: Stuttgart	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
BW: Mannheim	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
BW: Karlsruhe	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
BW: Freiburg	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
BW: Residual	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
HE: Frankfurt a. M.	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
HE: Wiesbaden	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
HE: Kassel	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
HE: Residual	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
NRW: Köln	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
NRW: Düsseldorf	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
NRW: Essen	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
NRW: Dortmund	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
NRW: Duisburg	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
NRW: Bochum	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
NRW: Wuppertal	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
NRW: Münster	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
NRW: Bielefeld	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
NRW: Bonn	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
NRW: Aachen	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
NRW: M'gladbach	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
NRW: Gelsenkirchen	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
NRW: Krefeld	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
NRW: Oberhausen	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]
NRW: Residual	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]	[CONF]

Source: Commission computation based on subscriber, household and network coverage data provided by Vodafone, Unitymedia, Deutsche Telekom, NetCologne and EWE.

- (7) At national level, the merged entity would have a market share by subscribers of [CONFIDENTIAL]% in 2017/18 with an increment of [CONFIDENTIAL]%. The Parties' combined market share in Unitymedia's footprint would be [CONFIDENTIAL]% with an increment of [CONFIDENTIAL]%. At footprint level, the market shares of the Commission's analysis are lower than the market shares calculated by Notifying Party in the Form CO due to different methodologies applied to define the Unitymedia footprint. The Notifying Party uses marketable households as market size, while the Commission has used, as explained in paragraph (4), all households in a given district to proxy market size, even if there is only partial network coverage in the respective region.⁶
- (8) The more granular analysis at federal state level shows that the Parties have the highest combined market share in [CONFIDENTIAL] with [CONFIDENTIAL]% and an increment of [CONFIDENTIAL]% in 2017/18. The district level analysis shows that the merged entity would have more than 50% market share in some large cities (over 100,000 households) and an increment of over 20% in some cities. Furthermore, as Unitymedia's network has higher coverage in large cities and lower network coverage in rural areas, the combined market share is lower in the residual districts that include also rural areas.
- (9) Notably, the combined market share of the Parties is comparably low in [CONFIDENTIAL], despite high network coverage by Unitymedia. [CONFIDENTIAL].
- (10) The combined market share of the Parties grew over time at each geographical level.
- (11) The diversion ratios between the Parties⁷ at Unitymedia footprint level are in line with the diversion implied by market shares that are based on the more complete subscriber data. The diversion presented based on porting data from Vodafone to Unitymedia is [...] and from Unitymedia to Vodafone [...] than the diversion ratios based on market share data in 2017/18.

⁶ This is also the reason why the footprint size (measured in homes/household) differs between the Commission's analysis and the Notifying Party's calculations.

⁷ The diversion ratios are presented in Table 8 and 9 in the Decision.

Case M.8864 — Vodafone/Certain Liberty Global Assets

COMMITMENTS TO THE EUROPEAN COMMISSION

Pursuant to Article 8(2) of Council Regulation (EC) No 139/2004 (the “**EUMR**”), Vodafone Group plc (with its Affiliated Undertakings, “**Vodafone**”) hereby enters into the following commitments (the “**Commitments**”) *vis-à-vis* the European Commission (the “**Commission**”) with a view to rendering the acquisition by Vodafone of Liberty Global plc’s (with its Affiliated Undertakings, “**Liberty Global**”, and together with Vodafone, the “**Parties**”) telecommunications business in Germany (“**Unitymedia GmbH**”) (the “**Transaction**”) compatible with the internal market and the functioning of the EEA Agreement.

This text shall be interpreted in light of the Commission's decision pursuant to Article 8(2) of the EUMR to declare the concentration compatible with the internal market and the functioning of the EEA Agreement (the “**Decision**”), in the general framework of European Union law, in particular in light of the EUMR, and by reference to the Commission Notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 (the “**Remedies Notice**”).

Section A. Definitions

For the purpose of the Commitments, the following terms shall have the following meaning:

Access Date: has the meaning given in paragraph 11.

Affiliated Undertakings: any undertakings controlled by the Parties, whereby the notion of control shall be interpreted pursuant to Article 3 of the EUMR and in light of the Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings.

Broadband Customers: consumers located in Germany that have a subscription to the Merged Entity’s broadband internet services either on a stand-alone basis or as part of a bundle.

Broadcaster: a provider of one or more linear TV channels.

Cable Broadband Access Agreement: has the meaning given in paragraph 10.

Cable Network: Vodafone’s coaxial cable infrastructure in the Combined Footprint post-Transaction.

Closing: the completion of the Transaction.

Combined Footprint: the technical reach of the Parties’ combined cable networks in Germany.

Confidential Information: any business secret, know-how, commercial information, or any other information of a proprietary nature that is not in the public domain.

Conflict of Interest: any conflict of interest that impairs the Monitoring Trustee's objectivity and independence in discharging its duties under the Commitments.

Daily Peak Utilization: the daily 95th percentile over 5-minute average bits transferred sample intervals (technically Vodafone takes 288 measurements of interface bit input counters per day, the highest 14 values are discarded and 15th highest is used for this purpose) of the sum of measured inbound capacity.

Effective Date: the date of adoption of the Decision.

Feed-In Agreement: any agreement between one of the Parties (or the Merged Entity) and a FTA Broadcaster with respect to the wholesale signal transmission by that Party over its cable network (or by the Merged Entity over the combined cable network) of the FTA Broadcaster's free-to-air TV channels in exchange for the payment of Feed-in Fees by the FTA Broadcaster to that Party (or to the Merged Entity).

Feed-in Fees: fees per connected household that a FTA Broadcaster pays to Vodafone and/or Unitymedia (or the Merged Entity) for the transmission of the FTA Broadcaster's free-to-air TV channels in their respective cable networks (or in the Merged Entity's combined cable network) to the connected households.

FTA Broadcaster: any Broadcaster providing free-to-air TV channels.

HbbTV Signal: the hybrid broadcast broadband TV signal of a FTA Broadcaster with respect to one or more of its channels, consisting of application information tables and stream events included in the DVB-C broadcast.

Merged Entity: the combined business of Vodafone and Unitymedia in Germany following completion of the Transaction.

Monitoring Trustee: one or more natural or legal person(s), independent from the Parties and their respective Affiliated Undertakings, who is approved by the Commission and appointed by Vodafone, and who has the duty to monitor Vodafone's compliance with the conditions and obligations attached to the Decision.

Network Readiness: has the meaning given in paragraph 11.

New Cable Provider: Telefónica Germany GmbH & Co. OHG.

OTT Service: any service that allows consumers access to audio-visual content, whether linear or non-linear, over the internet (howsoever delivered) via one or more devices.

Transaction: the proposed acquisition by Vodafone of Liberty Global's telecommunications businesses in the Czech Republic, Germany, Hungary and Romania.

Unitymedia: Unitymedia GmbH.

Vodafone DSL: Vodafone's DSL (digital subscriber line) broadband product offered to retail customers, which is based on regulated wholesale access to Deutsche Telekom's fixed telecommunications network in Germany.

Vodafone's TV Platform: television content distributed pursuant to a contract for such distribution on the Merged Entity's cable network and/or IPTV platforms, as well as their mobile network, in Germany.

Wholesale Cable Broadband Access: has the meaning given in paragraph 7.

Working Day: refers to the calendar followed by the Federal Republic of Germany. For the avoidance of doubt, this shall not include Saturdays or Sundays.

Section B.I

The Commitment to provide Wholesale Cable Broadband Access

7. Vodafone commits to provide the New Cable Provider with wholesale access to the Cable Network, in order for the New Cable Provider to be able to offer retail broadband services (and, if desired, fixed voice services) throughout the Cable Network, in accordance with paragraph 11 below ("**Wholesale Cable Broadband Access**").
8. The Transaction shall not be implemented before Vodafone has entered into a final binding Cable Broadband Access Agreement and the Commission has approved the Cable Broadband Access Agreement. Vodafone shall be deemed to have complied with these Commitments if by Closing, Vodafone has entered into a final binding Cable Broadband Access Agreement with the New Cable Provider and the Commission has approved the Cable Broadband Access Agreement.
9. In order to maintain the structural effect of the Commitments, Vodafone shall, for a period of ten (10) years after Closing, not acquire, whether directly or indirectly, the possibility of exercising influence (as defined in paragraph 43 of the Remedies Notice, footnote 3) over the whole or part of the New Cable Provider's activities in relation to the supply of retail fixed broadband services (and fixed voice services, if applicable) in Germany unless, following the submission of a reasoned request from Vodafone showing good cause and accompanied by a report from the Monitoring Trustee (as provided in paragraph 84 of the Commitments), the Commission finds that the structure of the market has changed to such an extent that the absence of influence over the New Cable Provider's activities is no longer necessary to render the Transaction compatible with the internal market.

Wholesale Cable Broadband Access

10. Vodafone commits that it shall enter into an agreement (including any ancillary agreements) for the provision of Wholesale Cable Broadband Access to the New Cable Provider in the Combined Footprint on substantially the terms set out in paragraph 11 below (the "**Cable Broadband Access Agreement**").
11. Wholesale Cable Broadband Access shall be provided to the New Cable Provider on substantially the following terms:
 - 11.1.1. The Cable Network shall be enabled for the provision of Wholesale Cable Broadband Access to the New Cable Provider as soon as practicable and in any event within [...] of Closing ("**Access Date**"), subject to any delays caused by

acts or omissions of the New Cable Provider or otherwise outside the control of the Parties ("**Network Readiness**"). The procedure by which Network Readiness is achieved shall be substantially in accordance with Annex A.1;

- 11.1.2. Wholesale Cable Broadband Access shall be provided to the New Cable Provider on the retail fixed broadband download and upload speeds set out in Annex A.2 (or as otherwise agreed by Vodafone and the New Cable Provider with the approval of the Monitoring Trustee);
- 11.1.3. The New Cable Provider shall commit to purchase from Vodafone, on an annual upfront basis for so long as the Cable Broadband Access Agreement remains in operation, a minimum number of cable connections as set out in Annex A.3;
- 11.1.4. In consideration for the provision of Wholesale Cable Broadband Access, the New Cable Provider shall pay to Vodafone the fees set out in Annex A.4;
- 11.1.5. Vodafone shall make available sufficient capacity on the Cable Network to accommodate traffic of the New Cable Provider and, to the extent necessary, Vodafone shall make any capacity expansions that are necessary to accommodate traffic from the New Cable Provider as at the Access Date (but the New Cable Provider shall bear sole responsibility for requesting sufficient interface capacity to enable Vodafone to handover the New Cable Provider's traffic);
- 11.1.6. Vodafone shall provide Wholesale Cable Broadband Access on a non-discriminatory basis, meaning that Vodafone shall treat the traffic of access seekers in the same way as Vodafone's own traffic on the Cable Network and, in particular, Vodafone shall (subject to the cooperation of the New Cable Provider) apply the same prioritisation rules to the New Cable Provider's traffic as Vodafone applies to its own traffic on the Cable Network. For the avoidance of doubt, this excludes any differences in quality of service due to elements installed, owned or controlled by the New Cable Provider and which are outside the scope of the Wholesale Cable Broadband Access commitment;
- 11.1.7. Vodafone shall be responsible for second and third line technical support services in connection with the Cable Network as set out in Annex A.5 (but Vodafone shall not, for the avoidance of doubt, be responsible for first line technical support);
- 11.1.8. Vodafone shall handle the New Cable Provider's voice traffic in the Combined Footprint (including handover to the New Cable Provider) on the same basis as it handles its own voice traffic in the Combined Footprint. The New Cable Provider shall be solely responsible for all other services required in order to be able to offer retail voice services; and
- 11.1.9. Wholesale Cable Broadband Access under the Cable Broadband Access Agreement shall be provided for a minimum term of [...] from the Access Date, which shall be extendable by [...] unless terminated by either of the parties on [...] notice prior to the end of the initial [...] term.

Section B.II

The Commitment not to restrict OTT distribution of content

12. By the below commitment (the “**OTT Commitment**”), Vodafone seeks to remove any link that could exist between:
 - 12.1.1. Commercial negotiations of the Merged Entity with Broadcasters, and conditions agreed with Broadcasters in such negotiations, regarding the distribution of Broadcasters' linear channels and catch-up TV services relating to content on such linear channels via Vodafone's TV Platform, and/or the distribution of Broadcasters' platforms offering linear channels and catch-up TV services relating to content on such linear channels via DVB-C, in Germany; and
 - 12.1.2. Such Broadcasters' OTT activities, including as regards the content that such Broadcasters could offer for inclusion in such OTT activities.
13. As of the Effective Date, Vodafone shall not enter into or renew any agreement (whether in writing or oral and whether formal or informal, including but not limited to e-mails, side letters or other) with a Broadcaster that includes the distribution of such Broadcaster's linear channels and catch-up TV services relating to content in such linear channels via Vodafone's TV Platform, and/or the distribution of a Broadcaster's platform offering linear channels and catch-up TV services relating to content on such linear channels via DVB-C, in Germany and that contains terms that would directly or indirectly restrict such Broadcaster's ability to offer to third parties and/or end-users, on a stand-alone basis or in partnership with another entity or third party:
 - 13.1.1. An OTT Service in Germany;
 - 13.1.2. Its linear channels via an OTT Service in Germany; or
 - 13.1.3. Any content owned and controlled by such Broadcaster (that is to say any content in respect of which that Broadcaster holds the relevant intellectual property rights for OTT distribution in Germany, for so long as it is so owned and controlled), including content from such linear channels, for inclusion in an OTT Service in Germany.
14. To the extent any such terms are included in agreements with Broadcasters regarding the distribution of linear channels and catch-up TV services relating to content on such linear channels of such Broadcasters on Vodafone's TV Platform, and/or the distribution of Broadcasters' platforms offering linear channels and catch-up TV services relating to content on such linear channels via DVB-C, in Germany made before the Effective Date, Vodafone shall not enforce such terms and shall promptly after the Effective Date inform the relevant Broadcaster that it waives its rights to enforce such terms and commit to remove such terms from its existing agreements. Furthermore, Vodafone shall not make the entry into or renewal of agreements with Broadcasters regarding the distribution of linear channels and catch-up TV services relating to content on such linear channels of such Broadcasters on Vodafone's TV Platform in Germany in any

way conditional upon the conclusion of a separate agreement with such Broadcasters relating to any OTT Service and/or the linear and non-linear content contained therein.

Interconnection Capacity Commitment

Purpose

15. By the below commitment (the “**Interconnection Capacity Commitment**”), Vodafone seeks to ensure that it maintains at least three uncongested routes into the Merged Entity’s IP network in Germany. By doing this, Vodafone seeks to ensure it has an incentive to provide sufficient interconnection capacity to allow the Merged Entity’s Broadband Customers to access any OTT Service in Germany either via the interconnection points described in paragraph 16 or otherwise.

Practicality

16. To this end, Vodafone will ensure that the Daily Peak Utilization across the Merged Entity’s interconnection points with each of a group of at least three (3) reputable interconnectivity providers (ICPs) who are willing to sell transit services via one or more physical interconnection points in Germany over which traffic may flow to Broadband Customers, will not exceed eighty (80) percent. That is to say that there will be at least twenty (20) per cent capacity available above the daily peak as calculated in arriving at Daily Peak Utilization.
17. Vodafone will further ensure that the capacity available above the daily peak, as calculated in arriving at Daily Peak Utilization across that group of at least three (3) reputable ICPs, shall be at least twenty (20) Gbit/s. This figure shall be reviewed annually in accordance with the procedure described in paragraph 44.
18. Subject to paragraph 19 below, this group of at least three (3) reputable ICPs may vary from time to time but no more than once per quarter generally and once per year in respect of the one (1) ICP declared as being one of the ten (10) largest ICPs in accordance with paragraph 20.
19. By way of exception to paragraph 18, where there is an urgent need to upgrade capacity with a particular ICP and it does not prove possible to agree or implement such upgrade in a timely manner Vodafone will seek the approval of the Commission via the Monitoring Trustee in accordance with paragraph 44 to replace that ICP with another ICP irrespective of when it was last changed. In that case Vodafone will use its reasonable commercial endeavours to agree and implement an upgrade with that ICP and, if it can do so, to immediately return that ICP to the group of three (3), in place of the ICP which replaced it, at least until it would otherwise have been possible to change that ICP in accordance with paragraph 18.
20. Annex B.1 contains a long list of ICPs which will include the three (3) reputable ICPs referred to above in paragraph 17. This list may be changed from time to time in coordination with the Commission and the Monitoring Trustee, in particular by the addition of other reputable ICPs. This long list shall include the ten (10) largest ICPs who are willing to sell transit services via one or more physical interconnection points in Germany over which traffic may flow to Broadband Customers. The group of three (3)

reputable ICPs referred to above in paragraph 16 shall include at least one of these ten (10) largest ICPs.

21. Vodafone shall request each ICP with whom the Merged Entity directly interconnects in Germany and over which interconnection points traffic may flow to the Merged Entity's Broadband Customers for permission to publish in arrears on a monthly basis the highest Daily Peak Utilization in the preceding month, as a percentage of available aggregated direct capacity between that ICP and the Merged Entity. As long as at least half of such ICPs agrees to such publication Vodafone shall publish, on a publicly available website, on a monthly basis, this information with respect to any such ICP who is and remains willing for this to be published. Where fewer than half such ICPs agrees to such publication Vodafone shall publish, on a publicly available website, on a monthly basis, only an aggregated figure based on the highest Daily Peak Utilization in the preceding month of aggregated direct interconnect capacity in Germany.

Feed-in Fee Commitment

22. By the below commitment (the "**Feed-in Fee Commitment**"), Vodafone seeks to ensure that it will have no ability to increase the Feed-in Fees paid by FTA Broadcasters.
23. No later than four (4) weeks from the Effective Date, Vodafone shall send the irrevocable offer set out in Annex C.1 to all FTA Broadcasters listed in Annex C.2.
24. Where the Merged Entity enters into a Feed-in Agreement with a FTA Broadcaster that does not currently have a Feed-in Agreement with one of the Parties, the Feed-in Fees included in that Feed-In Agreement shall not exceed the rates set out in Appendix 1 (No. 1-4 and 7) to Annex C.1.
25. For the avoidance of doubt, all other provisions of the Feed-in Agreements remain unaffected by this Feed-in Fee Commitment.

HbbTV Commitment

26. By the below commitment (the "**HbbTV Commitment**"), Vodafone seeks to ensure that it will have no ability to refuse to continue carrying the HbbTV Signal of FTA Broadcasters over its Cable Network.
27. No later than four (4) weeks from the Effective Date, Vodafone shall send the irrevocable offer set out in Annex C.1 to all FTA Broadcasters listed in Annex C.2.
28. Upon request from a FTA Broadcaster that does not currently have an agreement with one of the Parties for the transmission of HbbTV Signal for one or more of that FTA Broadcaster's channels, the Merged Entity shall carry the FTA Broadcaster's HbbTV Signal over the Cable Network, subject to the conclusion of a separate contract covering the transmission of such HbbTV Signal. The Merged Entity will transmit such HbbTV Signal under at least the minimum technical terms set out in Annex C.1 and without charging any fees for such transmission.
29. For the avoidance of doubt, the obligation to transmit HbbTV signals in the Cable Network does not include any obligation of the Merged Entity in connection with the functionality

of its or any third parties' customer premises equipment ("CPE"), in particular, no obligation to design or change CPE in such a way that they react to HbbTV signals.

Section C. Monitoring Trustee

I. Appointment Procedure

30. Vodafone shall appoint a Monitoring Trustee to carry out the functions specified in the Commitments.

31. The Monitoring Trustee shall:

31.1.1. At the time of appointment, be independent of the Parties;

31.1.2. Possess the necessary qualifications to carry out its mandate, for example have sufficient relevant experience as an investment banker, consultant or auditor; and

31.1.3. Neither have nor become exposed to a Conflict of Interest.

32. The Monitoring Trustee shall be remunerated by Vodafone in a way that does not impede the independent and effective fulfilment of its mandate.

Proposal by Vodafone

33. No later than two (2) weeks after the Effective Date, Vodafone shall submit a name or names of one or more natural or legal persons whom it proposes to appoint as the Monitoring Trustee to the Commission for approval.

34. The proposal shall contain sufficient information for the Commission to verify that the person or persons proposed as Monitoring Trustee fulfil the requirements set out in paragraph 31 and shall include:

34.1.1. The full terms of the proposed mandate, which shall include all provisions necessary to enable the Monitoring Trustee to fulfil its duties under these Commitments; and

34.1.2. The outline of a work plan which describes how the Monitoring Trustee intends to carry out its assigned tasks.

Approval or rejection by the Commission

35. The Commission shall have the discretion to approve or reject the proposed Monitoring Trustee and to approve the proposed mandate subject to any modifications it deems necessary for the Monitoring Trustee to fulfil its obligations. If only one name is approved, Vodafone shall appoint, or cause to be appointed, the individual or institution concerned as Monitoring Trustee, in accordance with the mandate approved by the Commission. If more than one name is approved, Vodafone shall be free to choose the Monitoring Trustee to be appointed from among the names approved. The Monitoring

Trustee shall be appointed within one week of the Commission's approval, in accordance with the mandate approved by the Commission.

New proposal by Vodafone

36. If all the proposed Monitoring Trustees are rejected, Vodafone shall submit the names of at least two more natural or legal persons within one week of being informed of the rejection, in accordance with paragraphs 30 and 34.

Monitoring Trustee nominated by the Commission

37. If all further proposed Monitoring Trustees are rejected by the Commission, the Commission shall nominate a Monitoring Trustee, whom Vodafone shall appoint, or cause to be appointed, in accordance with a Monitoring Trustee mandate approved by the Commission.

II. Functions of the Monitoring Trustee

38. The Monitoring Trustee shall assume its specified duties in order to ensure compliance with the Commitments. The Commission may, on its own initiative or at the request of the Monitoring Trustee or Vodafone, give any orders or instructions to the Monitoring Trustee in order to ensure compliance with the conditions and obligations attached to the Decision.

39. At any point in time, the Monitoring Trustee may seek the expert advisory opinion of the Bundesnetzagentur (the "**BNetzA**"), and take due consideration of such opinion, on specific issues concerning: (a) the German regulatory framework for telecommunications, (b) changes to the publically regulated Deutsche Telekom Layer 3 DSL bitstream contingent pricing, and (c) technical aspects of the implementation of the Cable Broadband Access Commitment. To this end, the Monitoring Trustee shall be entitled to share with the BNetzA Confidential Information proprietary to the Merged Entity, provided that the Monitoring Trustee provides the Merged Entity with prior notice and a reasonable opportunity to make representations before sharing such information with the BNetzA and that the BNetzA confirms that: (a) it will protect confidentiality according to its statutory mandate and cannot share the Confidential Information with any other person, entity or regulatory body; and (b) cannot use the Confidential Information for any purpose other than for providing an expert advisory opinion pursuant to this clause.

40. The BNetzA shall seek to deliver its expert advisory opinion in due time. The BNetzA is under no obligation to issue the requested expert advisory opinion(s), including (but not limited to) as a result of staffing shortage or lack of information on the relevant issue. The BNetzA may deliver its expert advisory opinion in German or in English. Should its opinion contain Confidential Information proprietary to third party other than the Merged Entity or personal data, the BNetzA may address a confidential version of its opinion to the Commission, sending the Monitoring Trustee and the Merged Entity a non-confidential copy at the same time.

41. Vodafone hereby acknowledges and agrees that the BNetzA shall not under any circumstances be held liable for any liability, loss or damage caused or alleged to be

caused directly or indirectly through any action or inaction on the part of the BNetzA, including but not limited to, by any fault and/or delay in issuing the expert advisory opinion, except to the extent that such liabilities result from the wilful default, recklessness, gross negligence or bad faith of the BNetzA (which, for the avoidance of doubt, includes any liability arising from any breach of its confidentiality obligations in paragraph 39 above). The same applies to the BNetzA's acting employees or civil servants which are involved in issuing the expert advisory opinion.

Duties and obligations of the Monitoring Trustee as regards the Cable Broadband Access Commitment

42. The Monitoring Trustee shall:

- 42.1.1. Propose in its first report to the Commission a detailed work plan describing how it intends to monitor compliance with the obligations and conditions attached to the Decision;
- 42.1.2. Monitor compliance by Vodafone with the conditions and obligations attached to the Decision. In particular, the Monitoring Trustee shall specifically monitor compliance with the Commitments in paragraph 11;
- 42.1.3. Propose to Vodafone such measures as the Monitoring Trustee considers necessary to ensure Vodafone's compliance with the conditions and obligations attached to the Decision;
- 42.1.4. Act as a contact point for any requests from third parties, and in particular the new Cable Provider, in relation to the Commitments;
- 42.1.5. Provide to the Commission, sending Vodafone a copy at the same time, a written report within fifteen (15) days after the end of each quarter in relation to: (i) the implementation of Wholesale Cable Broadband Access, from entering into the Cable Broadband Access Agreement until the Access Date, and (ii) compliance with the Commitments from the Access Date until the termination or expiry of the Commitments;
- 42.1.6. Promptly report in writing to the Commission, sending Vodafone a non-confidential copy at the same time, if it concludes on reasonable grounds that Vodafone is failing to comply with any of the Commitments; and
- 42.1.7. Assume the other functions assigned to the Monitoring Trustee under the conditions and obligations attached to the Decision.

Duties and obligations of the Monitoring Trustee with regard to the OTT Commitment

43. The Monitoring Trustee shall make use of the methodology in Annex B.2 for reviewing existing and new agreements with Broadcasters in order to monitor compliance with the OTT Commitment.

Duties and obligations of the Monitoring Trustee with regard to the Interconnection Capacity Commitment

44. The Monitoring Trustee shall monitor compliance with the Interconnection Capacity Commitment set out in Section B.II. To that end the Monitoring Trustee shall:

- 44.1.1.1. Verify, on the basis of information provided to it by Vodafone that, in accordance with paragraph 16, the Daily Peak Utilization across the relevant interconnection points does not exceed 80%;
- 44.1.1.2. Review Annex B.1 every three (3) months with the aim of ensuring that Annex B.1 will always contain a sufficient number of reputable ICPs;
- 44.1.1.3. Identify which of the ICPs referred to in Annex B.1 are amongst the ten (10) largest ICPs for the purposes of paragraph 20. It shall determine the appropriate metric for defining the 10 largest ICPs in consultation with Vodafone, having regard to paragraph 15;
- 44.1.1.4. Review every year the minimum capacity level described in paragraph 17 to determine whether such commitment is still required to prevent the Transaction giving rise to a significant impediment to competition and if so, to agree with Vodafone a number which allows for a reasonable level of spare capacity;
- 44.1.1.5. In the event that Vodafone contends that it needs to vary the group of three (3) ICPs in the circumstances referred to in paragraph 19, where there is an urgent need to upgrade capacity and it does not prove possible to agree or implement such upgrade in a timely manner, to review this matter with Vodafone and if deemed appropriate, to allow Vodafone to make this change;
- 44.1.1.6. Provide to the Commission, sending Vodafone a copy at the same time, a written report within fifteen (15) days after the end of each quarter that shall cover, for that period: (i) the three (3) ICPs referred to in paragraph 16 and (ii) the Daily Peak Utilization; and
- 44.1.1.7. Promptly report in writing to the Commission, sending Vodafone a copy at the same time, if it concludes on reasonable grounds that Vodafone is failing to comply with any of the Commitments.

Duties and obligations of the Monitoring Trustee with regard to the Feed-in Fee Commitment

45. The Monitoring Trustee shall:

- 45.1.1. Ensure that Vodafone sends the irrevocable offer set out in Annex C.1 to the FTA Broadcasters listed in Annex C.2 within four (4) weeks from the Effective Date and keep a record of the FTA Broadcasters who have accepted the irrevocable offer within the specified timeframe;
- 45.1.2. Where a FTA Broadcaster has accepted the offer and enters into an amended or new Feed-in Agreement with the Merged Entity (e.g. upon expiry of its existing agreement or for additional channels), review the amended or new Feed-in Agreement to ensure that the Feed-in Fees included in that Feed-in

Agreement do not exceed the sum of the Feed-in Fees due under Appendix 1 (No.1-4 and 7) and Appendix 2;

45.1.3. Where the Merged Entity enters into a Feed-in Agreement with a FTA Broadcaster that does not currently have a Feed-in Agreement with one of the Parties, review the new Feed-in Agreement to ensure that the Feed-in Fees included in that Feed-In Agreement do not exceed the rates set out in Appendix 1 (No.1-4 and 7) to Annex C.1; and

45.1.4. Promptly report in writing to the Commission, sending Vodafone a copy at the same time, if it concludes on reasonable grounds that Vodafone is failing to comply with any of the Commitments.

Duties and obligations of the Monitoring Trustee with regard to the HbbTV Commitment

46. The Monitoring Trustee shall:

46.1.1. Ensure that Vodafone sends the irrevocable offer set out in Annex C.1 to the FTA Broadcasters listed in Annex C.2 within four (4) weeks from the Effective Date and keep a record of the FTA Broadcasters who have accepted the irrevocable offer within the specified timeframe;

46.1.2. Where a FTA Broadcaster has accepted the offer and enters into an amended or new agreement for the transmission of HbbTV Signal (e.g. upon expiry of its existing agreement or for additional channels), review such agreement to ensure that the Merged Entity will transmit the HbbTV Signal over its Cable Network under at least the minimum technical terms set out in Annex C.1 and without charging any fees for such transmission;

46.1.3. Where the Merged Entity enters into an agreement for the transmission of HbbTV Signal with a FTA Broadcaster that does not currently have an agreement with one of the Parties for such transmission, review such agreement to ensure that the Merged Entity will transmit the HbbTV Signal over its Cable Network under at least the minimum technical terms set out in Annex C.1 and without charging any fees for such transmission; and

46.1.4. Promptly report in writing to the Commission, sending Vodafone a copy at the same time, if it concludes on reasonable grounds that Vodafone is failing to comply with any of the Commitments.

III. Duties and obligations of Vodafone

47. Vodafone shall provide and shall cause its advisors to provide the Monitoring Trustee with all such co-operation, assistance and information as the Monitoring Trustee may reasonably require to perform its tasks. The Monitoring Trustee shall have full and complete access to any of Vodafone's books, records, documents, management or other personnel, facilities, sites and technical information necessary for fulfilling its duties under the Commitments and Vodafone shall provide the Monitoring Trustee upon

request with copies of any document. Vodafone shall make available to the Monitoring Trustee one or more offices on its premises and shall be available for meetings in order to provide the Monitoring Trustee with all information necessary for the performance of its tasks.

48. Vodafone shall indemnify the Monitoring Trustee and its employees and agents (each an **"Indemnified Party"**) and hold each Indemnified Party harmless against, and hereby agrees that an Indemnified Party shall have no liability to Vodafone for any liabilities arising out of the performance of the Monitoring Trustee's duties under the Commitments, except to the extent that such liabilities result from the wilful default, recklessness, gross negligence or bad faith of the Monitoring Trustee, its employees, agents or advisors.
49. At the expense of Vodafone, the Monitoring Trustee may appoint advisors (in particular for corporate finance or legal advice), subject to Vodafone's approval (this approval not to be unreasonably withheld or delayed) if the Monitoring Trustee considers the appointment of such advisors necessary or appropriate for the performance of its duties and obligations under its mandate, provided that any fees and other expenses incurred by the Monitoring Trustee are reasonable. Should Vodafone refuse to approve the advisors proposed by the Monitoring Trustee, the Commission may approve the appointment of such advisors instead, after having heard Vodafone. Only the Monitoring Trustee shall be entitled to issue instructions to the advisors. Paragraph 48 of these Commitments shall apply *mutatis mutandis*.
50. Vodafone agrees that the Commission may share Confidential Information with the Monitoring Trustee. The Monitoring Trustee shall not disclose such information and the principles contained in Article 17(1) and (2) of the EUMR apply *mutatis mutandis*.
51. Vodafone agrees that the contact details of the Monitoring Trustee be published on the website of the Commission's Directorate-General for Competition and shall inform interested third parties of the identity and the tasks of the Monitoring Trustee.
52. For a period of ten (10) years from the Effective Date the Commission may request all information from Vodafone that is reasonably necessary to monitor the effective implementation of the Commitments.

IV. Replacement, discharge and reappointment of the Monitoring Trustee

53. If the Monitoring Trustee ceases to perform its functions under the Commitments or for any other good cause, including the exposure of the Monitoring Trustee to a Conflict of Interest:
- 53.1.1.1. The Commission may, after hearing the Monitoring Trustee, require Vodafone to replace the Monitoring Trustee; or
- 53.1.1.2. Vodafone, with the prior approval of the Commission, may replace the Monitoring Trustee.
54. If the Monitoring Trustee is removed according to paragraph 53, the Monitoring Trustee may be required to continue in its function until a new Monitoring Trustee is in place to whom

the Monitoring Trustee has effected a full hand over of all relevant information. The new Monitoring Trustee shall be appointed in accordance with the procedure referred to in paragraphs 30 to 37.

55. Unless removed according to paragraph 53, the Monitoring Trustee shall cease to act as Monitoring Trustee only after the Commission has discharged it from its duties after the Commitments with which the Monitoring Trustee has been entrusted have been implemented. However, the Commission may at any time require the reappointment of the Monitoring Trustee if it subsequently appears that the relevant Commitments might not have been fully and properly implemented.

Section D. Arbitration

56. In the event that there is a dispute between the Merged Entity and a third party (in the case of the commitment relating to the Wholesale Cable Broadband Access, the New Cable Provider) as to the implementation of the Commitments in paragraphs 5 (including Annexes A.1 to A.5), 6 to 15 (including Annex B.1) and 16 to 24 (including Annex C.1), the third party and the New Cable Provider shall have recourse to the following dispute resolution procedure. For the avoidance of any doubt, the New Cable Provider shall have recourse to the following dispute resolution procedure also in relation to disputes related to the clauses of the agreement entered into between Vodafone and the New Cable Provider which reproduce paragraphs 5 (including Annexes A.1 to A.5) of the Commitments as well as in relation to disputes related to any other clause of the agreement entered into between Vodafone and the New Cable Provider which have a bearing on the effectiveness of the Wholesale Cable Broadband Commitment, provided that the New Cable Provider is not using any other formal dispute resolution procedure in relation to the same dispute.

I. Fast Track Dispute Resolution

57. Should a third party (in the case of the commitment relating to the Wholesale Cable Broadband Access, the New Cable Provider) wish to avail itself of the fast track dispute resolution procedure (a “**Requesting Party**”), it shall send a written request to the Merged Entity (with a copy to the Monitoring Trustee) setting out in detail the reasons leading it to believe that the Merged Entity is failing to comply with the requirements of the Commitments. The Requesting Party and the Merged Entity will use their commercially reasonable efforts to resolve all differences of opinion and to settle all disputes that may arise through co-operation and consultation within a reasonable period of time not exceeding fifteen (15) Working Days after receipt of the request.
58. The Monitoring Trustee shall present its own proposal (the “**Trustee Proposal**”) for resolving the dispute within eight (8) Working Days, specifying in writing the action if any, to be taken by the Merged Entity in order to ensure compliance with the Commitments vis-a-vis the Requesting Party and be prepared, if requested, to facilitate the settlement of the dispute. To the extent that the Merged Entity and the Requesting Party have settled a dispute on the basis of the Trustee Proposal and the Merged Entity complies with such settlement, the Merged Entity shall be deemed not to be in breach of the Commitments.

59. Should the Requesting Party and the Merged Entity (together the “**Parties to the Arbitration**”) fail to resolve their differences of opinion in the consultation phase described above, the Requesting Party may, within twenty (20) calendar days of such failure, serve a notice (the “**Notice**”), in the sense of a request for arbitration, to the International Chamber of Commerce (hereinafter the “**Arbitral Institution**”), with a copy of such Notice and request for arbitration to the Merged Entity.
60. The Notice shall set out in detail the dispute, difference or claim (the “**Dispute**”) and shall contain, *inter alia*, all issues of both fact and law, including any suggestions as to the procedure, and all documents relied upon shall be attached, e.g. documents, agreements, expert reports, and witness statements. The Notice shall also contain a detailed description of the action to be undertaken by the Merged Entity and the Trustee Proposal, including a comment as to its appropriateness.
61. The Merged Entity shall, within ten (10) Working Days from receipt of the Notice, submit its answer (the “**Answer**”), which shall provide detailed reasons for its conduct and set out, *inter alia*, all issues of both fact and law, including any suggestions as to the procedure, and all documents relied upon, e.g. documents, agreements, expert reports, and witness statements. The Answer shall, if appropriate, contain a detailed description of the action which Merged Entity proposes to undertake vis-a-vis the Requesting Party and the Trustee Proposal (if not already submitted), including a comment as to its appropriateness.

II. Appointment of the Arbitrators

62. The Arbitral Tribunal shall consist of three (3) persons. The Requesting Party shall nominate its arbitrator in the Notice; the Merged Entity shall nominate its arbitrator in the Answer. The arbitrator nominated by the Requesting Party and by the Merged Entity shall, within five (5) Working Days of the nomination of the latter, nominate the chairman, making such nomination known to the Parties to the Arbitration and the Arbitral Institution which shall forthwith confirm the appointment of all three (3) arbitrators.
63. Should the Requesting Party wish to have the Dispute decided by a sole arbitrator it shall indicate this in the Notice. In this case, the Requesting Party and the Merged Entity shall agree on the nomination of a sole arbitrator within five (5) Working Days from the communication of the Answer, communicating this to the Arbitral Institution which shall forthwith confirm the appointment of the arbitrator.
64. Should the Merged Entity fail to nominate an arbitrator, or if the two (2) arbitrators fail to agree on the chairman, or should the Parties to the Arbitration fail to agree on a sole arbitrator, the default appointment(s) shall be made by the Arbitral Institution.
65. The three-person arbitral tribunal or, as the case may be, the sole arbitrator, are herein referred to as the **Arbitral Tribunal**.

III. Arbitration Procedure

66. The Dispute shall be finally resolved by arbitration under the Rules of the Arbitration Court of the International Chamber of Commerce, with such modifications or adaptations as

foreseen herein or necessary under the circumstances (the “**Rules**”). The arbitration shall be conducted in London (or, at the option of the Requesting Party, Dusseldorf) in the English language.

67. The procedure shall be a fast track procedure. For this purpose, the Arbitral Tribunal shall shorten all applicable procedural time-limits under the Rules as far as admissible and appropriate in the circumstances. The Parties to the Arbitration shall consent to the use of e-mail for the exchange of documents.
68. The Arbitral Tribunal shall, as soon as practical after the confirmation of the Arbitral Tribunal, hold an organisational conference to discuss any procedural issues with the Parties to the Arbitration. Terms of Reference shall be drawn up and signed by the Parties to the Arbitration and the Arbitration Tribunal at the organisational meeting or thereafter and a procedural time-table shall be established by the Arbitral Tribunal. An oral hearing shall, as a rule, be established within two months of the confirmation of the Arbitral Tribunal.
69. In order to enable the Arbitral Tribunal to reach a decision, it shall be entitled to request any relevant information from the Parties to the Arbitration, to appoint experts and to examine them at the hearing, and to establish the facts by all appropriate means. The Arbitral Tribunal is also entitled to ask for assistance by the Monitoring Trustee in all stages of the procedure if the Parties to the Arbitration agree.
70. The Arbitral Tribunal shall not disclose Confidential Information and apply the standards attributable to confidential information under the EUMR. The Arbitral Tribunal may take the measures necessary for protecting Confidential Information in particular by restricting access to Confidential Information to the Arbitral Tribunal, the Monitoring Trustee, and outside counsel and experts of the opposing party.
71. The burden of proof in any dispute under the Rules shall be borne as follows: (i) the Requesting Party must produce evidence of a prima facie case; and (ii) if the Requesting Party produces evidence of a prima facie case, the Arbitral Tribunal must find in favour of the Requesting Party unless the Merged Entity can produce evidence to the contrary.

IV. Involvement of the Commission

72. The Commission shall be allowed and enabled to participate in all stages of the procedure by:
- 72.1.1. Receiving all written submissions (including documents and reports, etc.) made by the Parties to the Arbitration;
 - 72.1.2. Receiving all orders, interim and final awards and other documents exchanged by the Arbitral Tribunal with the Parties to the Arbitration (including Terms of Reference and procedural timetable);
 - 72.1.3. Having the opportunity to file *amicus curiae* briefs; and

72.1.4. Being present at the hearings and being allowed to ask questions to parties, witnesses and experts.

73. The Arbitral Tribunal shall forward, or shall order the Parties to the Arbitration to forward, the documents mentioned to the Commission without delay.

74. In the event of disagreement between the Parties to the Arbitration regarding the interpretation of the Commitments, the Arbitral Tribunal may seek the Commission's interpretation of the Commitments before finding in favour of any party to the Arbitration and shall be bound by the interpretation.

V. Decisions of the Arbitral Tribunal

75. The Arbitral Tribunal shall decide the dispute on the basis of the Commitments and the Decision. Issues not covered by the Commitments and the Decision shall be decided (in the order as stated) by reference to the EUMR, European Union law and general principles of law common to the legal orders of the Member States without a requirement to apply a particular national system. The Arbitral Tribunal shall take all decisions by majority vote.

76. Upon request of the Requesting Party, the Arbitral Tribunal may make a preliminary ruling on the Dispute. The preliminary ruling shall be rendered within one (1) month after the confirmation of the Arbitral Tribunal, shall be applicable immediately and, as a rule, remain in force until a final decision is rendered.

77. The Arbitral Tribunal shall, in the preliminary ruling as well as in the final award, specify the action, if any, to be taken by the Merged Entity in order to comply with the Commitments vis-à-vis the Requesting Party. The final award shall be final and binding on the Parties to the Arbitration and shall resolve the Dispute and determine any and all claims, motions or requests submitted to the Arbitral Tribunal. The arbitral award shall also determine the reimbursement of the costs of the successful party and the allocation of the arbitration costs. In case of granting a preliminary ruling or if otherwise appropriate, the Arbitral Tribunal shall specify that terms and conditions determined in the final award apply retroactively.

78. The final award shall, as a rule, be rendered within six (6) months after the confirmation of the Arbitral Tribunal. The time-frame shall, in any case, be extended by the time the Commission takes to submit an interpretation of the Commitments if asked by the Arbitral Tribunal.

79. The Parties to the Arbitration shall prepare a non-confidential version of the final award, without business secrets. The Commission may publish the non-confidential version of the award. The Parties to the Arbitration, the Arbitral Tribunal, all other persons participating in the proceedings and all further persons involved, i.e. in the administration of the arbitral proceedings, shall maintain confidentiality towards all persons regarding the conduct of arbitral proceedings. All proceedings will be held in private and remain confidential.

80. Nothing in the arbitration procedure shall affect the power to the Commission to take decisions in relation to the Commitments in accordance with its powers under the EUMR.

Section E. Duration

81. The Wholesale Cable Broadband Access Commitment set out in Section B shall not expire before [...] from the Access Date except as determined in the Cable Broadband Access Agreement, or unless, in response to a request by Vodafone in accordance with the Review Clause, the Commission decides to waive, modify or substitute this commitment on grounds that the conditions of competition would no longer justify the undiminished continuation of this commitment.
82. The OTT Commitment, the Interconnection Capacity Commitment, the Feed-in Commitment and the HbbTV Commitment set out in Section B.II shall expire eight (8) years from the Effective Date, unless in response to a request by Vodafone in accordance with the Review Clause, the Commission decides to waive, modify or substitute this commitment on grounds that the conditions of competition would no longer justify the undiminished continuation of this commitment.

Section F. The Review Clause

83. The Commission may extend the time periods foreseen in the Commitments in response to a request from Vodafone or, in appropriate cases, on its own initiative. For the avoidance of doubt, the Commission cannot extend the duration of the Wholesale Cable Broadband Access Commitment, the OTT Commitment, the Interconnection Capacity Commitment, the Feed-in Fee Commitment or the HbbTV Commitment set out in Section B. Where Vodafone requests an extension to a time period, it shall submit a reasoned request to the Commission no later than one (1) month before the expiry of that period, showing good cause. This request shall be accompanied by a report from the Monitoring Trustee, who shall, at the same time, send a non-confidential copy of the report to Vodafone. Only in exceptional circumstances shall Vodafone be entitled to request an extension within the last month of any period.
84. The Commission may further, in response to a reasoned request from Vodafone showing good cause, waive, modify or substitute, in exceptional circumstances, one or more of the undertakings in these Commitments. This request shall be accompanied by a report from the Monitoring Trustee, who shall at the same time send a non-confidential copy of the report to Vodafone. The request shall not have the effect of suspending the application of the undertaking and, in particular, of suspending the expiry of any time period in which the undertaking has to be complied with.

Section G. Entry into Force

85. The Commitments shall take effect on the Effective Date.

June 2019

.....

Duly authorised for and on behalf of Vodafone Group plc

ANNEXES

SECTION A: WHOLESALE CABLE BROADBAND ACCESS

Annex A.1: Network Readiness

1. Following the Effective Date, Vodafone and the New Cable Provider shall (under the supervision of the Monitoring Trustee where necessary) discuss and agree a workplan to implement Cable Access by the Access Date. The workplan shall in particular take account of and reflect the elements listed in this Annex A.1. Such a workplan shall include the following:
 - (i) Agreement in principle on technical specifications and network connection points.
 - (ii) Detailed technical specifications (including for interfaces and network interconnections).
 - (iii) Implementation of technical and procedural requirements and the definition and scope of a pilot operational phase.
 - (iv) Successful completion of the pilot operational phase.

Broadband Cable Connections ("Connections")

86. By the Access Date, in order to provide Wholesale Cable Broadband Access in the Combined Footprint, Vodafone shall ensure that Connections are available to the New Cable Provider. Each Connection will comprise a connection from the first multimedia socket at the end customer's premises to a local transfer interface.

Local Interfaces

87. By the Access Date, in order to provide Wholesale Cable Broadband Access in the Combined Footprint, Vodafone shall set up local interfaces for traffic exchange in order to transport data traffic in the Combined Footprint to the regional locations where it transfers the traffic to the New Cable Provider.
88. Vodafone shall provide the New Cable Provider with transfer interfaces at Vodafone locations in the following regions in the Combined Footprint:

- [...]
- [...]
- [...]
- [...]
- [...]
- [...]
- [...]
- [...]

- [...]

89. The transfer interface shall have the following features:

- A transmission speed of [...] Gbps.
- All necessary technical equipment for the network infrastructures of the New Cable Provider and Vodafone, in particular the output port from Vodafone's network element and, if applicable, a terminating device (transfer point).
- An A10 network-to-service provider connection comprising one or more transfer interfaces (gigabit ethernet or optical interfaces). There is no limit to the number of Connections that can be connected to each A10-NSP, other than the available bandwidth.

90. Voice data traffic shall be transferred to the New Cable Provider via agreed network cross points. Vodafone shall set up Session Border Controllers as demarcation points for the transfer of signalling (SIP) and voice data (RTP) to the New Cable Provider, which shall be prioritized over other data traffic in the Combined Footprint.

Traffic and devices

91. The data traffic of the New Cable Provider shall be transmitted in the Combined Network on a non-discriminatory basis, meaning that Vodafone shall treat the traffic of access seekers in the same way as Vodafone's own traffic on the Cable Network and, in particular, Vodafone shall (subject to the cooperation of the New Cable Provider) apply the same prioritisation rules to the New Cable Provider's traffic as Vodafone applies to its own traffic on the Cable Network.

Addresses and authentication

92. Vodafone shall use IPv6 addresses from the address range of the New Cable Provider to address eRouters and end devices. Vodafone shall configure the address ranges in the Cable Modem Termination System (without charging a setup fee).

93. Authentication for network access is based on the MAC address of the cable modem used by the New Cable Provider's end customer. The MAC address is assigned to an existing LineID by the New Cable Provider using an authentication interface.

94. Vodafone shall provide the configuration files for DOCSIS operation of the end devices of the New Cable Provider's end customers.

IT interfaces

95. Vodafone and the New Cable Provider shall define key features for IT interfaces in a joint design and development process following the Effective Date. If Vodafone and the New Cable Provider do not agree on the scope of the design and development process,

Vodafone shall, in consultation with the Monitoring Trustee (who may also consult with the New Cable Provider), determine the relevant specifications.

96. Vodafone shall carry out a conformity test for each IT interface together with the New Cable Provider. A successful test is prerequisite for the use of each IT interface.

Annex A.2: Speeds

1. Vodafone shall provide Cable Broadband Access to the New Cable Provider on the retail fixed broadband download and upload speeds set out in Table 1 below (or as otherwise agreed by Vodafone and the New Cable Provider with the approval of the Monitoring Trustee).

Table 1: Speeds

Bandwidth profile	Downstream (mbps)	Upstream (mbps)	Optional upstream increase (mbps)
50/4	50	4	10
100/6	100	6	50
300/25	300	25	50

97. After the [...], the New Cable Provider can request Vodafone to include a product with a download speed of 500mbps, with an upload speed equal to the standard upload speed Vodafone offers its customers for its 500mbps product in the Combined Footprint, provided that [...] Vodafone will provide such a product within [...] of such a request.

Annex A.3: The Contingent

1. The New Cable Provider shall commit to purchase from Vodafone, on an annual upfront basis for so long as the Cable Broadband Access Agreement remains in operation, a minimum number of connections as set out in Table 1 below.

Table 1: Contingent

	Minimum contingent size (Cable Connections)
Year 1	[...]
Year 2	[...]
Year 3	[...]
Year 4	[...]
Year 5 and beyond	[...]

98. [...]

Annex A.4: Prices

1. In consideration for the provision of Wholesale Cable Broadband Access, the New Cable Provider shall pay to Vodafone the fees set out below.

The Contingent

99. The New Cable Provider shall pay €[...] per connection for each connection in the annual minimum contingent. This equates to an upfront cash payment to Vodafone as set out in Table 1 below.

Table 1: Contingent fees

	Minimum contingent size (Cable Connections)	Upfront cash payment
Year 1	[...]	[...]
Year 2	[...]	[...]
Year 3	[...]	[...]
Year 4	[...]	[...]
Year 5 and beyond	[...]	[...]

100. [...]
101. The New Cable Provider may adjust the annual purchase commitment upwards or downwards [...] provided that the quantity does not fall below the minimum sizes contained in Table 1 above.

Monthly fees

102. The New Cable Provider shall also pay the monthly fees for each active cable connection as set out in Table 2 below.

Table 2: Monthly Fees

Bandwidth profile	Downstream (mbps)	Upstream (mbps)	Monthly fee (€)
50/4	50	4	[...]
100/6	100	6	[...]
300/25	300	25	[...]

103. In the event that the New Cable Provider exceeds the number of active connections available in its annual Contingent commitment, it shall pay an additional €[...] / month for each active connection in excess of such amount.

104. The New Cable Provider is entitled to request upgrades to the upstream speeds, for which an additional fee shall be payable as set out in Table 3 below.

Table 3: Upgrades to Upstream Speeds

Bandwidth profile	Standard Upstream (mbps)	Optional upstream increase (mbps)	Fee for upload upgrade (€)
50/4	4	10	[...]
100/6	6	50	[...]
300/25	25	50	[...]

[...]

105. [...]

106. [...]

Table 4: [...]

[...]	[...]	[...]
[...]	[...]	[...]
[...]	[...]	[...]
[...]	[...]	[...]

Addition of 500 Mbps product

107. After the [...], the New Cable Provider can request Vodafone to include a product with a download speed of 500 Mbps, with an upload speed equal to the standard upload speed Vodafone offers its customers for its 500 Mbps product in the Combined Footprint, [...] Vodafone will provide such a product within [...] of such a request.
108. The monthly fee for the 500 Mbps product will be [...].

Transfer interface fees

109. Vodafone will charge a one-off fee of €[...] for each [...] gbps transfer interface. The annual fee for each transfer interface is €[...].

Activation and termination fees

110. The New Cable Provider shall pay the fees set out in Table 5 for the activation and termination of cable connections and transfer interfaces.

Table 5: Activation and Termination Fees

	Activation fee (€)	Termination fee (€)
Cable Connection	[...]	[...]
Transfer interface	[...]	[...]

Annex A.5: Technical Support Quality requirements

1. Vodafone shall be responsible for second and third level technical support services in connection with the Cable Network.
111. In particular, Vodafone and the New Cable Provider will assume the following responsibilities:
 - 111.1.1. Availability: In response to requests from the New Cable Provider via an electronic interface, Vodafone will provide information to the New Cable Provider on the availability of bandwidths at a given address. The New Cable Provider will be responsible for managing any subsequent sales process and other communication with the customer.
 - 111.1.2. Provisioning: Vodafone will provide access provisioning services, namely the connection to the end-customer premises as well as necessary installation services that are required, as communicated to Vodafone by the New Cable Provider using an electronic interface.
 - 111.1.3. Activation: The New Cable Provider shall be responsible for the provision of any customer premises equipment (“**CPE**”) that may be required for the remedy taker to provide services to the end customer. Vodafone shall activate and configure CPE as regards broadband connections; the New Cable Provider shall be responsible for configuring of CPE for voice services. The New Cable Provider shall be responsible for organising access for its customers to the public internet and public telephone networks.
 - 111.1.4. Fault clearance: Vodafone shall be responsible for executing fault clearances when the reason for such faults is Vodafone’s responsibility (because it occurs in its network e.g. faults in customer access lines or the backbone). The New Cable Provider shall be responsible for fault clearance relating to CPE, voice services and its own network.

SECTION B: OTT COMMITMENT / INTERCONNECTION CAPACITY COMMITMENT

Annex B.1 — LONG LIST INTERCONNECTIVITY PROVIDERS

[...]

[...]

[...]

[...]

[...]

[...]

[...]

[...]

[...]

[...]

[...]

[...]

[...]

Annex B.2 - REVIEW OF AGREEMENTS

1. Pursuant to Section B.II, the following methodology shall be applied for reviewing agreements with Broadcasters by the Monitoring Trustee in order to monitor compliance with the OTT Commitment, set out in Section B.II:

111.1.5. Any (part of an) agreement with a Broadcaster regarding the distribution of linear channels and catch-up TV services relating to content on such linear channels of such a Broadcaster on Vodafone's TV Platform and any OTT Service of such Broadcaster in Germany, existing on, amended or signed after the Effective Date, in so far as it directly or indirectly relates to any OTT Service, and regardless its form ("**Relevant Agreement**"), shall be provided to the Monitoring Trustee for review in a database to which the Monitoring Trustee and Commission have access.

111.1.6. Vodafone will maintain a rolling list of potential Relevant Agreements to be reviewed by the Monitoring Trustee with an indication of the expected commencement, duration and finalisation of negotiations. This rolling list is to be updated every three months.

111.1.7. Vodafone has the discretion whether to submit an agreement for review either before or after its signature. If after signature, Vodafone will not delay submission of the agreement for review.

111.1.8. In the event that Vodafone and the Broadcaster are enforcing terms, without signing a formal agreement, Vodafone will provide the Monitoring Trustee with the then current draft of such agreement (or any summary of such terms including by e-mail) to the extent it directly or indirectly relates to any OTT Service.

111.1.9. The Monitoring Trustee will have 48 hours to review agreements which have not yet been signed and one week to review if the agreement has been signed.

111.1.10. Communication with the Commission:

The Monitoring Trustee will keep the Commission informed of any potential concern identified by the Monitoring Trustee relating to terms addressing any OTT Service, identified by the Monitoring Trustee, regardless of whether it is ultimately (quickly) resolved in cooperation with Vodafone.

- (I) Vodafone will have the opportunity to discuss queries with the Monitoring Trustee before the Monitoring Trustee escalating any issue identified to the Commission.

Annex B.3 – INFORMATION PROVISION

1. Pursuant to Section B.II, Vodafone shall secure that the Monitoring Trustee shall be provided with all information reasonably required in order to undertake its functions. To this end, Vodafone shall provide the Monitoring Trustee, on a regular basis, but and at least automatically every quarter, and in addition in timely manner on request, with the following (which may vary from time to time by agreement with the Monitoring Trustee):
 - 111.1.11. A chart showing for the last month for each of the three ICPs, daily peak capacity (as a percentage of total), daily capacity (as a percentage of total) and daily available bandwidth in Tera bits per second (Tbps).
 - 111.1.12. Three documents in a format mutually agreed with the Monitoring Trustee, containing the following:
 - (I) Capacity planning notes;
 - (II) Hourly data (one line every hour for each interface of the three ICPs) with data on Device, Interface, Timestamp, Average usage, Minimum Usage and Maximum Usage;
 - (III) Interface speeds (total physical capacity for each interface of the three ICPs) snapshot of one day per month with data on Device, Interface and Speed; and
 - (IV) Daily interface 95th percentile capacity (one line for each interface of the three ICPs, one column per day, done monthly).

SECTION C: FEED-IN FEE COMMITMENT / HBBTV COMMITMENT

Annex C.1: Irrevocable offer to FTA Broadcasters

[Broadcasting Company]

[Date]

Confidential

Dear [Madam or Sir],

We make reference to the European Commission's merger control decision in relation to Vodafone's acquisition of certain assets from Liberty Global, Case M. 8864, (the "**Transaction**").

In accordance with the terms of that decision and the commitments offered by Vodafone to the Commission, we make the following binding, irrevocable offer:

Irrevocable Offer

1. by **Vodafone GmbH** (hereafter „**Vodafone**“) to **[Broadcasting Company]**, (hereafter „**Broadcaster**“), together the "**Parties**":

[Broadcaster] and [Vodafone] have entered into the following agreement:

- i. [*framework/ cooperation agreement*],

[and, in addition, into several separate agreements, including the following:]

- ii. [further agreements, *including e.g. separate feed-in agreement, HbbTV agreement*]

(together the "**Vodafone Feed-In Contract**")

[Broadcaster] and [Unitymedia NRW GmbH, Unitymedia Hessen GmbH Co. KG and Unitymedia BW GmbH] (together „**Unitymedia**“) have entered into the following agreement:

- i. [*framework/ cooperation agreement*],

[and, in addition, into several separate agreements, including the following:]

- ii. [further agreements , *including e.g. separate feed-in agreement, HbbTV agreement*]

(together the “**Unitymedia Feed-In Contract**”)

(together the “**Feed-In Contracts**”).

In light of the European Commission having approved the Transaction and in the event that the Transaction then completes, Vodafone makes the following binding and irrevocable offer to [Broadcaster] (the “**Offer**”):

1. Obligation of Vodafone not to raise Feed-In Fees

- (1) Vodafone will procure that Vodafone and Unitymedia will not increase the fees per connected household that [Broadcaster] pays to Vodafone and/or Unitymedia for the transmission of free-to-air TV programs via their respective cable networks to the connected households (“**Feed-in Fees**”), as provided for in the Feed-In Contracts, as long as these contracts are in effect.
- (2) Vodafone and/or Unitymedia may, with the [Broadcaster’s] consent, amend the structure or other aspects of the Feed-in Fees, e.g. for purposes of network integration.
- (3) Vodafone will procure that, under any amended Feed-In Contract with [Broadcaster], the Feed-In Fees that [Broadcaster] pays for any transmitted TV program will not exceed the sum of the Feed-In Fees due under each of Vodafone’s and Unitymedia’s current rate cards for Feed-In Fees (**Appendix 1, No. 1-4 and 7 and Appendix 2**), each applied to the households in the respective federal states where each network provider is currently active.
- (4) The obligation in 1(3) above also applies if the Feed-In Contract has ended and Vodafone and/or Unitymedia enter into a new feed-in agreement with [Broadcaster] or agree on the feed-in of additional TV programs.

2. Obligation of Vodafone to transmit HbbTV signals

- (1) Vodafone will procure that Vodafone and Unitymedia will continue to transmit hybrid broadcast broadband TV (“**HbbTV**”) signals together with any TV programs Vodafone transmits in DVB-C format, as and to the extent provided for in the Feed-In Contracts, as long as these contracts are in effect.
- (2) Vodafone and/or Unitymedia may, with the [Broadcaster’s] consent, amend any obligation to transmit HbbTV signals.
- (3) Vodafone will procure that, under any amended Feed-In Contract providing for the transmission of TV signal in the DVB-C standard, Vodafone and Unitymedia will transmit [Broadcaster’s] HbbTV signals in their cable networks at least under the following minimum technical terms and without charging any fees for such transmission:
 - (i) The HbbTV signal consists of AIT (application information tables) and stream events (in the transmission standard DSM-CC). The HbbTV signal will be included in the DVB-C broadcast. All other data components that [Broadcaster] requires must be separately obtained via an IP network.
 - (ii) The HbbTV signal may have a maximum data rate of 15 kbit/s per TV program (SD or HD).
- (4) The obligation in 2(3) above also applies to any agreement to transmit HbbTV signal together with TV programs in the DVB-C standard that is not currently covered by an agreement to transmit HbbTV or upon expiry of such agreement and/or of the Feed-In Contracts.
- (5) For the avoidance of doubt, the obligation to transmit HbbTV signals in the cable network does not include any obligation of Vodafone or Unitymedia in connection with the functionality of their or any third parties’ customer premises equipment (“CPE”), in particular, no obligation to design or change CPE in such a way that they react to HbbTV signals.

3. Acceptance of the Offer

- (1) [Broadcaster]'s acceptance of this Offer must be made in writing by returning a signed copy of this letter to the address specified below.
- (2) The written declaration of acceptance must be received by Vodafone at the latest [...] after receipt of this Offer by [Broadcaster].
- (3) If [Broadcaster] fails to accept the Offer within the time period specified in 3(2), the Offer shall expire.

4. Effective Period of Obligations

The obligations of Vodafone set out above under 1 and 2 are effective for a period of eight years from the date of the European Commission's approval decision for the Transaction.

5. Others

- (1) All other provisions of the Feed-in Contracts remain unaffected.
- (2) Nothing in this Offer shall be interpreted as a duty of Vodafone, Unitymedia or [Broadcaster] to prolong, renew or enter into a feed-in contract or as a waiver of any termination rights.
- (3) Any amendments to this Offer, including any amendments to this clause, must be made in writing.
- (4) In case any provision in this Offer is invalid, the validity of the remaining provisions shall remain unaffected. The invalid provision shall be replaced by an effective provision that will meet the purpose of the invalid or unenforceable term as closely as possible. The same applies if a gap in this Offer arises that requires filling.

If [Broadcasting Company] accepts this Offer, we kindly ask to return a signed copy of this letter to the following address within [...] of receipt of this letter:

Vodafone GmbH,
[...],
Ferdinand-Braun-Platz 1,
D-40549 Düsseldorf
Email: [...]

cc.: [...], Vodafone Group Plc.
E-Mail: [...]

Yours sincerely,

Vodafone GmbH

Düsseldorf, [Date]

[Signature]

[Broadcaster] accepts the Offer set out above:

[Broadcaster]

[Place, date]

[Signature]

Appendix 1

[...]

Appendix 2

[...]

Distribution type	Feed-in Fee
[...]	[...]
[...]	[...]
[...]	[...]

Annex C.2: List of FTA Broadcasters to be sent irrevocable offer

The table below sets out the list of FTA Broadcasters to be sent an irrevocable offer – in each case, for the purposes of the Feed-in Fee Commitment, relating only to the channel(s) for which the FTA Broadcaster pays Feed-in Fees and, for the purposes of the HbbTV Commitment, relating only to the channel(s) for which the FTA Broadcaster has an agreement for the transmission of HbbTV Signal.

Broadcaster	
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]

[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]
[...]	[...]