COMMISSION DECISION

of 16 July 2003

relating to a proceeding under Article 81 of the EC Treaty and Article 53 of the EEA Agreement

(Case COMP/38.369: T-Mobile Deutschland/O2 Germany: Network Sharing Rahmenvertrag)

(notified under document number C(2003) 2432)

(Only the German text is authentic)

(Text with EEA relevance)

(2004/207/CE)

THE COMMISSION OF THE EUROPEAN COMMUNITIES,

Having regard to the Treaty establishing the European Community,

Having regard to the Agreement on the European Economic Area.

Having regard to Council Regulation No 17 of 6 February 1962, First Regulation implementing Articles 85 and 86 of the Treaty (¹), as last amended by Regulation (EC) No 1/2003 (²), and in particular Articles 2, 6 and 8 thereof,

Having regard to the application for negative clearance and the notification for exemption submitted pursuant to Articles 2 and 4 of Regulation 17 on 6 February 2002,

Having regard to the summary of the application and notification published pursuant to Article 19(3) of Regulation No 17 and to Article 3 of Protocol 21 of the EEA Agreement (3),

After consulting the Advisory Committee for Restrictive Practices and Dominant Positions,

Having regard to the final report of the Hearing Officer in this case (4),

Whereas:

1. INTRODUCTION

(1) On 6 February 2002, T-Mobile Deutschland GmbH (T-Mobile) and O2 Germany & Co OHG (O2 Germany)

(formerly VIAG Interkom GmbH) notified to the Commission a framework agreement of 20 September 2001 concerning infrastructure sharing and national roaming for the third generation of GSM mobile telecommunications (3G) on the German market (the Agreement). In their notification T-Mobile and O2 Germany (the Parties) have requested either negative clearance under Article 81(1) EC/Article 53(1) EEA, or an exemption under Article 81(3)/Article 53(3) EEA (5).

(2) In February 2002, the Commission published a first notice summarising the notified agreement and inviting third party comments (6). This was followed in August 2002 by a notice published pursuant to Article 19(3) of Regulation 17/62 which set out the Commission's preliminary position and gave third parties an opportunity to provide their comments on the proposed favourable approach (7). In February 2003 a supplementary consultation took place of those third parties who had reacted to the notice published pursuant to Article 19(3) of Regulation 17/62, in relation to certain amendments to the notified agreement. The present Decision represents the final step in the Commission's decision-making procedure.

⁽¹⁾ OJ 13, 21.1.1962, p. 204.

⁽²⁾ OJ L 1, 4.1.2003, p. 1.

⁽³⁾ OJ C 189, 9.8.2002, p. 22.

⁽⁴⁾ OJ C 64, 12.3.2004.

⁽⁵⁾ The Commission has also received a related notification from O2 UK Limited (formerly BT-Cellnet Limited) and BT3G Limited, and from T-Mobile UK (formerly One2One Personal Communications Limited) dated 6 February 2002 relating to a 3G Network Deployment and 3G Bilateral Roaming Agreement for the United Kingdom. This agreement is being dealt with separately (Case COMP/38.370 — UK Agreement) and a decision was adopted on 30 April 2003.

⁽⁶⁾ OJ C 53, 28.2.2002, p. 18.

⁽⁷⁾ OJ C 189, 9.8.2002, p. 22.

2. THE PARTIES

- (3) T-Mobile is an operator of digital mobile telecommunications networks and services in Germany using the GSM family of standards. T-Mobile provides GSM services in Germany based on a GSM 900 licence, and was awarded a universal mobile telecommunications system (UMTS) licence in Germany in August 2000 (8). It is wholly owned by T-Mobile International AG, which in turn is a wholly owned subsidiary of the incumbent fixed network operator Deutsche Telekom AG (DTAG).
- (4) T-Mobile International AG is an international holding company acting in mobile telecommunications. Its main subsidiaries operate networks in the United Kingdom (T-Mobile (UK) Limited, T-Motion, Virgin Mobile), Austria, the Czech Republic and the USA. T-Mobile International AG also has subsidiaries active in the Netherlands, Russia and Poland. In the 2001 financial year, DTAG had a worldwide turnover of EUR 48,3 billion and T-Mobile International AG had a worldwide turnover of EUR 14,6 billion.
- (5) O2 Germany likewise operates digital mobile telecommunications networks and services in Germany, where it entered the market as the fourth out of four operators based on a GSM 1800 licence awarded in 1997, and was awarded a UMTS licence in August 2000. O2 Germany is a wholly owned subsidiary of mmO2 plc, formerly BT Cellnet limited, a company previously controlled by British Telecommunications plc. mmO2 operates, through its subsidiaries, networks in the United Kingdom (O2 UK), Germany (VIAG renamed O2 Germany), Ireland (Digifone renamed O2 Ireland) and the Isle of Man (Manx Telecom). In the financial year ending 31 March 2002, the mmO2 group had a turnover of GBP 4,3 billion (about EUR 6,7 billion).

3. LEGAL AND FACTUAL BACKGROUND

3.1. The Development of 3G mobile communications in the EU

(6) In Europe, the first generation (1*G*) of mobile communications systems was based on analogue technology. This was followed at the beginning of the 1990's by the second generation (2*G*) systems which introduced digital technology, namely GSM 900 (the European Global System for Mobile Communications) and DCS 1800 (so called Personal Communications Networks or PCN

services). Both GSM 900 and DCS 1800 services are now commonly referred to as GSM services. Standard GSM communications are circuit-switched, which means that for any call a physical path is set up and dedicated to a single connection between the two communicating end points in the network for the duration of the connection. Transmission rates for GSM are 9,6 kbit/s (kilo bits per second) to 11,4 kbit/s, or with compression 14 kbit/s, which allows the delivery of basic voice telephony, short messaging service (SMS) and e-mail, and circuit-switched data.

- Enhanced 2.5G mobile technologies that use more efficient packet-switched communications to send data in packets to their destinations (via different routes) without requiring the reservation of a dedicated transmission channel (using radio resources only when users are actually sending or receiving data) are being developed to provide a greater range of services including mobile e-mail, visual communications, multimedia messaging and location-based services. General Packet Radio Service (GPRS) is one of the principal 2.5G technology platforms that offer 'always-on' connection, higher capacity and packet-based data services. GPRS data transmission rates are, between 30 kbit/s and 40 kbit/s and with EDGE technology 80 kbit/s to 130 kbit/s, depending on the specific usage situation. This enables the delivery of services such as basic mobile Internet access, mobile radio, and location-based services (9).
- 8) Work is now underway to bring about a third generation (3G) of mobile technology, applications and services to the market (10). 3G builds on 2.5G technology, integrating packet- and circuit-switched data transmission. It is technically capable of reaching a speed of 144 kbit/s and will eventually allow transmission rates that are expected to have a practical maximum of 384 kbit/s (11). 3G services are mobile communications systems capable of supporting in particular innovative multimedia services, beyond the capability of second generation systems such as GSM, and capable of combining the use of terrestrial and satellite components (12).

⁽⁸⁾ In August 2000, the German Government awarded six 3G licences following a frequency auction procedure worth EUR 50,8 billion. The companies awarded the licences were T-Mobil, Vodafone-Mannesmann, E-Plus, Viag Interkom Group, Group 3G and Mobilcom multimedia. Both Group 3G and Mobilcom multimedia have meanwhile ceased their 3G operations, and it is not clear whether their frequencies will be reissued for 3G purposes.

⁽⁹⁾ Other less wide-spread technologies include WAP (Wireless Application Protocol), HSCSD (High-speed circuit switched data) and EDGE (Enhanced Data GSM Environment).

⁽¹⁰⁾ UMTS (Universal Mobile Telecommunications System) is one of the major new 'third generation' (3G) mobile communications systems being developed within the framework defined by the International Telecommunications Union (ITU) collectively known as IMT-2000.

⁽¹¹⁾ The exact transmission rate depends on parameters like the time and location of the call, the number of users within a cell and the applications used, as the available speed will be divided between the different users and applications.

^{(12) &#}x27;The introduction of third generation mobile communications in the European Union: state of play and the way forward' (Introduction of 3G in the EU), COM (2001) 141 Final (20.3.2001).

- (9) Annex I to Decision No 128/1999/EC of the European Parliament and of the Council of 14 December 1998 on the coordinated introduction of a third-generation mobile and wireless communications system (UMTS) in the Community (the UMTS Decision) (13) sets out the characteristics which UMTS must be capable of supporting. These include:
 - (a) multimedia capabilities, full mobility and low mobility applications in different geographical environments beyond 2G capabilities;
 - (b) efficient access to Internet, Intranets and other Internet protocol based services;
 - (c) high quality speech transmission commensurate with that of fixed networks;
 - (d) service portability across 3G environments; and
 - (e) operation in one seamless environment including full roaming with GSM as well as between the terrestrial and satellite components of UMTS networks. Given that 3G networks and services are not yet fully available it is not possible to provide a reliable catalogue. However, examples of anticipated services include mobile videoconferencing, mobile video phone/mail, advanced car navigation, digital catalogue shopping and various business to business (B2B) applications (14).
- (10) The development of 3G in the EU is based on the common UMTS technological platform, on the harmonisation of the radio spectrum and on the definition of a harmonised regulatory environment. These harmonisation objectives were met in part by the general Directive 97/13/EC of the European Parliament and of the Council of 10 April 1997 on a common framework for general authorisations and individual licences in the field of telecommunications services (15). This was followed at the end of 1998 by the abovementioned Decision (recital 9) on the coordinated introduction of a thirdgeneration mobile and wireless communication system (UMTS) in the Community (16). It required Member States to enable the introduction of UMTS services on their territory by 1 January 2002 and emphasised the role of technical bodies such as the European Conference of Postal and Telecommunications Administrations (CEPT) and Europe Telecommunications Standards Institute (ETSI) in harmonising frequency use and promoting a common and open standard for the provision of compatible UMTS services throughout Europe.

(11) Finally, in March 2001 the Commission published a Communication setting out the state of play and the way forward for the introduction of third generation mobile communications in the EU (17). This Communication takes note of the combination of the difficult financial situation of telecommunications operators throughout the EU and of the high infrastructure investment costs involved that lead operators to engage in infrastructure sharing arrangements. It concludes that economically beneficial sharing of network infrastructure should in principle be encouraged, provided the competition rules and other relevant Community law are respected (18). In its follow up Communication Towards the full roll-out of third generation mobile communications' of 11 June 2002 (19), the Commission emphasised that it would continue to work with national administrations towards establishing a best practice approach for network sharing. The Commission published a further Communication about 'Electronic Communications: the Road to the Knowledge Economy' on 11 February 2003 (20).

3.2. Network sharing and national roaming

(12) 3G Network sharing can take place at a number of different levels and involve varying degrees of cooperation. The degree of independence retained by the operators involved depends on which network elements are being shared and their remaining ability to install separate elements (planning freedom). The basic distinction that is relevant in the context of the Parties' network sharing agreement is that between the Radio Access Network (RAN) and the core or backbone network.

3.2.1. RAN

(13) The RAN includes mast/antenna sites, site support cabinets (SSC) and power supply, as well as antennas, combiners and transmission links, Nodes B, namely the base stations that receive and send data across frequencies and control a particular network cell, and the radio network controllers (RNCs) that each control a number of such Nodes B and that are linked to the core network.

3.2.2. Core network

(14) The core network is the intelligent part of the network that consists of mobile switching centres (MSCs), various support nodes, services platforms, client home location registers and operation and maintenance centres. It is linked to the fixed ISDN (integrated services digital network) and Internet networks (see figure 1).

⁽¹³⁾ OJ L 17, 22.1.1999, p. 1.

⁽¹⁴⁾ Cf. http://www.umts-forum.org.

⁽¹⁵⁾ OJ L 117, 7.5.1997, p. 15. This Directive sets out the procedures associated with the granting of authorisations for the purpose of providing telecommunications services and the conditions attached to such authorisations.

⁽¹⁶⁾ UMTS Decision, see footnote 13.

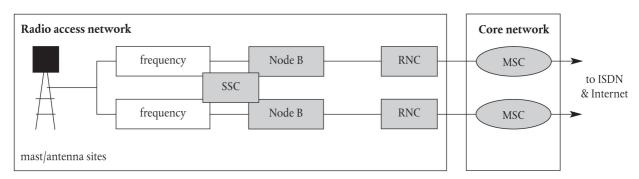
⁽¹⁷⁾ COM (2001) 141 Final (20.3.2001), see footnote 12.

⁽¹⁸⁾ See footnote 17, paragraph 4.3.

⁽¹⁹⁾ COM (2002) 301 Final.

⁽²⁰⁾ COM (2003) 65 Final.

Figure 1: UMTS Network



- (15) Ranked by the increasing degree to which the network is shared it is possible to distinguish between shared use of:
 - (a) sites, which ranges from sharing individual mast sites up to grid sharing (requiring a uniform layout of networks), and may include site support infrastructure, such as site support cabinets (SSC);
 - (b) base stations (Nodes B) and antennas;
 - (c) radio network controllers ('RNCs');
 - (d) core networks, including mobile switching centres ('MSCs') and various databases;
 - (e) frequencies.
- (16) Finally, national roaming concerns a situation where the cooperating operators do not share any network elements as such but simply use each other's network to provide services to their own customers.
- (17) In their notification the Parties use the term 'extended site sharing' for shared use of sites and site infrastructure up to the level of, but not including, Nodes B and RNCs (recital 15, point (a)). They apply the term 'RAN sharing' to common use of the entire radio access network, up to and including Nodes B and RNCs (recital 15, point (a), (b) and (c)). The Parties do not envisage sharing their core networks or frequencies. Their Agreement (as amended) does cover national roaming of O2 Germany on T-Mobile's network namely within the 50 % coverage area, as well as reciprocal roaming of the Parties outside the 50 % coverage areas.

3.3. The National Regulatory Framework

(18) In addition to Community law, the applicable national licensing and regulatory requirements must be taken

into account in the context of network infrastructure sharing (21). Both the general national regulatory framework in Germany and the terms of the Parties' 3G licences set out parameters for network sharing. These include:

- (a) network roll-out requirements in terms of effective coverage related to a specific timetable, notably a requirement to cover 25 % of the population by the end of 2003 and 50 % of the population by the end of 2005 that cannot be met by means of national roaming but can be met by shared infrastructure (22);
- (b) general obligations as regards e.g. site and antenna sharing relating to planning restrictions and environmental concerns:
- (c) limitations as regards the extent of network sharing allowed related to for example sharing network intelligence and sensitive customer data.

⁽²¹⁾ A number of national regulatory authorities (NRAs) in the EU issued guidance on the conditions on which infrastructure sharing would be consistent with the national licensing and regulatory requirements. In Germany, the Regulierungsbehörde für Telekommunikation und Post (RegTP) published its Interpretation of the UMTS Award Conditions in light of more recent technological advance, RegTP (6 June 2001), available at www.regtp.de. In May 2001, the Office for telecommunications (Oftel), the UK NRA, published a note for information on '3G mobile infrastructure sharing in the UK', available at http://www.oftel.gov.uk/publications/mobile/infrashare0501.htm. The Dutch and French NRAs have published similar guidance documents, which are available on their websites at http://www.opta.nl/download/

concept_notitie_nma_vw_opta_umts_netwerken_190701.pdf and at http://www.art-telecom.fr/dossiers/umts/partage-infras.htm.

⁽²²⁾ The minimum transmission rate required to meet the coverage obligation is to be specified by RegTP following a further public consultation. Consistent with technical specifications for 3G services, it is expected to be around or in excess of 144 kbit/s.

- (19) The German Regulatory Authority for Post and Telecommunications (Regulierungsbehörde für Telekommunikation und Post RegTP) is the national telecommunications regulatory authority (NRA) responsible for the notified agreement. RegTP published general guidance in June 2001 in which it took a favourable view of infrastructure sharing provided certain conditions were met (23).
- (20) In particular, RegTP excluded sharing of the core network and the pooling of frequencies, but allowed sharing of sites, masts, antennas, cables and combiners as well as shared used of site support cabinets, and the shared use of logically distinct Node Bs as well as RNCs (²⁴), provided that:
 - (a) each licence holder has independent control of their own logical Node B, respectively RNC;
 - (b) there is no exchange of data, such as customer data, beyond that required for technical operations;
 - (c) separation of operation and maintenance centres;
 - (d) additional own Nodes B respectively own RNCs can be operated to guarantee planning independence and the operator's own Nodes B operated solely by himself are connected to his own logical RNCs;
 - (e) there is no regional division of coverage areas that rules out overlapping network and coverage areas; namely parties may not agree to each cover only a distinct and different geographical area and rely on roaming on each other's network in those areas where their own network does not have coverage.
- (21) On 7 December 2001, RegTP found the Parties' framework agreement to be in line with these regulatory constraints, provided that the Parties respected the requirements of logically independent control of Nodes B and RNCs. RegTP's approval was further subject to reporting obligations concerning the geographical distribution of shared infrastructure, and the meeting of their respective 50 % of population coverage obligations (25).
- (22) Subject to the principle of the primacy of Community law, the national regulatory framework and the EU competition rules are of parallel and cumulative application. National rules may neither conflict with the EU competition rules nor can compatibility with national rules and regulations prejudice the outcome of an

assessment under the EU competition rules. Hence a full assessment of the notified Agreement under the EU competition rules is required.

4. THE AGREEMENT

- (23) On 20 September 2001, the Parties entered into the notified Agreement, namely a framework agreement setting out the principal terms for their cooperation on 3G infrastructure in Germany. The Agreement has been subject to amendment by the Parties, in particular in relation to roaming. The Agreement directly affects the position of the Parties in the German markets for (i) sites and site infrastructure for digital mobile communications services, and (ii) wholesale access to roaming for 3G communications services. The Agreement has potential spill-over effects in related markets.
- (24) The objectives of the Agreement as amended are to achieve capital expenditure efficiencies and operating expenditure savings which will improve the Parties financial situation better enabling them to position themselves in the market; to expand geographical coverage while limiting the environmental impact, and to achieve faster deployment of 3G network infrastructure and the early launch of 3G services. The Agreement provides the basis for cooperation between the Parties on:
 - (a) extended site sharing: reciprocal sharing of sites and elements of site infrastructure such as mast sites, site support cabinets (SSC) and power supply, as well as possibly antennas, combiners and transmission links, within a geographical area sufficient to enable the Parties to each attain its regulatory 50 % population coverage obligation by the end of 2005;
 - (b) radio access network (RAN) sharing: reciprocal sharing of Nodes B (namely the base stations that receive and send data across frequencies and control a particular network cell) and the radio network controllers (RNCs), that each control a number of such Nodes B and that are linked to the core network;
 - (c) <u>national roaming:</u> O2 Germany will roam on T-Mobile's network but not vice versa within the area of O2 Germany's 50 % population coverage obligation between 1 January 2003 and 31 December 2008, subject to the limitations set out in section 4.3.1. For the part of Germany over and above each Party's respective 50 % population coverage obligation, reciprocal national roaming is agreed for the duration of the Agreement.
- (25) The Parties will maintain separate core networks and service provision, and will not share their frequencies. The Agreement is not exclusive, to the extent that both Parties can agree on extended site sharing, RAN sharing and national roaming with third parties (clause 1.3). The key provisions of the Agreement are set out in more detail below.

⁽²³⁾ RegTP (6 June 2001), available at www.regtp.de.

^{(24) &#}x27;Logically distinct' means that a single physical network element, due to its programming, can perform logically distinct operations for the two networks, as if two separate Nodes B or RCS were involved.

⁽²⁵⁾ Letter from RegTP to European Commission, 7.12.2001.

4.1. Extended site sharing

- (26) The Parties will each construct their own proprietary network infrastructure but will cooperate on the basis of 'extended site sharing' within an area which corresponds to their licence obligations for a population coverage of 50 % by the end of 2005. Under the agreement, 'extended site sharing' involves sharing Common Site Support Cabinets (SSC) and power supply and possibly antennas, combiners and transmission links.
- (27) The Agreement specifies rules for the determination of sites that may become the subject of sharing arrangements. Clause 2.1 states that, first, each Party will draw up its own roll-out plans independently; next, the plans are divided into planning periods of [(*)] (26) showing the respective areas which T-Mobile and O2 Germany plan to develop. The geographical areas that the Parties consider relevant for their individual network roll-out will be compared periodically and where overlap exists may be identified as infrastructure sharing areas. The Parties' respective local branches at technical level will determine which sites should be subject to extended site sharing based on maximising cost savings.
- (28) Clause 3.2 specifically provides that the Parties cannot jointly own or control the extended site sharing elements. However, the Party that owns or controls the particular site-sharing elements must allow their use by the other Party. According to Clause 3.3 a bilateral site framework agreement that remains to be concluded will set out the position on common and beneficial use as well as cost (price) regulation for shared sites. T-Mobile has meanwhile transferred ownership of its sites to the newly founded separate legal entity Deutsche Funkturm GmbH, which has not yet negotiated the terms of the relevant framework agreement with O2 Germany. Because to date such an agreement has not yet been concluded and the Commission has not received details regarding its terms, the Commission reserves its position on this agreement which is in any event not covered by the present Decision.
- (29) The Agreement also contains safeguards in relation to the exchange of confidential information. Clause 2.6 provides that only information necessary for the technical realisation of extended site sharing can be exchanged. Under the Agreement, other information, in particular commercially sensitive customer information, cannot be exchanged.

4.2. RAN sharing

Section 4 of the Agreement deals with cooperation in the form of RAN sharing. Under the Agreement, RAN sharing can include additional sharing of Common Physical Nodes B and Common Physical Radio Network Controllers (RNC) — (To remain within the framework set by RegTP, Nodes B and RNCs would have to be logically separate). Clause 4.1 provides that the Parties must carry out a feasibility study into RAN sharing before 30 June 2002. Based on an examination of this feasibility the Parties have for the time being concluded that they will not engage in RAN sharing, but may reconsider RAN sharing in the future. Clause 4.2 states that if RAN sharing is feasible, the Parties will enter into an agreement regulating its implementation as soon as possible. Because so far there is no such agreement the Commission reserves its position on this issue, which is in any event not covered by the present Decision.

4.3. **National roaming**

- (31) National roaming is covered in Chapter 3 of the Agreement (Sections 5 to 11) as amended by supplementary agreements of 20 September 2002, 22 January 2003 and 21 May 2003.
 - 4.3.1. O2 Germany roaming on T-Mobile's network within the 50 % coverage area
- (32) By the amendment of 22 January 2003 to the Agreement of 20 September 2001, the Parties have agreed that T-Mobile will supply O2 Germany (but not vice versa) with national roaming within an area corresponding to a 50 % population coverage obligation between 1 January 2003 and 31 December 2008. For roaming within the 50 % coverage area, O2 Germany will pay [(*)] (see section 4.3.2 below)).
- (33) Following discussions with the Commission, the Parties have agreed to limit roaming within the area that is subject to the 50 % population coverage obligation to a strict minimum. Consequently they have identified three separate areas (Areas 1, 2 and 3) within the area that is subject to the 50 % population coverage obligation where roaming will be successively phased out according to an agreed timetable as O2 Germany achieves a network quality and density that allows it to compete effectively with the other licensed network operators. The Parties have amended the Agreement on 21 May 2003 to reflect these changes.

⁽²⁶⁾ Part of this text has been edited to ensure that confidential information is not disclosed; those parts are enclosed in square brackets and marked with an asterisk.

- (34) The Areas where roaming will be phased out according to a specific timetable are as follows:
 - (a) Area 1 comprises [main urban (*)] regions covering approximately [(*)] of the German population, where O2 Germany undertakes not to roam, and T-Mobile undertakes to bar roaming from 31 December 2005 (27);
 - (b) Area 2 comprises [smaller urban (*)] regions [of secondary commercial importance (*)] covering approximately a further [(*)] of the German population, where O2 Germany undertakes not to roam, and T-Mobile undertakes to bar roaming from 31 December 2007 (²⁸); and
 - (c) Area 3 comprises [smaller urban (*)] regions [of lesser commercial importance (*)] covering approximately a final [(*)] of the German population, where O2 Germany undertakes not to roam, and T-Mobile undertakes to bar roaming from 31 December 2008 (²⁹).

By way of exception to this rule, in both Area 1 and in Area 2, O2 Germany will continue roaming in so-called 'underground areas' until 31 December 2008. Pursuant to the timetable, O2 Germany is also entitled to roam in underground areas in Area 3 until 31 December 2008 (30).

- 4.3.2. Reciprocal roaming outside the 50 % coverage area
- (35) Outside the area required to obtain 50 % population coverage, the Parties have agreed terms for reciprocal bulk purchasing of both circuit-switched and package-switched national roaming. O2 Germany commits to purchasing a minimum volume of such roaming services from T-Mobile. T-Mobile obtains a right to purchase roaming services from O2 Germany under the same conditions, but it is not under an obligation to do so.

- (36) Section 5 of the Agreement sets out the key principles on national roaming. Clause 5.3 provides that the Parties agree not to discriminate against other national or international roaming partners. In addition, neither of the Parties will treat the other Party's customers less favourably than their own customers. Clause 5.6 states that the Parties undertake to ensure that the cooperation on roaming will not restrain service competition between the Parties.
- (37) Section 6 of the Agreement deals with national roaming by O2 Germany customers on T-Mobil's 3G network. Clause 6.1 provides that T-Mobile will provide O2 Germany with bulk national roaming for the duration of the Agreement. O2 Germany has agreed to purchase a minimum quantity of roaming services from T-Mobile for a value of [(*)] within three years from the date of launch of the 3G roaming services (Clause 6.5). Parties have provided data based on the experience with O2 Germany roaming on T-Mobile's second generation GSM network to show that this is likely to represent a very small proportion of O2 Germany's requirements. Conversely, Section 7 deals with national roaming by T-Mobil's customers on O2 Germany's 3G network. Clause 7.1 states that T-Mobile has the option but not an obligation to purchase 3G roaming services from O2 Germany. However, if T-mobile purchases national roaming services from O2 Germany, it is subject to the same minimum purchase requirement as O2 Germany (Clause 7.4)
- (38) Section 8 of the Agreement sets out specific rules on barring customer use. Clause 8.3 states that the Party providing national roaming has the right to bar subscribers of the other Party from its network. Also, the Party using national roaming can bar its own customers from using the other Party's network. This applies in cases where there are overlapping areas. The agreement also provides information about the location areas for barring and circumstances when the parties will dispense with barring.
- (39) Section 10 of the Agreement sets out a two-tier system of pricing for 3G roaming. It provides that prices for circuit-switched 3G roaming (destined for mobile voice telephony services) are based on the respective interconnection termination prices of T-Mobile and O2 Germany. Wholesale prices for packet-switched 3G roaming (destined for mobile data services) are based on a [retail minus pricing model (*)] (31) taking into account possible future developments of packet-switched roaming prices and demand.

⁽²⁷⁾ Area 1 consists of: [(*)].

⁽²⁸⁾ Area 2 consists of: [(*)].

⁽²⁹⁾ Area 3 consists of: [(*)].

^{(30) &#}x27;Underground areas' shall mean any area within the cities or regions within Areas 1 and 2 and 3 which is part of the underground public transport system (including railways and metro), underground shopping centres, underground car parks, tunnels for vehicles and pedestrians and any other comparable underground areas as well as the areas directly above (ground level) but only to the extent underground areas and ground level cannot be technically separated for roaming purposes.

 $^(^{31})$ [(*)].

- (40) Section 11 of the Agreement sets out specific rules on the resale of national roaming capacities to third parties. Clause 11.1.a sets out the general rule that each Party has the right to resell the roaming capacity of the other Party to service providers. This is in accordance with the Parties' obligations under national law and under the terms of their 3G licence to provide access to service providers (32). However, the resale of roaming capacity to Mobile Virtual Network Operators (MVNOs) that provide voice services to end users (33), and of roaming capacity to other licensed network operators, is subject to the prior approval of the host operator, namely the other Party.
- (41) Clause 11.1.b provides that Parties have the right to make national roaming capacities of the respective other Party available to MVNOs for data traffic (data MVNOs), provided that these MVNOs do not use this capacity for the provision of services to end customers that are essentially identical to an end-to-end mobile voice service from a customer's viewpoint (Voice MVNOs). The Parties are also able to provide roaming capacity for voice traffic to 'data MVNOs' acting as service providers.
- (42) In addition, Clause 11.1.c provides that the resale of roaming capacity to other licensed network operators or to 'Voice MVNOs' as defined in Clause 11.1.b is subject to consent by the other Party. However, pursuant to Clause 11.2, the prior consent requirement of Clause 11.1.c does not apply if the MVNOs are group companies of the other Party, provided that they respect the different pricing regimes for voice and data services. Moreover, pursuant to Clause 11.3, once a Party itself offers roaming to a third party (not a group company) that is a Voice MVNO and offers services essentially identical to an end-to-end mobile voice service from a

customer's viewpoint in the sense of Clause 11.1.b, this Party is obliged to allow the other Party to provide their received national roaming capacities to such Voice MVNOs as well.

4.4. Duration

(43) The Agreement will continue in force until 31 December 2011, after which date it will be automatically renewed for a period of two years unless terminated by either Party with two years prior notice.

5. RELEVANT MARKET

5.1. Introduction

- (44) As the Agreement is mainly technical in nature and does not have as its object the restriction of competition, the effect of the Agreement must be analysed. Whether the Agreement is likely to have negative effects on competition depends not only on the nature of the Agreement but also on its economic context, such as the market power of the parties and other factors relating to market structure. This analysis requires a definition of the two relevant wholesale markets that are directly affected by the Agreement, and an identification of a number of other (potential) wholesale and retail markets where effects may be felt.
- (45) Telecommunications markets can generally be divided into wholesale and retail markets. Wholesale markets typically consist of the provision of access to networks (or network elements) and of network services to operators of networks and services, and retail markets consist of the provision of communications services to end users (34). Within these broad categories narrower markets can be defined not only on the basis of the characteristics of the service concerned and the degree to which it can be substituted by other services based on price, usage and consumer preference, but by an analysis of competitive conditions and the structure of demand and supply (35). Given the advantages of mobility and

⁽³²⁾ Service providers (also called resellers) are entities authorised to offer mobile services directly to end users under their own brand name (dealing with marketing, billing, etc.) based on wholesale airtime purchased on a third party's mobile network. The legal basis for the obligation to provide service providers access for 3G are Section 4 TKV Telecommunications Customer Protection Ordinance of 11 December 1997 (Federal Law Gazette I, p. 2910) last amended by Second Ordinance Telecommunications Customer Protection Ordinance of 27 August 2002 (Federal Gazette I, p. 3365) (Telekommunikations-Kundenschutzverordnung vom 11.12.1997, BGBl. I S. 2910 Zweite Verordnung zur Änderung der TKV vom 27.8.2002, BGBl. I S. 3365), and section 15 of the German 3G licences.

⁽³³⁾ MVNOs are undertakings with an own mobile network code and an own range of mobile International Mobile Subscriber Identity (IMSI) numbers or an equivalent for 3G, but that do not own a licence to operate wireless frequencies.

⁽³⁴⁾ Notice on the application of the competition rules to access agreements in the telecommunications sector, framework, relevant markets and principles (Access Notice), OJ C 265, 22.8.1998, p. 2, point 45; Commission guidelines on market analysis and the assessment of significant market power under the Community regulatory framework for electronic communications networks and services (SMP Guidelines), OJ C 165, 11.7.2002, p. 6, point 64.

⁽³⁵⁾ Commission Notice on the definition of relevant market for the purposes of Community competition law, OJ C 372/5, 9.12.1997, p. 5. Guidelines on the application of EEC competition rules in the telecommunications sector, OJ C 233, 6.9.1991, p. 2.

the premium paid for it, mobile services are in general not substitutable by fixed services. Mobile and fixed voice services are therefore part of different services markets, as has been determined in a number of Commission decisions (36).

- (46) The network access and services markets that are primarily concerned by this Decision are:
 - (a) the market for sites and site infrastructure for digital mobile radiocommunications equipment;
 - (b) the market for wholesale access to national roaming for 3G communications services.

In addition, the markets for wholesale access to 3G services, as well as the downstream retail markets for 3G services are affected indirectly.

5.2. Wholesale mobile network access markets

- (47) Access to physical facilities such as sites and site infrastructure such as masts and antennae, as well as ducts, leased lines and rights of way that serve as part of a mobile telecommunications network infrastructure, may constitute access to particular mobile network markets. In addition, there are wholesale network access and services markets for the provision of digital mobile communications services to other operators. These can be divided broadly into:
 - (a) first, wholesale network services related to interconnection that allow communication to take place between the users of different networks, and;
 - (b) second, wholesale access services that relate to the use of a host or visited network by customers of other operators.
- (48) The wholesale network services related to interconnection include call termination (the wholesale service of completing a call to an end user), call origination (the wholesale service of enabling a call to be originated by an end user), as well as direct interconnection services (the provision of a direct physical link between terminating and originating networks) and transit services (the

provision of an indirect link between terminating and originating networks by means of transit across one or more third networks). Access services that relate to the use of a host or visited network by customers of other operators include the wholesale provision of national and international roaming, and the wholesale provision of airtime.

5.3. Markets directly affected by the Agreement

5.3.1. The market for sites and site infrastructure for digital mobile radiocommunications equipment

Product/infrastructure market

- (49) Both 2G and 3G mobile telecommunications networks rely on a cellular network architecture based around antennae that are distributed across the coverage area, allowing radio signals to be received from and transmitted to end users within a certain cell radius (³⁷). The operators of 2G and 3G mobile telecommunications networks require sites for the location of these antennas and the related site infrastructure such as masts, site support cabinets, power supply, combiners and transmission links.
- Acquiring (either purchasing or, more commonly, leasing) such sites requires agreement with the site owners and planning permission from local authorities, and in some cases approval from regulatory authorities to limit the risk of radio frequency interference. Although the number of properties that can be converted into sites for digital mobile communications equipment is in theory unlimited, in practice the number of suitable sites is limited due to planning regulations, health or environmental considerations or space constraints in hot spots (e.g. in city centres, airport and railway terminals and in underground areas). To be considered a site, a particular property must therefore be usable as such from a technical point of view, must be made available in accordance with regulatory constraints, and must fit into the planned network architecture spaced across the coverage territory according to capacity needs.

⁽³⁶⁾ SMP Guidelines, paragraph 66. Cf Commission Decision 98/2001/EC in Case No COMP/M.1439 — Telia/Telenor, OJ L 40 9.2.2001, p. 1; Commission Decision of 12 April 2000 in Case No COMP/M.1795 — Vodafone Airtouch/Mannesmann, OJ L 40, 9.2.2001, p. 1; Commission Decision of 20 September 2001 in Case No COMP/M.2574 — Pirelli/Edizone/Olivetti/Telecom Italia, OJ C 325, 21.11.2001, p. 12; Commission Decision of 10 July 2002 in Case No COMP/M.2803 — Telia/Sonera, OJ C 201, 24.8.2002, p. 19.

⁽³⁷⁾ Because 2.5G is based on an overlay of existing 2G networks and in Germany is provided by the four existing 2G operators (and their service providers) this is not analysed separately.

(51) From a demand perspective, sites are at present required primarily by the four operators that hold 3G licences in Germany and are planning 3G network roll-out, all four of which also operate 2G networks (38). In principle 2G and 3G sites are interchangeable, although due to the nature of the different frequencies used and the added capacity required for 3G services, the density of a 3G network is greater, and requires up to twice as many sites as a 2G network. Only a limited part of the demand for 3G sites can therefore be met by using existing 2G sites. Finally, unlike 2G networks, which are already fully rolled out, the roll-out of 3G networks in Germany is still in its planning stages. Given regulatory roll-out requirements of 25 % population coverage by the end of 2003 and 50 % population coverage by the end of 2005, the initial demand for sites is highest in urban and other densely populated areas. Although there is some room for substitution between various types of sites (e.g. between roof-top sites and mast sites, or between multiple sites serving smaller cells, such as micro or pico cells and single sites serving larger macro cells) there are no other products that can substitute for 2G and 3G sites and site infrastructure.

(52) From a supply perspective, access to 2G and 3G sites and site infrastructure can firstly be provided by 2G and 3G network operators that have located, acquired and developed sites for the purposes of operating their own networks. This is because in principle sites can be shared between multiple operators, although there are technical limits on the number of operators that can share a particular site, in most cases up to three (39), depending on the lay-out of the specific site. There appear to be economies of scope involved at the supply side, because network operators are likely to prefer dealing with parties that can provide them with the largest possible number of sites across the largest possible number of locations in order to minimise search costs and to minimise transaction costs. Operators may prefer 'extended' site sharing with other operators covering elements of site infrastructure, thereby further reducing their costs. Finally, it is likely that in hot spots such as city centres many of the most favourable sites have already been developed and are therefore not always available to market entrants.

- (53) There is limited scope for supply by operators of broadcasting networks. Nevertheless, there is a tendency for mobile operators to utilise broadcast structures where they are suitable for the local requirements of the service. Broadcast transmission equipment is located on sites affording a much higher level of geographical coverage when compared to the coverage requirements of cellular systems. Consequently, broadcast sites tend to be tall structures in elevated locations that transmit at high powers (tens of kilowatts) in order to achieve optimal population coverage using a limited number of sites. In view of capacity considerations, mobile radio networks are cellular in nature, each site providing sufficient but limited coverage, reducing inter-cell interference and allowing the frequency allocations to be reused in other areas. The size of each cell may range from a few hundred metres to several kilometres, the actual range determined by the level of network capacity required. Site height and transmitted power are the main factors in controlling cell size with typical powers of tens of watts and antenna heights between 10 and 20 meters.
- There has been market entry in Germany by independent companies that specialise in the location, acquisition and provision of sites for use by third parties. Other parties that control sites, such as public authorities or utilities can likewise enter the market and have already done so in Germany. Moreover, operators have historically also acquired and leased individual sites on a commercial basis directly from the site owners, and continue to do so. Apart from the general planning permission constraints, health rules and requirements to minimise electromagnetic interference mentioned above there are no serious legal, statutory or other regulatory requirements that could defeat a time-efficient entry into the market and as a result discourage supply-side substitution. No significant investments or scarce technical expertise are required to enter the market. Market entry therefore remains possible.
- (55) Based on the above analysis of supply and demand it should be concluded that there is a market for sites and site infrastructure for digital mobile radiocommunications equipment.

Geographical market

(56) Based on the structure of demand, which is driven by nationally licensed operators, and because the relevant planning rules are guided by national law, the market is national, namely Germany.

 $^(^{38})$ Sites are also required by e.g. digital broadcasters and will be required by providers of TETRA (terrestrial trunked radio) if these services take off in Germany. So far the Parties only share sites with other 2G/2.5G operators.

⁽³⁹⁾ A breakdown of the multiple usage of sites can be found on http://www.regtp.de.

5.3.2. Wholesale market for access to national roaming for 3G communications services

Product/service market

- Mobile roaming takes place when subscribers use their mobile telephone handset, or more specifically the SIM (subscriber identification module) card that identifies the subscribers, on a different mobile network (the host or visited network) than that to which they subscribe and which issued their SIM card (the home network). Roaming can be either national or international. In both cases it is based on agreements between the home network operator and the visited network operator for the provision of wholesale roaming access to the visited network which is then passed on as a retail service by the home network to its subscribers. However, the market for national roaming is distinct from that for international roaming, inter alia, because it does not involve agreements between foreign operators, because it is not based on the standard arrangements developed within the GSM Association (40), and because the prices are significantly different.
- (58) Notwithstanding a possible initial overlap between 2G, 2.5G and 3G retail services, from a demand perspective wholesale access to national roaming for 3G communications services will be distinct from 2G or 2.5G roaming, because the range of both voice and data services that can be provided based on 3G roaming is broader and different, given that significantly higher transmission speeds will be available (namely in practice from 144 up to 384 kbit/s for 3G versus between 20 and 60 kbit/s for 2.5G and between 9 and 14 kbit/s for 2G). A more complete discussion of the relevant voice and data services is provided in a separate section below.
- (59) From a supply perspective, only operators of 3G networks, or other parties able to provide the relevant type of access to the 3G networks of such operators, will be able to supply wholesale access to national roaming for 3G services. Given licensing requirements, the entry barriers, aside from secondary entry based on access rights to an existing 3G network, are absolute. Wholesale access to national roaming for 3G communications services therefore constitutes a distinct product/service market.

Geographical market

(60) Given national licensing of 3G networks, and given pricing differences between national and international roaming, the relevant market is national, namely Germany.

5.4. Other potentially affected wholesale and retail markets

5.4.1. Potentially affected wholesale markets

Product/service market

- There are a number of other possible wholesale markets for 3G network services and network access that may be affected by the Agreement such as the market for the provision of wholesale airtime access to service providers, which exists in Germany based on regulatory obligations. Wholesale airtime access is similar to national roaming because it likewise concerns the wholesale provision of network access and minutes (airtime) by a host network. It is supplied to service providers by licensed mobile operators in Germany as a condition of the latters' licences (41). The difference between the two forms of access is that a mobile network operator relying on national roaming can itself determine the range of services available to its subscribers, and can provide services that are not available to customers of the host network. A service provider, however, can only provide simple resale of the range of services offered by the network operator that is providing it with wholesale airtime.
- (62) Another possible wholesale market is the market for call origination services where providers of carrier selection services purchase the right to obtain access to mobile networks in order to originate calls that they terminate under their own responsibility. This market does not presently appear to exist in Germany but exists in other Member States such as the United Kingdom. It is possible that in addition, new forms of wholesale access to 3G networks and services may develop that will come to constitute separate relevant markets.

⁽⁴⁰⁾ The GSM Association consists of over 690 different 2 and 3G mobile network operators, manufacturers and suppliers who collectively develop technical platforms to make wireless services work seamlessly, with a focus on roaming and inter-operability. See http://www.gsmworld.com.

⁽⁴¹⁾ Section 4 TKV Telecommunications Customer Protection Ordinance of 11 December 1997 (Federal Law Gazette I, p. 2910) last amended by Second Ordinance Telecommunications Customer Protection Ordinance of 27 August 2002 (Federal Gazette I, p. 3365) (Telekommunikations-Kundenschutzverordnung vom 11.12.1997, BGBl. I S. 2910 Zweite Verordnung zur Änderung der TKV vom 27.8.2002, BGBl. I S. 3365); and by section 15 of the German 3G licences.

(63) Wholesale 3G services network services and network access are likely to be distinct from network services and access for 2G or 2.5G services, because the range of services that can be provided based on 3G networks is broader and different, given the availability of significantly higher transmission speeds. However given the degree of development of 3G wholesale markets which are still emerging, it is too early to assess in detail the demand side for network services and access on commercial terms in such markets, with the exception of demand from service providers for access to wholesale airtime consistent with the regulatory obligations of the 3G network operators. From a supply side these markets are logically limited to 3G network operators and to any other parties that may obtain a right to provide the relevant degree of access to 3G networks.

Geographical market

- (64) Given national licensing and pricing patterns, the geographic scope of such wholesale markets is likely to be national (42).
- (65) Because for the purposes of the present decision it is not necessary to define these markets more closely, their definition will be left open.

5.4.2. Potentially affected retail markets

Whereas the cooperation covered by the Agreement is limited to site sharing and national roaming at wholesale network level, the effects of this cooperation could be felt in the downstream retail services markets where the Parties are active independently of each other. Within the area of mobile retail services, voice and data services have so far been offered in a bundled manner, suggesting they may be part of the same market. The Parties believe that all network operators are likely to offer 'seamless' 2G and 3G voice and data services by providing both types of services on a single SIM card. However, the balance between voice and data services is expected to shift fundamentally: whereas 2G data services are largely limited to fax and SMS, and voice services typically account for over 90 % of 2G mobile operators' revenues, for 3G networks, with services like teleshopping, video telephony and video conferencing, it is expected that eventually between 50 % and two thirds of revenue may be generated by data services. It is therefore useful to analyse digital mobile voice telephony services and digital mobile data services separately. At least initially this distinction largely corresponds with that between circuit-switched and packet-switched services.

Digital mobile voice services

- Concerning mobile voice telephony markets the Commission has so far generally not distinguished between different technologies. Most Decisions have determined that both analogue and digital GSM 900 and 1800 are part of the same mobile voice telephony market, while testing narrower market definitions to ensure that no dominant positions arose on any market definition (43). However, as analogue mobile telephony was phased out in Germany on 1 January 2000, the services concerned by the Agreement are digital mobile voice telephony. So far, the Commission has not defined distinct markets for 2G, 2.5G and 3G retail services (44).
- Over time however industry sources anticipate that 'rich voice over 3G networks' services may develop that consist of voice services integrated with data services such as consumer videophones and multimedia conferencing that go beyond the capacity of 2G and 2.5G networks. Hence it is possible that a distinct retail market for 3G voice services will develop, or indeed that 3G voice and data services will merge into a single market.

(44) Commission Decision of 12 April 2000 in Case No COMP/ M.1795 — Vodafone Airtouch/Mannesmann, OJ C 141, 19.5.2000, p. 19; Commission Decision of 31 July 2000 in Case No COMP/M.1954 — ACS/Sonera Vivendi/Xfera, OJ C 234, 18.8.2000, p. 6; Commission Decision of 25 September 2000 in Case No COMP/M.2130 — Belgacom/Tele Danmark/T-Mobile International/Ben Nederland Holding, OJ C 362, 18.12.2001, p. 6.

⁽⁴²⁾ However cf Commission Decision of 4 October 2001 in Case No COMP/M.2898 TDC/CMG/MIGway JV, OJ C 16, 19.1.2002, p. 16, which identifies EU-wide markets for connectivity to the international signalling network and for wholesale access (SMS) to mobile telephony infrastructure.

⁽⁴³⁾ See Commission Decision of 21 May 1999 in Case No IV/ M.1430 — Vodafone/Airtouch, OJ C 295, 15.10.1999, p. 2; Commission Decision of 21 May 1999 in Case No COMP/JV.17 - Mannesmann/Bell Atlantic/Omnitel, OJ C 11, 14.1.2000, p. 4; Commission Decision 98/2001/EC of 13 November 1999 in Case No COMP/M.1439 — Telia/Telenor, OJ L 40, 9.2.2001, p. 1; Commission Decision of 20 December 1999 in Case No COMP/M.1760 — Mannesmann/Orange OJ C 139, 18.5.2000, p. 15; Commission Decision of 12 April 2000 in Case No COMP/M.1795 — Vodafone Airtouch/Mannesmann, OJ C 141, 19.5.2000, p. 19; Commission Decision of 4 August 2000 in Case No COMP/M.2053 — Telenor/BellSouth/Sonofon, OJ C 295, 18.10.2000, p. 11; Commission Decision of 11 August 2000 in Case No COMP/M.2016 — France Telecom/Orange, OJ C 261, 12.9.2000, p. 6; Commission Decision of 25 September 2000 in Case No COMP/M.2130 — Belgacom/Tele Danmark/T-Mobile International/Ben Nederland Holding, OJ C 362, 18.12.2001, p. 6.

Developments in the quality and the scope of the voice services concerned brought about by 3G technology are likely to enable 3G voice services to command a price premium. Moreover, they are likely to lead to one-way substitution between 2G services on the one hand, and 3G services on the other hand (namely users will substitute 3G services for 2G services, but not vice versa), which would be evidence of the existence of separate markets. For the purposes of the present Decision however, it is not necessary to conclude whether 2G and 3G voice services should be considered separate product markets. The relevant product market definition is therefore left open.

Digital mobile data services

- (69) A fundamental difference between 2G data services on the one hand and 2.5 and 3G data services on the other is that the former is circuit-switched, whereas the latter are packet-switched, namely based on a different technology with different and increased technical capabilities. Because services and content available over 3G networks are expected to be considerably better than 2G both as concerns data speeds and the range of services that is consequently enabled, any substitutability between 2G and 3G is likely to be one way. This leads to the conclusion that 2G and 3G services are likely to be separate markets. Although it appears clear that there will be some overlap between $2.5\hat{G}$ and 3G services as 2.5G allows e.g. mobile e-mail, multi-media messaging and continuous Internet access, it does not have data transmission rates that are sufficient to provide the high end of data services that are expected to emerge on 3G networks. It therefore appears that there may be an emerging market for the provision of 3G mobile data retail services.
- (70) Based on the distinguishing factor of mobility, the Commission has so far considered that mobile and fixed data services are in separate markets (45). However the highest bandwidth 3G data services are likely to be deliverable only under conditions of optimal coverage and reduced to very low or no mobility. At the same time wireless local area network services (WLAN) are developing that provide data communications including broadband Internet access allowing limited mobility within a circumscribed area (such as within buildings or

(45) In relation to dial-up access to Internet via mobile handsets and via fixed means. Cf. Commission Decision of 20 July 2000 in Case COMP/JV 48 — Vodafone/Vivendi/Canal+, http://europa.eu.int/ comm/competition/mergers/cases/. at public locations). It is not excluded that a similar measure of limited mobility will in future become the norm for all or most high bandwidth data services. Consequently, it is an open question whether services like WLAN will be a complement to or a substitute for 3G services and as a result the distinction between fixed and mobile data services will break down and a market for broadband wireless data communications may emerge.

services are presently only at the planning stages, it is not possible to determine accurately whether they are in the same market or in different markets, whether digital mobile voice and data services are in the same market, nor whether certain 3G services are in the same market as broadband data services like WLAN. However, for the purposes of the present Decision it is not necessary to conclude on whether 2G, 2.5G and 3G data services and/or voice services, respectively broadband wireless data services should be considered separate product markets. The relevant product market definition is therefore left open.

Geographic markets

(72) Given the fact that retail pricing and services offers of digital mobile telephony are currently national, markets remain national in scope, with the exception of the emerging market for the provision of seamless pan-European mobile telecommunications services to internationally mobile customers that the Commission first identified in the Vodafone/Mannesmann Decision (46). International roaming services are not a substitute given the high prices and limited functionality of international roaming (47). In addition, network operators have generally refused to allow permanent roaming based on international roaming access, namely allowing a customer of a foreign network to permanently roam on their own network. Consequently the market or markets identified above are national.

⁽⁴⁶⁾ See Commission Decision of 12 April 2000 in Case No COMP/M.1795 — Vodafone Airtouch/Mannesmann, OJ C 141, 19.5.2000, p. 19; Commission Decision of 11 August 2000 in Case No COMP/M.2016 — France Telecom/Orange, OJ C 261, 12.9.2000, p. 6.

⁽⁴⁷⁾ See Commission Decision of 22 June 1998 in Case No IV/JV.2 — ENEL/FT/DT, OJ C 178, 23.6.1999, p. 15; Commission Decision of 21 May 1999 in Case No IV/M.1430 — Vodafone/ Airtouch, OJ C 295, 15.10.1999, p. 2; Commission Decision 98/ 2001/EC of 13 November 1999 in Case No COMP/M.1439 — Telia/Telenor, OJ L 40, 9.2.2001, p. 1.

5.5. Market structure

- 5.5.1. The market for sites and site infrastructure for digital mobile radiocommunications equipment
- (73) Although operators are likely to prefer to deal with parties who can provide a large number of sites at the same time, there are no major entry barriers, limited investment or technical expertise is required, and owners of individual sites can trade directly with mobile network operators. Actual or potential competitors in this market include the other licensed operators for 2G and/or 3G networks and services in Germany, railway and broadcasting operators, power utilities, and specialised companies (tower companies) acquiring and offering access to sites, such as New Radio Tower, Plan+Design Netcare AG and Tessag SAG Abel Kommunikationstechnik GmbH & Co. Kg. T-Mobile has recently transferred its activities regarding the location, acquisition and leasing, including sharing, of sites to a separate legal entity, Deutsche Funkturm GmbH. Of the around [40 000 to 70 000 (*)] existing sites some [10 000 to 20 000 (*)] are estimated to be held by T-Mobile, [10 000 to 20 000 (*)] by D2 Vodafone, [5 000 to 15 000 (*)] by E-Plus and [5 000 to 15 000 (*)] by O2 Germany. [2 000 to 6 000 (*)] sites are estimated to be held by the German Railways, [2 000 to 6 000 (*)] by broadcaster ARD and some [2 000 to 6 000 (*)] by others including Mobilcom, power utilities, and tower companies.
 - 5.5.2. Wholesale access to national roaming for 3G communications services
- (74) In Germany, 2G national roaming is presently limited to O2 Germany's customers roaming on T-Mobile's network (⁴⁸). T-Mobile consequently has a 100 % market share in the market for wholesale 2G national roaming in Germany. Because in practice 3G roaming will mainly result from O2 Germany's customers roaming on T-Mobile's network, T-Mobile is likely to have a similarly high market share in the market for wholesale 3G national roaming. However T-Mobile is subject to potential competition from the other 3G network operators who could offer national roaming at little or no additional cost, albeit possibly subject to capacity constraints.
- (75) There are high entry barriers due to formal licensing requirements, the limited number of available licences, and the high costs associated both with the acquisition

of a 3G licence in Germany and with investments in 3G network infrastructure. The opportunities for market entry at network operator level are limited, as it is not foreseen that new licences will be issued or that the licences of Group 3G and Mobilcom, which will not roll-out their 3G networks, will be reissued. Although it cannot be excluded that the licences of Group 3G and Mobilcom will be transferred to another undertaking either with approval from the NRA, or by means of a takeover of these undertakings, this is an unlikely scenario given the present investment climate. Hence, the main actual or potential competitors in wholesale access and services markets are the two other licencees that plan to roll-out 3G networks and services in Germany and potential competitors may be third parties reselling access to and wholesale roaming services on the network of these other operators or on the Parties' networks.

5.5.3. 3G retail services

- (76) There are six operators that have been licensed to use 3G frequency rights and provide 3G networks and services in Germany. Apart from T-Mobile and O2 Germany this concerns D2 Vodafone, E-Plus, Mobilcom and Group 3G. However, both Group 3G/Quam and Mobilcom have written off the value of their 3G assets and have abandoned their plans to enter 3G markets in Germany as network operators although Mobilcom may remain active as a service provider (49). The main competitors in 3G retail markets are therefore D2 Vodafone and E-Plus and potentially service providers such as Mobilcom and Debitel, who purchase wholesale airtime for resale from network operators as well as any mobile virtual network operators (MVNOs) that may emerge in this market.
- Because 3G networks and services have not yet been rolled out, no accurate estimate of market shares or assessment of the substitutability between 2G and 3G services can at present be provided. If the estimated 2002 market shares for 2G retail services are nevertheless taken as a proxy for market share in 3G markets, including figures for customers of service providers active on their networks, T-Mobile had a 41,7 % market share and O2 Germany a 7,8 % market share against 38,3 % for D2 Vodafone and 12,2 % for E-Plus. If only own subscribers are counted, T-Mobile had a market share of 29 %, against 7,5 % for O2 Germany, 28 % for D2 Vodafone, and 7 % for E-Plus, and in total 29 % of subscribers are divided between more than 10 different service providers, led by Debitel with a market share of 12,7 % and Mobilcom with 8,8 %. Group 3G is not active in 2G markets in Germany.

⁽⁴⁸⁾ The relevant agreement was the subject of a notification in Case COMP/C1/37.500 VIAG Interkom + T-Mobil, which was closed by means of an administrative letter of 13 July 1999.

⁽⁴⁹⁾ Cf http://www.quam.de: 'Quam stellt operatives Geschäft ein', Quam (15 October 2002); http://www.mobilcom.de: 'Q3/2002: MobilCom schreibt UMTS-Vermögen vollständig ab', MobilCom AG (28 November 2002).

6. ARGUMENTS OF THE PARTIES

- (78) The Parties primarily explain the need for their agreement on 3G network sharing in financial terms. More specifically they claim that network sharing is necessary because:
 - (a) 3G network infrastructure is more expensive than its predecessors, given the much higher antenna density required, namely up to twice as high as 2G GSM networks;
 - (b) since 3G licences were awarded, the expectations of 3G services revenue have been revised downward; and
 - (c) due to the general downturn of the mobile telecommunications industry their cost of raising capital has increased.

In the notification the Parties stated that as a result of the Agreement, they envisaged a reduction of up to [15 to 35 % (*)] of their investments in network infrastructure with further savings on network operating costs. Subsequently the Parties have reduced their estimates of the cost savings.

6.1. Article 81(1) EC/Article 53(1) EEA

(79) The Parties argue the Agreement does not have the object or effect of appreciably restricting competition within the common market contrary to Article 81(1) EC/53(1) EEA, as their prospective site-sharing and possible RAN-sharing will not result in the sharing of core networks or frequencies, and because the Agreement requires the Parties to maintain full competition at the service and retail level. In addition, network planning, design and operations will remain independent and any disclosure of technical information will be limited to the minimum necessary.

6.2. Article 81(3) EC/Article 53(3) EEA

The main potential restriction of competition concerns the limitations on resale of roaming capacity for the provision of voice services to MVNOs. If the Agreement is considered to restrict competition, the Parties argue in the alternative, that it is exemptable under Article 81(3) EC/53(3) EEA. In view of the large licence costs incurred followed by a significant decrease in the commercial value of 3G spectrum the Parties argue that infrastructure sharing will enable them to reduce capital and operating expenditure by reducing their investments in network infrastructure and network operating costs. O2 Germany, the main beneficiary of national roaming under the Agreement, estimates that as a result of the Agreement it will save [15 to 35 % (*)] of its 3G network rollout costs predominantly due to roaming. According to the Parties, this is necessary to alleviate some of the

burden of the simultaneous opening of 3G market access in the EU. Further, the Parties argue that the approach adopted is in line with the policy adopted by RegTP (the German NRA) as well as by other NRAs such as Oftel in the UK. In addition, they argue infrastructure sharing is required due to planning restrictions and to meet environmental concerns.

The Parties argue that consumers will ultimately benefit through the delivery of faster, more innovative 3G services at lower prices. The Parties will as a result of their cooperation not produce common or standardised services to end users but will continue to compete directly on content applications, retail pricing, wholesale pricing, terms and conditions of service, channel to market and customer care services and marketing. Hence they conclude that as a result of the Agreement competition will not merely be preserved but will be increased in the markets for 3G networks and services in Germany. Finally, the Parties argue that because it is essential to protect their investments that they retain ultimate control over who has access to their network, the Agreement would not have been concluded without the restriction on resale to Voice MVNOs.

7. COMMENTS FROM THIRD PARTIES

(82) The initial notice (50) published by the Commission upon receiving the notification in February 2002 and the subsequent Notice pursuant to Article 19(3) of Regulation No 17 (51) gave rise to comments from the German competition authority, the Bundeskartellamt (BKartA), as well as from five different market parties representing mobile network operators as well as service providers and operators on related markets in Germany. Although some parties expressed their support for network sharing, all were critical of the Agreement in its current form. Following the Parties' notification of an amendment to the Agreement concerning national roaming, the BKartA and the market parties that commented on the Notice pursuant to Article 19(3) of Regulation No 17 have been given a further opportunity to react to these changes.

7.1. Comments by the BKartA

(83) The BKartA believes that for UMTS, competition based on network quality and transmission capacity will be especially important and depends on the degree of infrastructure competition. It would therefore tend to see a restriction of competition in any form of network sharing activity, unless infrastructure based competition is not possible for practical or legal reasons. In this context the BKartA would also take e.g. environmental concerns and the financial situation of the undertakings involved into consideration. It notes that in Germany

⁽⁵⁰⁾ OJ C 53, 28.2.2002, p. 18.

⁽⁵¹⁾ OJ C 189, 9.8.2002, p. 22.

obtaining planning permission for sites is increasingly difficult and forces operators to rely on site sharing. It also notes that the financial situation of mobile operators may require network sharing in order to enable market entry.

- (84) Consequently, the BKartA is of the opinion that there is no restriction of competition in so far as site sharing is necessary in order to fulfil the Parties' licence obligations (notably the 50 % population coverage requirement by 2005) and consequently is necessary to enable market entry. The BKartA finds RAN sharing, which it does not consider necessary to meet licence obligations, a restriction of competition that would be acceptable only in so far as it is necessary to enable market entry. Concerning site sharing both after 2005 and beyond the 50 % population coverage requirement, and regarding RAN sharing the BKartA assumes that these involve restrictions of competition but may merit exemption.
- (85) However, the BKartA does not consider that the limitations on resale of roaming capacity to MVNOs in Article 11 of the Agreement are exemptable because in its view they have the effect of price coordination between competitors. The BKartA's submission does not specifically address national roaming, and it has not provided further comments in relation to the Parties amendments of the Agreement concerning roaming within the territory covered by the 50 % population coverage requirement.

7.2. Comments from market parties

- (86) One market party objected as a matter of principle to national roaming which it considers to be a restriction of network competition. It also objected to extended site sharing and RAN sharing, claiming the result will be a degree of harmonisation of networks such as to make them indistinguishable. As a result, it claimed, not just competition on network quality will to a large extent be eliminated, but services competition as well. It added that it has not seen any evidence that as a result of the Agreement the Parties are engaging in a more rapid 3G network rollout.
- (87) A second market party favoured network sharing as a means to control costs and facilitate market entry as a matter of principle, but requested that non-exclusivity of the Agreement should be backed up by a commitment from the Parties on the availability of sufficient network capacity to accommodate third parties.
- (88) A third market party claimed that the network sharing agreement could enable the Parties to utilise their resulting cost savings to enter the market for paging and emergency instant messaging services as well as related markets for 3G services and squeeze smaller competitors out of these markets.

- (89) Two market parties raised objections against Clause 11 of the Agreement, arguing that its requirement of prior approval by the operator of the host network for the resale of roaming capacity for the provision of voice services by MVNOs led to a restriction of competition on the retail market or markets for 3G services.
- (90) All comments received have been carefully reviewed and to the extent that the third party comments reflected genuine competition concerns, the Commission's reasoning on the concerns raised is presented in the legal assessment below.

8. RESTRICTIONS OF COMPETITION

- (91) Article 81(1) of the EC Treaty and Article 53(1) of the EEA Agreement prohibit agreements between undertakings which may affect trade between Member States and which have as their object or effect the prevention, restriction or distortion of competition within the common market. The Commission can exempt agreements restricting competition contrary to Article 81(1) of the EC Treaty and Article 53(1) of the EEA Agreement provided the conditions set out in Article 81(3) of the EC Treaty and Article 53(3) of the EEA Agreement are met.
- (92) The notified Agreement is a horizontal cooperation agreement between two competitors that also involves certain vertical aspects. The Agreement does not have the object of restricting competition by means of price fixing, output limitations or the sharing of markets or customers, but it may have the effect of restricting competition given that T-Mobile and O2 Germany are competitors for both 2G and 3G digital mobile networks and services.
- The Agreement between T-Mobile and O2 Germany involves cooperation in the roll-out of the Parties 3G networks, principally via (i) site sharing and (ii) national roaming. Specifically the Parties intend to cooperate in the planning, acquiring, building, deploying and sharing of 3G sites as well as through the provision of roaming services. As a result the Parties will cooperate extensively in the roll-out of their 3G mobile networks. Such farreaching cooperation between two players that affects markets with only a limited number of competitors and markets with high, if not absolute, barriers to entry raises competition concerns. In particular, there is a risk that the Agreement could (i) reduce network competition in Germany and (ii) could result in spill-over effects in services markets. In addition, any restrictive provisions, such as restrictions on resale, will have to be examined.

8.1. Applicability of Article 81(1) of the EC Treaty and Article 53(1) of the EEA Agreement

(94) Because site sharing, RAN sharing and national roaming should be seen as distinct forms of cooperation with effects in different markets, they are analysed separately.

8.1.1. Extended site sharing

Site sharing is in principle encouraged as a matter of public policy both at EU and at national level. In addition national authorities can impose facility sharing in particular where competitors lack viable alternatives. Article 11 of the European Parliament and Council Directive 97/33/EC of 30 June 1997 on interconnection in Telecommunications with regard to ensuring universal service and interoperability through application of the principles of Open Network Provision (Interconnection Directive) requires that national regulatory authorities are empowered to encourage and impose collocation and facility sharing (52), and has been implemented in Germany by means of section 33 of the German Telecommunications Act (TKG), which provides that third parties may claim access to essential facilities of dominant operators (53). Under the new regulatory framework recital 23 of the European Parliament and Council Directive 2002/21/EC of 7 March 2002 on a common regulatory framework for electronic communications networks and services (Framework Directive) (54) states that 'Facility sharing can be of benefit for town planning, public health or environmental reasons, and should be encouraged by national regulatory authorities on the basis of voluntary agreements'. Article 12 of the Framework Directive requires that national regulatory authorities are empowered to impose facility sharing where undertakings are deprived of access to viable alternatives because of the need to protect the environment, public health, security, or to meet town and country planning objectives. Hence sector-specific regulation can provide a solution if alternative sites are not available and competitors do not manage to negotiate access to necessary sites and/or site infrastructure on commercial terms.

(96) Site sharing based on bilateral agreements is common practice between all operators in Germany for 2G and is

likely to be continued in 3G. There are existing framework agreements between T-Mobile, D2 Vodafone and E-Plus that concern the use of joint sites. In addition, site sharing is promoted in Germany as a matter of public policy aiming to minimise the total number of sites required due to environmental and health concerns. Consequently on 9 July 2001 general agreement has been concluded between, on the one hand, all mobile network operators and, on the other hand, the associations of the municipalities, with the objective of maximising the use of shared sites (55). As a result of this agreement mobile network operators in Germany exchange information on a regional basis regarding sites needed in particular municipalities in order to achieve the maximum proportion possible of shared sites.

The market for sites and site infrastructure for digital mobile radiocommunications equipment was defined above (Recital 49 et seq.). The Parties estimate that so far around [40 000 to 70 000 (*)] sites have been acquired for 2G networks in Germany of which a sizeable proportion can be used for 3G networks. So far overall in the German market, 64 % of sites are used by only one operator, 20 % by two operators, and 16 % by three or more operators (56). Because 3G networks will initially concentrate on urban areas in order to reach the required population coverage it is likely that the percentage of sites shared for 3G could be higher than for 2G. The distribution of the sites that have already been deployed between the network operators is estimated as follows: [10 000 to 20 000 (*)] are estimated to be held by T-Mobile, [10 000 to 20 000 (*)] by D2 Vodafone, [5 000 to 15 000 (*)] by E-Plus and [5 000 to 15 000 (*)] by O2 Germany. It is estimated that at least 20 000 new sites will be acquired for 3G networks. In addition to its stock of [10 000 to 20 000 (*)] sites, T-Mobile plans to add [(*)] for its 3G network. A proportion of the sites added will be shared: in their notification the Parties claimed that they anticipate sharing up to [20 to 35 % (*)] of their 3G sites under the Agreement. More recent information provided by the Parties shows that O2 Germany now expects to share up to [40 to 55 % (*)] of its 2G and 3G sites with all other operators including T-Mobile, and [15 to 30 % (*)] with T-Mobile alone. T-Mobile now expects to share [(*)] of mast sites and [(*)] of rooftop sites with all three other operators.

⁽⁵²⁾ OJ L 199, 26.7.1997, p. 32.

⁽⁵³⁾ Telecommunications Act (TKG) of 25 July 1996 (Federal Law Gazette I, p. 1120) as last amended by First Act for revision of the Telecommunications Act of 21 October 2002 (Federal Law Gazette I, p. 4186). (Telekommunikationsgezetz vom 25. Juli 1996, BGBl. I, S. 1120; Änderungsgesetz zum TKG — Kleine Novelle vom 25.10.2002, BGBl. I S. 4186).

⁽⁵⁴⁾ OJ L 108, 24.4.2002, p. 33.

⁽⁵⁵⁾ Vereinbarung über den Informationsaustausch und die Beteiligung der Kommunen beim Ausbau der Mobilfunknetze zwischen Deutscher Städtetag, Deutscher Landeskreistag, Deutscher Städte- und Gemeindebund und DeTeMobil Deutsche Telekom Mobilnet GmbH, E-Plus Mobilfunk GmbH & Co KG, Group 3G, Mannesmann Mobilfunk GmbH, MobilCom Multimedia GmbH, VIAG Interkom GmbH & Co.

 $^(^{56})$ Based on data of RegTP for May 2001 across a total pool of 39 690 sites.

- (98) The market is highly concentrated and at present the Parties jointly have a market share of around 45 %. Apart from the Parties, two other parties have obtained licences that enable them to develop their own networks, of which at least one, D2 Vodafone, already has a very strong position in 2G markets. These parties are likewise present in the market for sites and site infrastructure for digital mobile radiocommunications equipment. However, although the large majority of sites in Germany are currently held by mobile network operators, a number of specialised tower companies are also entering the German market, and individual sites can also be obtained directly from their owners. Moreover, in principle, site sharing does not reduce the number of sites available to other network operators: as it reduces the number of sites required individually by the sharing operators it increases the proportion of sites out of the total pool that are available for other operators.
- (99) On the demand side, the market is even more concentrated, as it is limited to the four licensed 2G/3G operators that remain active in the German market. The parties present on the demand side are also present on the supply side and in principle have the ability to acquire sites for their own network needs completely independently from the Parties and from any other operators if they so desire. Because the Parties are likely to request access to sites controlled by the other 2G and 3G operators there is likely to be countervailing bargaining power.
- (100) Moreover third party access to sites controlled by the Parties is promoted by public policy and, as explained above, by the ability of the NRA to impose site sharing where no viable alternatives exist. Finally, the Agreement does not limit the Parties' commercial freedom to engage in site sharing with third parties and both Parties plan to continue actively sharing sites with third parties. Consequently the Agreement does not appear to have the effect of foreclosing competition in the market for sites and site infrastructure for digital mobile radiocommunications equipment. It remains to be examined whether as a result of site-sharing Parties are likely, given an increase in the similarity of their cost-structures, to find the scope for distinguishing their retail services offers reduced, or whether, as a result of site-sharing, they are likely to coordinate their activities in other markets.

estimates that its cost savings due to site sharing alone will only amount to [7 to 17 % (*)] of its total savings under the Agreement of [15 to 35 % (*)] of network roll-out costs, namely its savings based on site sharing will amount to [less than 5 % ($\check{*}$)] of its total savings. In relation to 2G sites, T-Mobile does not expect that there will be any additional cost savings due to the existing 2G site sharing arrangements in place. Instead the Parties see the benefits from site sharing in terms of faster planning and implementation due to advance establishment of radio plans based on earlier site information than would otherwise be available. The Parties will in any event not own or control sites in common, but will compete with each other and with other network operators for the acquisition of own sites and will each give rights of use to the other Party. They do not therefore as a result of the Agreement have a high proportion of their total costs in common. Consequently, site sharing does not result in similarity in the Parties' cost structure that could affect their ability to compete effectively with each other in downstream network or services markets.

(102) Nor do there appear to be any significant effects on competition in any other network markets or services markets. The depth of cooperation on site sharing is consistent with the assessment of the NRA, RegTP, concerning the minimum degree of independence required to allow independent control of networks and services by the respective Parties. In particular the Parties retain independent control over their core networks including all intelligent parts of the network and the services platforms that determine the nature and the range of services provided. The Parties also retain independent control over their radio planning and the freedom to add sites, including non-shared sites, in order to increase their network coverage and capacity, which appear to be the main competitive parameters at network level, and which are likely to have an important impact on the level of services competition. Because site sharing will reduce search costs and will eventually allow greater network density it can improve network competition, and thereby services competition, both between the Parties and with third parties. Therefore the site sharing between the Parties set out in the Agreement as notified does not lead to restrictions of competition.

- (101) Because the percentage of total costs represented by the shared sites is relatively small, the Parties' anticipated cost savings due to site sharing are limited. O2 Germany
- (103) For the purposes of site sharing the Parties have stated that they will exchange information necessary for the common roll-out of sites, comprising technical information and location data for individual sites, namely

disclosing which Party wants to build out where. The Parties state that there will be no additional exchange of information on the expected build-out of 3G networks. Clause 2.6 of the Agreement provides that competition sensitive information is not exchanged between the Parties beyond the minimum information necessary to allow network planning. The exchange of this technical information is limited to what is necessary to enable a form of cooperation between the Parties that is not considered restrictive of competition. Therefore it does not itself constitute a restriction of competition either.

8.1.2. RAN sharing

(104) Although the Agreement provides for the possibility to examine the potential for RAN sharing between the Parties, RAN sharing is not presently foreseen. Moreover the modalities for RAN sharing between the Parties are not covered in sufficient detail by the notification to allow the Commission to make an analysis under Article 81 EC/Article 53 EEA. It is therefore not covered by the present Decision.

8.1.3. National roaming

O 2 Germany roaming on T-Mobile's network within the 50 % coverage area

(105) By amendments of 20 September 2002 and 22 January 2003 to the notified Agreement, the Parties have agreed that O2 Germany will be able to purchase wholesale national roaming rights on T-Mobile's 3G networks between 1 January 2003 and 31 December 2008. This means that during this time-period O2 Germany will be purchasing wholesale national roaming services from T-Mobile within the area where O2 Germany has a regulatory obligation to cover 50 % of the German population via its own network. T-Mobile will not have a similar right to purchase wholesale national roaming on O2's network in this area. Following discussions with the Commission, the Parties have agreed to limit the duration of roaming within the area that is subject to the 50 % population coverage obligation based on the definition of three separate area (Areas 1, 2 and 3). Roaming will be successively phased out in these areas according to the timetable set out in Section 4.3.1 above and which are incorporated in the Agreement by the Parties' amendment of 21 May 2003.

Reciprocal roaming outside the 50 % coverage area

(106) The Agreement as originally notified provides for reciprocal right of wholesale 3G national roaming between T-Mobile and O2 Germany outside the area of the 50 % population coverage requirement. In practice, T-Mobile intends to cover [(*)] of the German population with its 3G network by the end of 2006, and to provide further coverage as a function of demand, whereas O2 Germany intends to [(*)]. Given that T-Mobile's network will be more extensive, and given the advantages for a network operator in using its own network in terms of control over costs and parameters such as network quality and transmission rates, it is likely that there will be little roaming by T-Mobile or its customers on O2 Germany's network, if any. Therefore national roaming under the Agreement will predominantly involve O2 Germany roaming on T-Mobile's network, not vice versa.

Competitive Effects

Effects on wholesale markets

- (107) The market for wholesale national roaming access for 3G communications services was defined above (recital 57 and following). National roaming between network operators who are licensed to roll-out and operate their own competing digital mobile networks by definition restricts competition between these operators in all related network markets on key parameters such as coverage, quality and transmission rates. It restricts competition on scope and on speed of coverage because instead of rolling out its own network to obtain the maximum degree of coverage of territory and population within the shortest period of time, a roaming operator will rely for its roamed traffic on the degree of coverage achieved by the network of the visited operator. National roaming also restricts competition on network quality and on transmission rates, because the roaming operator will be restricted by the network quality and the transmission rates available to it on the visited network that are a function of the technical and commercial choices made by the operator of the visited network. Finally, based on the Agreement, national roaming will be charged at wholesale rates, for voice communications at the level of call termination rates, and for data services on a [retail minus pricing model (*)]. In the case of O2 Germany, national roaming will account for [(*)]. Consequently the wholesale rates that it will be able to charge to purchasers of its own wholesale network and access services will be constrained by the wholesale rates it has to pay to T-Mobile.
- (108) The effects of such restrictions will be more serious in areas where there is a clear economic case for the rollout of parallel competitive networks notably in core urban areas and where therefore competition is more restricted by roaming. The effects will be less serious where the economic incentives for roll-out are less developed, as may be the case in built-up areas of secondary commercial importance and in particular in rural and remote areas.

- (109) Given the resulting constraints on the ability of O2 Germany and T-Mobile to compete on coverage, on quality, on transmission rates, and on wholesale prices, 3G national roaming between O2 Germany and T-Mobile has an impact on competition in all 3G network markets in Germany including the market for wholesale national roaming access for 3G communications services and the market for wholesale airtime access to 3G services.
- (110) As 3G markets are emerging markets there is no market share information available. However, in the market for wholesale national roaming access for 3G communications services, there are in Germany only four licensed operators that have the ability to roll-out networks. Entry barriers due to licensing requirements and investment requirements are very high if not absolute (57). Hence, it is clear that cooperation between two of only four parties in the market, even if one of these two (O2 Germany) does not presently intend to roll-out a network beyond [(*)], is capable of restricting competition in a manner that is appreciable. The Agreement on national roaming (as amended) therefore constitutes a restriction of competition in the sense of Article 81(1) of the EC Treaty and Article 53(1) of the EEA Agreement.

Effects on retail markets

- (111) In addition the question should be examined whether the Agreement on wholesale 3G roaming access restricts competition for 3G retail services. National roaming at wholesale level will lead to a greater uniformity of conditions at retail level, given the fact that the underlying network coverage, quality and transmission speeds are likely to be similar. Transmission speeds will determine to a significant extent the types of service that a particular operator will be able to provide. In addition, the timing of the introduction of particular services will be determined by the moment when certain transmission speeds are reliably available at network level, and the latter will have to be coordinated for purposes of national roaming. Finally, as operators using wholesale national 3G roaming will have to pay charges for wholesale access that for data services will be based on a [retail minus pricing model (*)] the scope for price competition will as a result be limited. The [(*)] pricing system itself could give rise to a risk of coordination on retail price levels.
- (112) It is therefore likely that the cooperation between the Parties on wholesale 3G national roaming will have effects on competition between the Parties in downstream retail markets. Although the number of parties

present in these retail markets will be greater than that of those operating at network level and there is no precise market share information available, if the combined market share of the Parties for 2G are used as a proxy, this market share is 36,5 % (T-Mobile 29 %; O2 Germany 7,5 %) if only own customers are counted, and it is 49,5 % (T-Mobile 41,7 %; O2 Germany 7,8 %) if the end customers of service providers active on the Parties' networks are counted. Consequently, the Parties combined market share of the markets for 3G retail services is under any plausible market development likely to exceed 10 %, and the restriction is therefore appreciable.

Minimum purchasing requirement

- (113) The Agreement on 3G national roaming is non-exclusive, but envisages a minimum purchasing requirement by O2 Germany of [(*)] Euro from T-Mobile within three years from the date of launch of the relevant 3G roaming services. The amendments of the Agreement that enable roaming of O2 Germany on the network of T-Mobile within the 50 % population coverage area provide for a [payment by O2 Germany to T-Mobile (*)]. Although this is not a minimum purchasing requirement it may similarly have the effects of concentrating O2 Germany's purchases of 3G national roaming access on T-Mobile's network.
- (114) However, neither the minimum purchasing requirement nor the fixed payment need be analysed further in terms of possible foreclosure. The sale of wholesale 3G roaming access between licensed 3G network operators has been identified as a restriction of competition. Therefore, potential obstacles to other licensed 3G network providing this form of cooperation cannot be interpreted as constituting a further restriction of competition in their own right. On the contrary, should one of the Parties conclude an agreement to purchase significant volumes of national roaming access from one or both of the other licensed 3G network operators, this would require an analysis under the competition rules.

Resale to MVNOs

(115) Clause 11(c) of the Agreement limits the ability of the Parties to resell roaming access rights to third parties, notably it requires the prior approval of the other Party for any resale of roaming capacity to MVNOs that would offer voice telephony services to end-users. Because this clause concerns the resale of access rights the restraints involved are vertical in nature. However Article 2(4) of Commission Regulation 2790/1999 on the application of Article 81(3) of the EC Treaty to categories of vertical

⁽⁵⁷⁾ See section 5.5.2.

agreements states that the block exemption does not apply to reciprocal vertical agreements between competing undertakings (⁵⁸).

(116) Therefore this restriction must be assessed both as regards possible collusion effects in line with the Guidelines on horizontal cooperation as well as, as regards their vertical dimension, with the Guidelines on vertical restraints. An analysis based on the Guidelines on horizontal cooperation shows that limiting the type of customers to which the buyer may sell the contract services limits output and therefore constitutes a restriction of competition under Article 81(1) EC/53(1) EEA that requires individual analysis under Article 81(3) EC/53(3) EEA (59). Hence the provisions of Article 81(3) EC/53(3) EEA must be applied to the restrictions on resale to 'Voice MVNOs' to establish whether any efficiencies exist that compensate for the restrictions of competition involved.

Restriction on resale to other network operators

(117) By requiring prior approval from the operator of the visited network, Clause 11(c) of the Agreement also limits the resale of roaming rights to other licensed network operators. The Parties have argued that this restriction is necessary to enable planning for network capacity and to guarantee quality of service. However, it is not necessary to enter into an analysis of these arguments. The sale of wholesale 3G roaming access between licensed 3G network operators has been identified as a restriction on competition in its own right. Therefore a limit on other licensed 3G network operators joining in this form of cooperation cannot be interpreted as constituting a restriction of competition. On the contrary, should one of the Parties conclude an agreement to resell significant volumes of national roaming access to one or both of the other licensed 3G network operators, this would require an analysis under the competition rules.

Information exchange for purposes of national roaming

(118) Clause 2.6 in the Agreement bars the Parties from exchanging 'competitively relevant information'. In this

context the Parties have declared that they will not exchange information about anticipated future capacity requirements, namely about customer numbers and their specific requirements.

(119) The Parties will however exchange certain key technical data that are strictly necessary to provide a seamless roaming service, notably channel numbers, customer identification (CID) and interconnect identification information. Seamless roaming depends on a 'seamless handover' between the two networks involved, namely taking place without the customer having to manually log onto the other network when changing networks. To allow seamless handover between cells the relevant radio-network parameters must be made known to the visited network, namely the cell identity, its geographic location coordinates, antenna height, type of antenna, direction of the main radio beam, cable attenuation and node B performance. As this information is strictly necessary to national roaming, this information exchange does not constitute a restriction of competition under Article 81(1) EC/53(1) EEA that requires individual analysis.

8.2. Effect on trade between EEA States

(120) The conditions for access to 3G infrastructure and wholesale services of mobile network operators affect trade between EEA States. This is because the services provided over telecommunications networks are traded throughout the EEA — e.g. wholesale termination of international calls and wholesale access to 3G international roaming — and the conditions for access to telecommunications infrastructure and wholesale services determine the ability of other operators, service providers and MVNOs who require such access to provide their own services (60). The conditions for network sharing will also affect purchases of network equipment from producers of network equipment located in different EEA States. In addition investment and market entry in 3G networks and services is increasingly cross-border within the EEA. Therefore the conditions for access to 3G infrastructure and wholesale services significantly affect not only the climate for investment including investment between EEA States in 3G infrastructure and services, but also affect the conditions for market entry, including such entry by operators, service providers, MVNOs and content providers from other EEA States.

⁽⁵⁸⁾ OJ L 336, 29.12.1999, p. 21. See Commission Notice, Guidelines on vertical restraints, OJ C 291, 13.10.2000, p. 1, point 52.

⁽⁵⁹⁾ Commission Notice, Guidelines on the applicability of Article 81 of the EC Treaty to horizontal cooperation agreements, OJ C 3, 6.1.2002, p. 2, point 25.

⁽⁶⁰⁾ Cf. Access Notice paragraphs 144-148.

8.3. Application of Article 81(3) of the EC Treaty and Article 53(3) of the EEA Agreement

- (121) As analysed above, the Clauses of the Agreement (as amended) on national roaming fall within Article 81(1) of the EC Treaty and Article 53(1) of the EEA Agreement as the national roaming arrangement between the Parties has an appreciable effect on competition and affects trade between EEA States. An agreement that violates Article 81(1) of the EC Treaty and Article 53(1) of the EEA Agreement can be exempted provided that it meets the following conditions set out in Article 81(3) of the EC Treaty and Article 53(3) of the EEA Agreement:
 - (a) it must contribute to improving the production or distribution of goods or services and promote technical or economic progress;
 - (b) it must allow consumers a fair share of the resulting benefit;
 - (c) it must not impose on the undertaking concerned restrictions which are not indispensable to the attainment of these objectives;
 - (d) it must not afford the undertaking concerned the possibility of eliminating competition in respect of a substantial part of the products in question.
 - 8.3.1. Contribution of the Agreement to improving production or distribution and promoting technical or economic progress
- (122) Access to 3G national roaming will allow the roaming Party to provide better coverage, quality and transmission rates for 3G wholesale and retail services more rapidly. Selling access to roaming will provide the host network operator with additional resources to invest into its network and will allow it to use its network capacity more fully at an earlier stage than would otherwise have been the case, and therefore more efficiently. Even if in practice only one of the Parties were to exercise its roaming rights under the Agreement, its use of their joint networks would give it access to a greater network density and a more extended footprint than it would be able to provide individually, making both its wholesale and its retail services more attractive to users. The competition arising from at least two other operators at network level will ensure that the Parties' incentive to realise greater density and a more extended footprint in line with commercial take-up of 3G services is maintained and that they do not merely economise on their network costs. Given competition from these other operators as well as from a number of service providers and possibly MVNOs at retail level, the Parties will also individually continue to have an incentive to provide a wider range and better quality of services.

O 2 Germany roaming on T-Mobile's 3G network within the 50 % coverage area

- (123) O2 Germany's roaming on T-Mobile's 3G network within the area that is subject to the regulatory obligation of providing 50 % population coverage by the deadline of 31 December 2005, is likely to lead to greater choice and increased competitiveness at both wholesale and retail level. In particular, mobile roaming by O2 Germany on T-Mobile's network within this area will allow O2 Germany from the outset to offer better coverage, quality and transmission rates for its services than it would be able to do on a stand-alone basis during its roll-out phase in competition with the other providers of 3G wholesale and retail services.
- (124) O2 Germany's network will meet regulatory requirements by 31 December 2005. However as the smallest operator in the German mobile market with a small share of the 2G market (about 8 %) it is unlikely to be in a position to quickly build out a high quality network covering a sufficient area to enable the company to compete effectively from the outset against other established licensed operators of 3G networks and services in Germany. Due to important first-mover advantages, this is likely to limit its ability to compete effectively and may affect the overall competitiveness of the German market. There are therefore economic benefits in this instance from allowing O2 Germany to roam even within major urban centres for a short period of time until it has built out an effective network. Roaming at the outset will also allow O2 Germany to launch 3G services earlier thereby generating additional revenue for the company. This will help the company finance the roll-out of its 3G network which will enable it to reduce its reliance on roaming on T-Mobile's network.
- (125) In addition, if O2 Germany is able to focus its network investments in the areas of greatest demand, namely the main urban centres whilst relying on roaming in conurbations of secondary economic importance for a longer but still limited period of time, it will be able to provide better wholesale and retail services, including on its own network, than would otherwise have been the case. In underground areas, roaming access is necessary in order to allow uninterrupted coverage in areas of strategic importance to the consumer but safety rules and building permission requirements limit O2 Germany's ability to quickly set up separate networks in such locations. A longer exemption can therefore be justified for these specific areas.

Reciprocal roaming outside the 50 % coverage area

- (126) Mobile roaming of O2 Germany on T-Mobile's network outside the area subject to the regulatory obligation of providing 50 % population coverage by 31 December 2005 will allow in particular O2 Germany to become active as a competitor offering nationwide coverage on 3G retail markets. The Parties have provided evidence to demonstrate that without the Agreement it is unlikely that within current planning timeframes, O2 Germany would have been able to offer coverage beyond [(*)]. It should also be noted that in 2G mobile markets, which O2 Germany likewise entered by initially relying to a significant extent on national roaming on T-Mobile's network, O2 Germany has now achieved its own near nationwide network coverage well in excess of its licence requirements by building-out its network in line with market demand for its services.
- (127) As a result of the Agreement, O2 Germany will also be able to resell, outside the areas covered by its licence obligations, nationwide roaming access to data MVNOs and nationwide wholesale 3G airtime to service providers. The Agreement thereby promotes competition in the markets for 3G national roaming, for wholesale airtime, and at retail level, and consequently contributes to the production and distribution of these services. Because the 3G services concerned are expected to constitute a broad range of new technologically advanced products of enhanced quality and functionality compared to 2G services, the Agreement also promotes technical and economic progress.
- (128) The Agreement on national roaming allows the Parties, in particular T-Mobile, to make a more intensive and therefore more efficient use of their network, especially in less densely populated areas. By allowing T-Mobile to derive greater economic benefits from its investments in infrastructure, roaming therefore adds to the incentives to provide more comprehensive network coverage, at better quality and higher transmission rates. This likewise contributes to the production and distribution of the services concerned, and to technical and economic progress.
 - 8.3.2. Fair share of the benefits resulting from the Agreement to end users
- (129) By enabling O2 Germany first, to compete more effectively during its roll-out phase, and second, to emerge as a nationwide provider of 3G wholesale and retail services (or in any event as a provider offering the broadest geographical scope likely to be available at that time) the Agreement on 3G national roaming will enhance competition both in digital mobile network and services markets. Competition will develop more quickly and competitors will have incentives to introduce new services into the market and will be under greater

pressure to reduce prices as the result of enhanced market entry with wider coverage based on 3G national roaming access between the Parties. This is likely to enable consumers to benefit earlier from a greater range of new and technically advanced 3G services that are expected to be enhanced in quality and range of choice as compared to 2G services, and it makes price-competition more likely.

(130) The Parties have provided a clear indication of the potential benefits to consumers of enhanced market entry in terms of price developments. They have submitted evidence that market entry of the third and fourth operators in 2G mobile markets in Germany led to annual reductions in the mobile retail price index of around 20 %. At the time, O2 Germany's entry into the 2G mobile market as the fourth nationwide operator was dependent to a significant extent on the supply of national roaming by T-Mobile. In addition, as a result of increased competition at retail level, any cost-saving benefits of the increased competition on nationwide national roaming access available to data MVNOs, and on resale of wholesale airtime for nationwide services to service providers (or MVNOs acting as service providers) are likely to be passed on to end-users.

8.3.3. Indispensability of the restrictions involved

National roaming

- (131) The clauses in the Agreement (as amended) that provide for national roaming are indispensable to the benefits just discussed.
- (132) As regards roaming within the 50 % coverage area, it should be noted that the specific characteristics of German geography and its pattern of population distribution mean that compared to other Member States such as the United Kingdom there are a larger number of urban centres in Germany with a relatively smaller number of inhabitants to cover. Moreover the overall population of Germany is significantly larger than that of the United Kingdom or any other Member State. Given that the business case for 3G networks does not at present justify uniform nationwide coverage, but that in line with the expected development of market demand, coverage will spread more gradually from urban centres and possibly main transportation axes. This means that covering a significant percentage of the German urban population requires comparatively large investments. Even investments concentrated on the most densely populated areas still require a relatively large number of geographically separate areas of network coverage to be built out and connected.

(133) Finally O2 Germany as the fourth network operator to enter GSM markets in Germany is a player with a relatively small existing customer base which consequently has more limited access to financial resources than the more established operators. Because O2 Germany has fewer existing customers on its 2G network, it also has considerable spare capacity available for voice services, reducing the business case for investments in its 3G network for any purpose other than to enable higher bandwidth services, requiring a high network density. Hence O2 Germany's roaming on T-Mobile's 3G network even in the main urban areas for a limited period of time is considered proportionate and indispensable, where this might not necessarily be the case for operators with more established market positions.

Restriction on resale to Voice MVNOs

- (134) The Parties wish to exercise prior control over who has wholesale access to their 3G networks outside those categories mandated by national law and regulation notably the provision of wholesale airtime to service providers - and except MVNOs that provide data services or act as service providers for voice services. Therefore they require prior consent from the host operator before allowing the resale of roaming access to Voice MVNOs, namely MVNOs providing voice telephony or equivalent services. By restricting the resale of roaming access for the provision of voice services to MVNOs that have not invested in 3G network licences or infrastructure, the Parties intend to protect their own ability to roll-out 3G networks and to safeguard their investments, enabling them to offer technically advanced 3G services to end users.
- (135) Without the ability to control access to their networks and thereby, inter alia, to protect their investments from the erosion of retail prices for voice services by Voice MVNOs based on the resale of roaming capacity, the Parties would not offer each other such roaming capacity at all. This is credible because the Parties have provided calculations to demonstrate that any revenues foregone at wholesale level as a result of denying each other roaming access would be compensated by avoiding the revenue losses at retail level that would otherwise result. Without access to national roaming for 3G services on T-Mobile's network, O2 Germany would be a less effective competitor during its roll-out phase and would be unlikely to enter 3G wholesale and retail markets as a nationwide competitor (or in any event as a competitor offering the broadest geographical scope that is likely to be available at that time). Moreover the efficiencies gained from T-Mobile selling excess capacity on its network to O2 Germany would be lost. Likewise the other benefits in terms of increased scope for competition based on O2 Germany's enhanced market entry and based on the increased network coverage quality

- and transmission rates would be lost. The restriction therefore is necessary to the Agreement, and to its benefits.
- (136) The restriction in no way affects the Parties' freedom to offer wholesale access to their own networks to any other party. Furthermore it is limited in scope to the effect that the Agreement does allow resale of wholesale access for 3G voice services to service providers and MVNOs acting as service providers, and allows the resale of wholesale access to national roaming for 3G data services to MVNOs without any restrictions, whereas data services are expected to be at the heart of 3G retail markets. Competition is thus affected only in 3G voice markets. In this sense the restriction is proportional to its objective. Therefore, at present no less restrictive means than a limitation on resale of roaming capacity for voice services to MVNOs are available that would lead to the same substantive result.

No elimination of competition in respect of a substantial part of goods and services concerned

- (137) As was set out above, the competition between the four licensed operators of 3G networks and services that intend to roll-out 3G networks in Germany and between service providers, as well as by MVNOs other than those based on the resale of roaming capacity for voice services, is enhanced by the present Agreement.
- (138) The Agreement also leaves scope for effective competition between the Parties. In spite of relying on roaming for part of its coverage, the home network operator will control its own core network, enabling it to offer differentiated services. In addition, Clause 5.6 of the Agreement provides that in order to guarantee services competition between the Parties, they each have to ensure that roaming customers can only have access to the services portfolio and network access to third parties that is available on the home network, and that they should not have access to the services offered on the visited network, or have network access to third parties via the visited network.
- (139) The ability of the home network operator to retain control over the traffic generated by its customers outside the home network, and to provide access to services that are not available on the host network, is improved by the use of the CAMEL (Customised Application for Mobile network Enhanced Logic) technology, including by means of call-back features. This is illustrated by the current availability of different location-based 2G services for O2 Germany's users roaming on the T-Mobile network than those available for T-Mobile users on the same network. For 3G retail services, the control over the services available to end users while roaming will increase because for all data transfers users will be connected to the packet data network via their home network.

- (140) In addition, the responsibility for pricing and billing remains with the home operator. Although detailed billing data is provided by the host operator to the home operator, there is no direct relationship between the commercial conditions for the wholesale roaming offer and for the specific retail services that are based on this offer. An example is the 'click-based' billing that is offered by O2 Germany, but not by T-Mobile, for its 2.5G services.
- (141) The wholesale costs of 3G roaming are only a transport cost, albeit a significant one, in addition to which there are content costs, which for content-rich 3G data services are expected to increase in significance in relation to transport costs over time. For the core network the costs of the operators will differ based on their choice of equipment suppliers, mode of transmission within the core network (for instance based either on fixed leased lines or on a wireless micro wave network), the relationship between the number of users and available capacity, operational costs and maintenance and operations. Finally, given the existence of a margin between the applicable wholesale rates and anticipated retail rates, and given that most traffic will not be roamed, it is likely that the scope for a significant degree of price differentiation remains.
- (142) Hence, the elimination of competition from MVNOs based on the resale of roaming capacity for voice services by the Parties is compensated substantially by the overall pro-competitive effects of the notified Agreement, and effective competition between the Parties remains possible. Competition is therefore not eliminated for a substantial part of any of the markets identified as affected by the Agreement.

8.3.4. Conclusion

It is the Commission's conclusion that all the conditions for an individual exemption pursuant to Article 81(3) of the EC Treaty and Article 53(3) of the EEA Agreement are met in respect of the restrictions of competition related to the Agreement on wholesale national 3G roaming between the Parties and to the restriction on resale of roaming capacity to MVNOs.

8.4. **Duration of the exemption**

(143) Pursuant to Article 8 of Regulation No 17 and to Protocol 21 of the EEA Agreement respectively, the Commission shall issue a decision pursuant to Article 81(3) of the EC Treaty and Article 53(3) of the EEA Agreement for a specified period, and may attach conditions and/or obligations.

- (144) Given that the markets affected by the restrictions in the Agreement are emerging markets, the likely effects of the restrictions cannot be evaluated for a period that substantially exceeds five years, and therefore in any event not beyond 31 December 2008. Pursuant to Article 6 of Regulation No 17, a decision pursuant to Article 81(3) of the EC Treaty cannot take effect from an earlier date than the date of notification. Accordingly, the exemption shall have effect from 6 February 2002. The duration for each part of the exemption is justified below (recital 145 and following).
 - O2 Germany roaming on T-Mobile's network within the 50 % coverage area
- (145) The 50 % population coverage obligation concerns the urban areas with the greatest potential for infrastructure competition. Therefore an exemption for roaming in this area can only be justified for such time as the cooperation helps to promote competition during the initial roll-out phase of the network and to promote the commercial launch and early take-up of 3G retail services.
- (146) In order to ensure that O2 Germany's incentives to build out its own high quality network are maintained, the duration of the exemption is based on phasing out roaming within the 50 % population coverage area according to a fixed timetable. This timetable applies to Areas 1, 2 and 3 as set out in section 4.3.1 above. This phasing out starts on 31 December 2005 with Area 1, which covers main urban areas accounting for approximately [(*)] of the German population. Next, roaming is phased out by 31 December 2007 in Area 2 which accounts for approximately a further [(*)] of the German population and by 31 December 2008 in Area 3, which accounts for approximately [(*)] of the German population. The cities and regions in Areas 2 and 3 cover smaller urban conurbations of secondary commercial importance. As regards underground areas, O2 Germany is entitled to continue roaming until 31 December 2008. Barring significant unanticipated changes to the commercial or regulatory environment, the economic justification for applying Article 81(3) EC/Article 53(3) EEA to roaming in the 50 % population coverage area thereafter will cease to exist after 31 December 2008.
- (147) After expiry of each of the dates specified in Section 4.3.1 and following advance notice to the Parties, the Commission will reveal, in an appropriate form, the lists of cities and regions in Areas 1, 2 and 3 respectively.

Reciprocal roaming outside the 50 % coverage area

- (148) As the area over and above that which is subject to the regulatory obligation of 50 % population coverage covers less densely populated and commercially less attractive areas of the Germany, an exemption for roaming in this area can be justified for a longer period, in particular to the extent that the Parties are going beyond their regulatory obligations to cover some of the commercially less attractive rural and remote parts of Germany.
- (149) However, the markets affected by the restrictions in the Agreement are emerging markets and therefore the likely effects of those restrictions cannot be evaluated for a period that substantially exceeds five years. Consequently the Commission considers it appropriate to grant an exemption until 31 December 2008. This does not exclude that the commercial and regulatory situation prevailing at the end of that period may be such that Article 81(3) of the EC Treaty/Article 53(3) of the EEA Agreement continue to apply to roaming across parts of the area over and above that which is subject to the regulatory obligation of 50 % population coverage.

Restriction on resale to Voice MVNOs

- (150) The restriction on resale to Voice MVNOs is closely linked to the provision of roaming, as without the provision of roaming the resale restriction would serve no purpose and without the resale restriction the sale of roaming rights would not have been agreed between the Parties. In order to preserve the logic of the resale restriction and commercial balance between the Parties as set out in their Agreement, this link must be maintained as concerns the duration of the exemption. Hence the Commission considers it appropriate to grant an exemption for the restriction on resale to Voice MVNOs until 31 December 2008.
- (151) This Decision is without prejudice to the application of Article 82 of the EC Treaty and Article 54 of the EEA Agreement.

HAS ADOPTED THIS DECISION:

Article 1

Based on the facts in its possession, the Commission has no grounds for action pursuant to Article 81(1) of the EC Treaty or Article 53(1) of the EEA Agreement in respect of the provisions of the Agreement of 20 September 2001 and by supplementary agreements of 20 September 2002, 22 January 2003 and 21 May 2003 that relate to (extended) site sharing between T-Mobile and O2 Germany, with respect to the information exchanged necessary to enable site sharing, and with respect to the restriction in the Agreement on the resale of national roaming to other licensed network operators.

Article 2

Pursuant to Article 81(3) of the EC Treaty and Article 53(3) of the EEA Agreement and subject to Articles 3 and 4 of this Decision, the provisions of Article 81(1) of the EC Treaty and Article 53(1) of the EEA Agreement are hereby declared inapplicable to the supply of 3G national roaming by T-Mobile to O2 Germany, within the area subject to the regulatory obligation of providing 50 % population coverage by 31 December 2005 for the following periods:

- (a) from 6 February 2002 until 31 December 2005 in respect of the cities listed in Area 1 (61), except in the underground areas;
- (b) from 6 February 2002 until 31 December 2007 in respect of the regions listed in Area 2 (62), except in the underground areas;
- (c) from 6 February 2002 until 31 December 2008 in respect of the regions listed in Area 3 (63) and in any underground areas in the cities and regions listed in Areas 1, 2, and 3.

'Underground areas' shall mean any area within the cities and regions listed in Areas 1, 2 and 3 which is part of the underground public transport system (including railways and metro), underground shopping centres, underground car parks, tunnels for vehicles and pedestrians and any other comparable underground areas as well as the areas directly above (ground level) but only to the extent underground areas and ground level cannot be technically separated for roaming purposes.

Article 3

Pursuant to Article 81(3) of the EC Treaty and Article 53(3) of the EEA Agreement, the provisions of Articles 81(1) of the EC Treaty and Article 53(1) of the EEA Agreement are hereby declared inapplicable, from 6 February 2002 until 31 December 2008 to:

(a) The provision of 3G national roaming between T-Mobile and O2 Germany outside the area subject to the regulatory obligation of providing 50 % population coverage by 31 December 2005, as set out in Chapter 3 of the Agreement (Sections 5 to 11);

⁽⁶¹⁾ Area 1 comprises [main urban (*)] regions covering approximately [(*)] of the German population, where O2 undertakes not to roam, and T-Mobile undertakes to bar roaming, from 31 December 2005 onward. Area 1 consists of: [(*)].

⁽⁶²⁾ Area 2 comprises [smaller urban (*)] regions [of secondary commercial importance (*)] covering approximately a further [(*)] of the German population, where O2 undertakes not to roam, and T-Mobile undertakes to bar roaming, from 31 December 2007. Area 2 consists of: [(*)].

⁽⁶³⁾ Area 3 comprises [smaller urban (*)] regions [of lesser commercial importance (*)] covering approximately a final [(*)] of the German population, where O2 undertakes not to roam, and T-Mobile undertakes to bar roaming, from 31 December 2008. Area 3 consists of: [(*)].

(b) The restriction on the resale of 3G national roaming rights to MVNOs in Clauses 11.1.b and 11.1.c of the Agreement.

Article 4

This Decision is addressed to

T-Mobile Deutschland Landgrabenweg 151 D-53227 Bonn And

O2 Germany & Co OHG Georg Brauchle Ring 23-25 D-80992 München

Done at Brussels, 16 July 2003.

For the Commission

Mario MONTI

Member of the Commission