



EUROPEAN COMMISSION
DG Competition

PUBLIC VERSION

***CASE M.9409 – AURUBIS /
METALLO GROUP HOLDING***

(Only the English text is authentic)

**MERGER PROCEDURE
REGULATION (EC) 139/2004**

Article 8(1) Regulation (EC) 139/2004

Date: 4/5/2020

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Brussels, 4.5.2020
C(2020) 2752 final

COMMISSION DECISION

of 4.5.2020

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

(Case M.9409 – AURUBIS / METALLO GROUP HOLDING)

(Text with EEA relevance)

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THE COMMISSION,

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

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

Having regard to Council Regulation (EC) No 139/2004 of 20 January 2004 on the control of concentrations between undertakings¹, and in particular Article 8(1) thereof,

Having regard to Commission Decision of 19 November 2019 to initiate proceedings in this case,

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

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

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

Whereas:

1. INTRODUCTION

- (1) On 14 October 2019, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EC) No 139/2004 (the ‘Merger Regulation’) by which the undertaking Aurubis AG (‘Aurubis’) based in Germany intends to acquire, within the meaning of Article 3(1)(b) of the Merger Regulation, sole control of the whole of Metallo Group Holding N.V. (‘Metallo’) based in Belgium by way of purchase of shares² (the ‘Transaction’). Aurubis (also referred to as the ‘Notifying Party’) and Metallo are hereinafter collectively referred to as the ‘Parties’. The entity resulting from the Transaction is hereinafter referred to as the ‘Merged Entity’.

¹ OJ L 24, 29.1.2004, p. 1 (the ‘Merger Regulation’). With effect from 1 December 2009, the Treaty on the Functioning of the European Union (‘TFEU’) has introduced certain changes, such as the replacement of ‘Community’ by ‘Union’ and ‘common market’ by ‘internal market’. The terminology of the TFEU will be used throughout this Decision.

² Publication in the Official Journal of the European Union No C 356, 21.10.2019, p. 7.

- (2) Aurubis, headquartered in Germany, is a vertically integrated provider of non-ferrous metals and the leading player in the copper industry in Europe. The core business of Aurubis is the production of copper cathodes both from mined copper concentrate and from copper scrap. Aurubis is also active in further stages of the copper value chain. It processes copper cathodes into wire rod and shapes. The latter are intermediate products used for the production of flat rolled products.
- (3) Metallo, headquartered in Belgium, is active in the processing and refining non-ferrous metals, including copper. Metallo specializes in recycling and refining low-grade and highly complex scrap materials³, valorising nine different metal types⁴ into metal (copper, tin, lead), metal products (zinc oxide, nickel bleed, anode slimes) and minerals⁵. Copper accounts for the largest share of Metallo's output in refined metals and metal products⁶. Metallo is purely a secondary copper refiner, that is to say, it uses only copper scrap as input for its refining operations. It has two recycling and refining plants (Beerse, Belgium and Berango, Spain). Metallo is one of the most technologically advanced undertakings for processing low grade and complex scrap⁷. In addition to strong capabilities in copper scrap refining, Metallo considers itself to be a 'global leader in secondary tin refining'⁸.

2. THE OPERATION AND THE CONCENTRATION

- (4) Pursuant to a sale and purchase agreement entered into on 22 May 2019, Aurubis will acquire sole control of the whole of Metallo. Therefore, it follows that the Transaction is a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

3. UNION DIMENSION

- (5) The undertakings concerned have a combined aggregate worldwide turnover of more than EUR 5 000 million⁹ (Aurubis: EUR 11 694 million, Metallo: EUR 985 million). Each of the undertakings has an Union-wide turnover in excess of EUR 250 million (Aurubis: EUR [...] million, Metallo: EUR [...] million), but they do not achieve more than two-thirds of their aggregate Union-wide turnover within one and the same Member State.
- (6) The Transaction therefore has a Union dimension pursuant to Article 1(2) of the Merger Regulation.

³ For the purposes of this Decision, 'low-grade' in general means that the scrap material contains a comparatively small percentage of one specific type of metal, whereas the other elements are considered as impurities, and 'highly complex' scrap material means that the scrap material not only typically contains several kinds of metal and/or other material, but also that the processing and valorising of such scrap material usually requires particular metallurgical knowledge.

⁴ Copper, tin, lead, zinc, nickel, platinum, palladium, silver, and gold.

⁵ Form CO, Annex 5.4 – X, page 5.

⁶ [...]%; Form CO, Annex 5.4 – X, page 6.

⁷ Form CO, Annex 5.4 – X, page 39.

⁸ Form CO, Annex 5.4 – X, page 3.

⁹ Turnover calculated in accordance with Article 5 of the Merger Regulation and the Commission Consolidated Jurisdictional Notice (OJ C 95, 16.4.2008, p. 1).

4. THE PROCEDURE

- (7) On 30 August 2019, the Notifying Party notified the Transaction a first time to the Commission by submitting the Form CO.
- (8) During its initial first phase investigation the Commission contacted market participants (mainly the Parties' suppliers and competitors), by requesting information through telephone calls and written requests for information pursuant to Article 11 of the Merger Regulation, including questionnaires.
- (9) In addition, the Commission also sent several written requests for information to the Parties and reviewed internal documents and submissions of the Parties.
- (10) On 23 September 2019, a State of Play meeting took place between the Commission and the Parties. The Commission explained that at that stage it could not exclude serious doubts as to the compatibility of the Transaction with the internal market.
- (11) On 25 September 2019, the Notifying Party withdrew the notification of the Transaction.
- (12) The Notifying Party notified the Transaction to the Commission for a second time by submitting a new Form CO on 14 October 2019.
- (13) During the investigation, following the re-notification (Phase I), the Commission again contacted market participants (mainly the Parties' suppliers and competitors), by requesting information through telephone calls and written requests for information pursuant to Article 11 of the Merger Regulation, including questionnaires.
- (14) In addition, the Commission also sent several written requests for information to the Parties and reviewed internal documents and submissions of the Parties.
- (15) On 4 November 2019, a State of Play meeting took place between the Commission and the Parties.
- (16) On 19 November 2019, the Commission adopted a decision to initiate proceedings pursuant to Article 6(1)(c) of the Merger Regulation (the 'Article 6(1)(c) Decision'), which, following the results of the preliminary investigation, raised serious doubts as to the compatibility of the Transaction with the internal market.
- (17) On 20 November 2019, the Commission provided the Notifying Party with non-confidential versions of key documents of third parties collected during the first phase investigation. Subsequent batches of key documents were provided to the Notifying Party on 21 November, 22 November and 26 November 2019.
- (18) The Notifying Party submitted its written comments on the Article 6(1)(c) Decision on 29 November 2019 (the 'Response to Article 6(1)(c) Decision').
- (19) On 3 December 2019, following the Response to Article 6(1)(c) Decision, a State of Play meeting took place between the Commission and the Parties.
- (20) On 10 December 2019, following a request from the Notifying Party, the time period set for the adoption of a final decision in relation to the Transaction pursuant to Article 10(3) of the Merger Regulation was extended by 10 working days pursuant to that Article.
- (21) In its in-depth (Phase II) investigation, the Commission sent several requests for information to the Parties regarding various matters such as sourcing practice and strategy, technological capabilities and internal documents.

- (22) In addition to collecting and analysing a substantial amount of information from the Parties (including internal documents and submissions), the Commission collected information through additional telephone calls and written requests for information addressed to competitors and suppliers of the Parties pursuant to Article 11 of the Merger Regulation.
- (23) On 15 January 2020, a meeting took place between the Commission and the Parties on the subject of submissions by the Notifying Party on economic matters and efficiencies.
- (24) On 4 February 2020, the Commission informed the Parties of the preliminary results of the Phase II investigation during a State of Play meeting.
- (25) On 11 February 2020, the Commission adopted a Statement of Objections (the ‘SO’), which was sent to the Notifying Party on the same day. In the SO, the Commission set out the preliminary view that the Transaction would likely significantly impede effective competition in the internal market, within the meaning of Article 2 of the Merger Regulation, in relation to the market for the purchase of copper scrap for smelting and refining (‘CSSR’) in the European Economic Area (the ‘EEA’) due to the removal of an important competitor and the creation of a dominant position by Aurubis. The Commission’s preliminary conclusion was therefore that the notified concentration would be incompatible with the internal market and the functioning of the EEA Agreement.
- (26) On 12 February 2020, the Notifying Party was granted access to the file. A data room was organised from 13 February to 24 February 2020 allowing the economic advisors of the Notifying Party to verify confidential information of a quantitative nature, which formed part of the Commission’s file. A non-confidential data room report (‘Data Room Report’) was provided to the Notifying Party on 25 February 2020.
- (27) On 19 February 2020, an external advisor to Metallo was granted access to the data room.
- (28) On 25 February 2020, the Notifying Party submitted its reply to the SO (the ‘Reply to the SO’).
- (29) On 27 February 2020, the Notifying Party submitted commitments pursuant to Article 8(2) of the Merger Regulation in order to address the competition concerns identified in the SO.
- (30) [Third party] made an application to the Hearing Officer to be admitted as an interested third person in the proceedings and was recognised as such by the Hearing Officer. It was provided with a non-confidential version of the SO.
- (31) On 2 March 2020, an oral hearing was held, upon request by the Notifying Party.
- (32) On 6 March 2020, a State of Play call was conducted, during which the Commission provided the Notifying Party with preliminary feedback following its Reply to the SO.
- (33) On 10 March 2020, following a request from the Notifying Party, the time period set for the adoption of a final decision in relation to the Transaction pursuant to Article 10(3) of the Merger Regulation was extended by 10 working days pursuant to that Article.

- (34) On 3 April 2020, the Commission sent a draft decision pursuant to Article 8(1) of the Merger Regulation to the Advisory Committee with the view of seeking the Committee's opinion.
- (35) The meeting of the Advisory Committee took place on 22 April 2020.

5. OVERVIEW OF THE PARTIES' ACTIVITIES

5.1. Horizontal overlaps and vertical links

- (36) The activities of the Parties overlap horizontally and are linked vertically in the following areas.

5.1.1. *Horizontal overlap through purchasing of copper scrap for smelting and refining*

- (37) Both Parties purchase CSSR. This activity leads to an affected market and is assessed in detail in this Decision¹⁰.

5.1.2. *Horizontal overlap through purchasing of coppers scrap no.2*

- (38) Furthermore, both Parties purchase so-called copper scrap no.2¹¹. This activity leads to an affected market and is assessed in detail in this Decision¹².

5.1.3. *Horizontal overlap through production and sale of copper cathodes*¹³

- (39) Both Parties manufacturer copper cathodes¹⁴. Whilst Aurubis produces both so-called LME A-grade cathodes ('A-grade cathodes')¹⁵ and so-called off-grade cathodes¹⁶, Metallo produces only off-grade cathodes¹⁷. However, Aurubis does not sell off-grade cathodes, which it all uses captively to third parties on the market. It sells a part of its A-grade cathodes on the market and uses the rest of its A-grade cathodes captively¹⁸.

- (40) In its previous decisions, the Commission considered copper cathodes to constitute a distinct product market, but left the question open whether this market should be further segmented by the grade (namely separate markets for A-grade and off-grade copper cathodes)¹⁹. In the Parties' view, there is likely one single market for cathodes because A-grade and off-grade cathodes may be used for the same applications. However, the Parties suggest leaving the question open because the concentration

¹⁰ Sections 7.1, 8.3.3, 9.1, 9.2.

¹¹ Copper scrap no.2 is a type of high-grade copper scrap as defined under Institute for Scrap Recycling Industries (ISRI) classification. According to the ISRI definition, copper scrap no.2 is scrap with copper content of 94% – 96% and with little or no non-metallic impurities (but the delta to 100% could be filled by zinc, tin, lead, aluminium, glass, sand, however no grease, oil, or burned copper wires, Form CO, paragraph 204.

¹² Sections 7.2, 8.3.4, 9.3.

¹³ The production and sale of copper cathodes also results in a vertical link with affected markets, Sections 7.3.2, 7.3.3, 8.3.5, 8.3.6, 9.4.

¹⁴ Copper cathodes are the base input for the production of copper rod and copper shapes; Form CO, paragraph 220.

¹⁵ Copper cathodes are produced in various grades: 'LME A-grade' cathodes comply with the standard set by the LME. These cathodes must have a copper content of at least 99.9935% and a defined maximum level of the various impurities such as silver, lead, phosphorous and others which make up the remaining 0.0065% or less; Form CO, paragraph 220.

¹⁶ Cathodes are not LME certified and called 'off-grade' if either the copper content is lower than or the impurities differ from the LME standard (or both); Form CO, paragraph 221.

¹⁷ Form CO, paragraph 230.

¹⁸ Form CO, paragraph 230.

¹⁹ Case M.4781 – *Norddeutsche Affinerie/Cumerio*, recital 29; M.6316 – *Aurubis/Luvata*, recital 17.

does not lead to any competition concerns²⁰. The Commission notes that, in line with previous Commission decisions, all respondents to the market investigation expressing views agreed that copper cathodes constitute a distinct market²¹. The Commission also notes that the large majority of respondents expressing their views²² considered that it is relevant to distinguish between A-grade and off-grade cathodes because of different qualities, premium and use²³. However, the Commission endorses the Parties' view that the relevant product market definition can ultimately remain open as the combined market shares of the Parties do not give rise to affected markets under any plausible product market definition.

- (41) With respect to the relevant geographic market and in line with previous Commission decisions²⁴, the Parties submit that the market for copper cathodes is worldwide in scope. The Parties explain that copper cathodes are traded globally, transportation costs are low compared to the value of the product and prices are set on a global level, mainly by the London Metal Exchange (the 'LME'), to which premium and transformation fees are added along the value chain²⁵.
- (42) The results of the market investigation indicate that the relevant geographic market for cathodes is global²⁶. First, about two-third of respondents submitted that the price premium for copper cathodes (charged on top of the LME metal price) *'is about the same'* between the EEA and non-EEA regions (for example, the United States of America, China)²⁷. Second, the responses of competitors in copper cathodes manufacturing suggest that a significant amount of cathodes is imported into the EEA, thus demonstrating that the customers in the EEA are an alternative outlet for cathodes suppliers from other regions of the world²⁸. Third, the market investigation demonstrated that in the view of the vast majority of the respondents A-grade cathodes and off-grade cathodes are substitutable or partially substitutable regardless of whether they originate from the EEA or outside the EEA²⁹. Therefore, it is concluded, in line with the Commission's previous decisions, that the geographic market for the sale of copper cathodes is global in scope.
- (43) The Commission notes that the combined market shares based on production volumes of the Parties for all plausible markets remain below 20% and thus do not

²⁰ Form CO, paragraph 223.

²¹ Replies to question 20 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

²² Throughout this Decision, when the Commission refers to the (number of) respondents in relation to a given question of the market investigation, this excludes all respondents that have not provided an answer to that question or replied 'I do not know', unless stated otherwise. For example, 'a majority of respondents' means a majority of respondents having replied to a given question and not having ticked 'I do not know'. 'A large majority' refers to at least two thirds having replied like this. Moreover, in cases where an overall majority of respondents that replied to a given question replied 'I do not know', this information is reflected in the text.

²³ Replies to questions 21 and 21.1 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098; replies to question B.A.1 of PHASE II - Q6 -Questionnaire to competitors in copper cathodes, DocID3093.

²⁴ Cases M.4505 – *Freeport-McMoran Copper & Gold/Phelps Dodge Corporation*, recital 16; M.4781 – *Norddeutsche Affinerie/Cumerio*, recitals 26-27; M.5979 – *KGHM/Tauron Wytwarzanie/JV*, recital 47; M.6316 – *Aurubis/Luvata*, recital 18.

²⁵ Form CO, paragraph 224.

²⁶ Replies to question 43 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

²⁷ Replies to question B.A.3 of PHASE II - Q6 -Questionnaire to competitors in copper cathodes, DocID3093. Only two respondents stated that the premium is significantly different.

²⁸ Replies to question B.A.2 of PHASE II - Q6 -Questionnaire to competitors in copper cathodes, DocID3093.

²⁹ Replies to questions B.A.4.1 and B.A.4.2 of PHASE II - Q6 -Questionnaire to competitors in copper cathodes, DocID3093.

lead to affected markets³⁰. The individual and combined market shares on a global scale for 2018³¹ are as follows:

Table 1: Market shares of Aurubis and Metallo on the plausible markets for copper cathodes³²

	Off-grade (including captive production) ³³	A-grade and off-grade (merchant market)	A-grade and off-grade (including captive production)
Metallo	[0-5]%	[0-5]%	<[0-5]%
Aurubis	[5-10]%	[0-5]%	[5-10]%
Combined	[5-10]%	[0-5]%	<[5-10]%

(44) The Commission notes that with respect to off-grade copper cathodes on a global level in 2018, and considering only the merchant market, there is no horizontal overlap as Aurubis does not sell the off-grade cathodes produced in-house³⁴. As regards A-grade copper cathodes, there is no horizontal overlap as Metallo does not produce A-grade copper cathodes.

(45) Therefore, that horizontal overlap does not result in an affected market taking into account any of the plausible markets for copper cathodes.

5.1.4. *Horizontal overlap through extraction and sale of gold*

(46) Aurubis produces pure gold while Metallo sells only anode slimes, copper anodes and copper blister, which contain gold³⁵. Even if one considered that the Parties' activities lead to a horizontal overlap on the relevant product and geographic market for gold³⁶, that overlap would result in individual and combined market shares of Aurubis with [0-5]%, Metallo with [0-5]% and thus a combined of [0-5]%³⁷. Therefore, that horizontal overlap regarding the extraction and sale of gold does not result in affected markets.

5.1.5. *Horizontal overlap through extraction and sale of silver*

(47) Aurubis sells silver. Metallo only sells anode slimes, copper anodes and copper blister, which contain silver³⁸. Even if one considered that the Parties' activities result

³⁰ In the meaning of Section 6.3(a) of Annex I of the Commission Implementing Regulation (EU) No 1269/2013 of 5 December 2013 amending Regulation (EC) No 802/2004 implementing Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings, OJ L 336, 14.12.2013, p. 1.

³¹ In light of data submitted in Form CO, Annex 6-J, the Commission has sufficient ground to assume that the individual and combined market shares with respect to the plausible copper cathodes markets in the years 2016 and 2017 are largely in line with the data provided for 2018.

³² Form CO, paragraph 230 and Annex 6-J. The data provided in Form CO, paragraph 230 and Annex 6-J are partially inconsistent. The Commission applied an interpretation of the data, which leads to the largest combined market shares for the Parties. The data for 2017 and 2016 available in Form CO, Annex 6-J are - with respect to the Parties' individual and combined market shares - largely the same.

³³ Based on Commission's calculation using Table 12 in Form CO, paragraph 230. The market shares are rounded numbers.

³⁴ Form CO, paragraph 230; reply to the Commission's request for information RFI 28, Annex 1.

³⁵ Form CO, paragraph 243.

³⁶ Case M.4256 – *Xstrata/Falconbridge*, paragraph 27 with further references.

³⁷ Form CO, paragraph 313.

³⁸ Form CO, paragraph 247.

in a horizontal overlap on the relevant product and geographic market for silver³⁹, that overlap would result in individual and combined market shares of Aurubis with [0-5]%, Metallo with [0-5]% and thus a combined of [0-5]%⁴⁰. Therefore, that horizontal overlap does not result in an affected market.

5.1.6. *Horizontal overlap through extraction and sale of nickel*

- (48) Metallo sells nickel bleed and Aurubis sells nickel in the form of green powder (nickel sulfate) and in a small volume also as nickel bleed to third parties⁴¹.
- (49) Whilst there are no previous decisions of the Commission, which defined a market for nickel bleed or nickel sulfate and similar intermediate products, the Notifying Party submits that the Commission has previously defined different market segments for nickel depending on its application and defined each of the relevant geographic market as worldwide⁴².
- (50) Considering the overall worldwide production of nickel, the volumes produced by Aurubis account for a market share of [0-5]% and for Metallo of less than [0-5]%⁴³. Therefore, that horizontal overlap does not result in an affected market.

5.1.7. *Horizontal overlap through extraction and sale of zinc oxide*

- (51) Both Aurubis and Metallo sell zinc oxides.⁴⁴ According to a previous Commission decision, zinc oxide forms a distinct product market with a global scope⁴⁵.
- (52) Aurubis' market share on that (global) market is [0-5]% and Metallo's [0-5]% resulting in a combined market share of [0-5]%⁴⁶. Therefore, that horizontal overlap does not result in an affected market.

5.1.8. *Horizontal overlap through extraction and sale of lead*

- (53) The Parties produce lead metal. Furthermore, both sell a small amount of impure lead-antimony alloy, which is further refined by third parties. Metallo also sells 'hard lead' to some customers⁴⁷.
- (54) According to the Commission's previous decisions, there is a relevant product market for lead⁴⁸. The Commission defined the market for lead as worldwide but considered

³⁹ Case M.4256 – *Xstrata/Falconbridge*, paragraph 27 with further references.

⁴⁰ Form CO, paragraph 313.

⁴¹ Form CO, paragraph 248. Copper recycling materials and copper concentrate contain small amounts of nickel. In the process step that takes place in the copper tank house, the nickel remains in the electrolyte, (i.e. liquid that flows between anode and cathode). A nickel containing solution (nickel bleed) is then continuously removed from the electrolyte. Aurubis processes it into a light green powder (nickel sulfate) through water reduction. Nickel bleed or nickel sulfate cannot be used in this form directly as "nickel" but has to be processed further.

⁴² Form CO, paragraph 250, with reference to Case M.4476 – *Norilsk Nickel/OMG Nickel*: In this decision, the Commission defined four separate markets of (i) nickel for stainless steel, (ii) standard melting applications other than stainless steel and super-alloy production, (iii) nickel for super-alloy applications and nickel for plating and electroforming and (iv) specialty end applications.

⁴³ Form CO, paragraph 252 and paragraph 313. The Notifying Party confirmed that even if the Parties' production of nickel would overlap in one of the separate markets as defined in Case M.4476 – *Norilsk Nickel/OMG Nickel*, the Parties' combined market share would not be 20% or higher on the worldwide level on any of such markets; reply to request for information RFI 51, question 1.

⁴⁴ Form CO, paragraph 254.

⁴⁵ Case M.445 – *Umicore/Zinifex/Neptune*, paragraphs 32 to 36.

⁴⁶ Form CO, paragraph 313.

⁴⁷ Form CO, paragraph 259.

⁴⁸ Case M.4256 – *Xstrata/Falconbridge*, paragraph 27 with a further reference.

also an EEA-wide market whilst leaving the exact geographic market definition open⁴⁹.

- (55) On a worldwide level, Aurubis' market share is [0-5]% and Metallo's [0-5]% resulting in a combined market share of [0-5]%. On an EEA-wide market level, Aurubis' market share would be [0-5]% and Metallo's [0-5]% resulting in a combined market share of [0-5]%⁵⁰. Therefore, that horizontal overlap does not result in an affected market.

5.1.9. Horizontal overlap through extraction and sale of tin

- (56) According to the Notifying Party, the Parties' activities do not overlap in the market for the sale of tin metal to third parties, since only Metallo produces tin metal (LME-grade refined tin⁵¹), while Aurubis sells tin only in form of intermediate products (tin composite) which are subject to further refining⁵².
- (57) The Commission has previously not defined the relevant product and geographic market for tin. The Notifying Party submits that in line with other metals, for which distinct product markets have been defined, and since tin has chemical and physical characteristics which distinguish it from other metals and make it difficult to replace, tin should be regarded as a distinct product market. As tin is a commodity and traded worldwide, the Notifying Party submits that the relevant geographic market is global⁵³.
- (58) On that global basis, Aurubis has a market share of [0-5]% and Metallo of [0-5]%, combining to a market share of [0-5]%⁵⁴. Therefore, that horizontal overlap does not result in an affected market.

5.1.10. No horizontal overlap through extraction and sale of iron silicates

- (59) Both Aurubis and Metallo produce iron silicates. Iron silicate is created by the addition of sand to copper slag, which is a by-product of copper production from copper concentrate as well as from copper scrap. The iron silicate comes in the form of stones and granulates⁵⁵.
- (60) However, the Parties do not compete for customers of iron silicates as, due to its high weight and low value, they transport iron silicate only in the small surrounding area of their plants. Aurubis produces iron silicate in its sites in Hamburg, Lünen and consequently sells iron silicate mainly in Northern and Eastern Germany. Metallo markets its iron silicate in the area of its plants in Beerse, Belgium, and Berango, Spain⁵⁶.
- (61) The shortest distance between Metallo's (Beerse) and Aurubis' (Lünen) plants is approximately 220 km and between an Aurubis iron silicate customer and Beerse [...] km. Since Metallo sells iron silicate within a maximum radius of [...] km

⁴⁹ Case M.6541 – *Glencore/Xstrata*, paragraph 326 *et. seq.*

⁵⁰ Form CO, paragraph 313.

⁵¹ To comply with the LME standard, tin ingots must have a tin content of at least 99.85% purity (minimum) conforming to BS EN 610:1996; reply to request for information RFI 51, question 5.2.

⁵² Form CO, paragraph 267.

⁵³ Form CO, paragraph 265 and paragraph 266.

⁵⁴ Form CO, paragraph 313.

⁵⁵ Form CO, paragraph 269. Customers process iron silicate to construction materials, primarily for hydro construction purposes. For example, iron silicate stone is used for securing river embankments and for levees in ports, rivers and as coastal protection. Iron silicate is also sold in granules which are processed to standardised abrasives and then marketed to third parties.

⁵⁶ Form CO, paragraphs 277 and 278.

around Beerse, the Parties do not compete for customers on the same geographic markets⁵⁷. Therefore, there is no horizontal overlap in the Parties' activity in iron silicates.

5.1.11. *Vertical link through Metallo's potential supply of copper cathodes upstream to Aurubis for its copper rods downstream*

- (62) Metallo sells its copper cathodes to third parties and Aurubis purchases copper cathodes in order to produce copper rods. Albeit Metallo does not currently sell copper cathodes to Aurubis, the vertical link results in affected markets when taking into account the plausible EEA-wide⁵⁸ geographic market⁵⁹. These activities are assessed in detail in this Decision⁶⁰.

5.1.12. *Vertical link through Metallo's potential supply of copper cathodes upstream to Aurubis for its copper shapes downstream*

- (63) Metallo sells its copper cathodes to third parties and Aurubis purchases copper cathodes in order to produce copper shapes. Although Metallo does not currently sell copper cathodes to Aurubis, the vertical link results in affected markets when taking into account the plausible EEA-wide⁶¹ geographic market⁶². Those activities are assessed in detail in this Decision⁶³.

5.1.13. *Vertical links through Metallo upstream selling copper anodes and copper blister to Aurubis downstream for the production of copper cathodes*

- (64) Metallo sells to Aurubis [...] of its] copper anodes production and [...] of its copper blister production⁶⁴. Metallo sells [...] of the copper blister to third parties⁶⁵. Aurubis, on the other hand, does not sell any of its copper blister or copper anodes production to third parties⁶⁶. Aurubis uses copper anodes and copper blister for the production of copper cathodes.
- (65) With respect to the relevant product markets, the Notifying Party refers to the Commission's Decision in *Glencore/Xstrata*⁶⁷. In that Decision, the Commission defined a market for secondary copper products, which included copper scrap and the

⁵⁷ Form CO, paragraphs 279 *et seq.*

⁵⁸ On a presumed global geographic market for copper rods, Aurubis' market share is [5-10]% downstream (reply to request for information 52, Annex 3). As Metallo's and Aurubis' combined market share upstream in copper cathodes would be at most [5-10]%, this constellation would not lead to affected markets.

⁵⁹ Both Parties produce copper cathodes and therefore there is also a (plausible) horizontal overlap with respect to the manufacturing and sale of copper cathodes, albeit not resulting in affected markets, Section 5.1.3.

⁶⁰ Sections 7.3.2, 8.3.5, 9.4. From the Parties, only Aurubis is active on the downstream markets of copper cathodes, including on the market of copper rods.

⁶¹ On a presumed global geographic market for copper shapes, Aurubis' market share is [10-20]% downstream (reply to request for information 52, Annex 3). As Metallo's and Aurubis' combined market share upstream in copper cathodes would be at most [5-10]%, this constellation would not lead to affected markets.

⁶² Both Parties produce copper cathodes and therefore there is also a (plausible) horizontal overlap with respect to the manufacturing and sale of copper cathodes, albeit not resulting in affected markets, Section 5.1.3.

⁶³ Sections 7.3.3, 8.3.6, 9.4. From the Parties, only Aurubis is active on the downstream markets of copper cathodes, including on the market of copper shapes.

⁶⁴ Form CO, paragraphs 288 and 294.

⁶⁵ Form CO, paragraph 294.

⁶⁶ Form CO, paragraph 288.

⁶⁷ Case M.6541 – *Glencore/Xstrata*.

intermediate products obtained in the production of copper cathodes: copper blister and spent copper anodes⁶⁸. However, the Commission left open the question of whether the secondary copper products market includes custom cast anodes⁶⁹. With respect to the relevant geographic market, and regardless of whether custom cast anodes form part of the market for secondary copper products, the Commission concluded that the geographical scope of the market is worldwide since there are no barriers to redirect sales of secondary copper products and custom cast anodes to the EEA from any region in response to price rises⁷⁰.

- (66) The Commission notes that during the market investigation, all respondents who expressed an opinion stated that copper blister and copper spent anodes are interchangeable⁷¹. The majority of the respondents, who expressed their view, stated that custom cast anodes are not interchangeable with copper blister or copper spent anodes⁷². With respect to a further segmentation, the large majority of the market participants held the view that copper blister form a separate product market⁷³. The market investigation showed the same result for custom cast anodes⁷⁴.
- (67) The Commission also takes note of responses of market participants with respect to spent copper anodes, for which the majority of those who expressed an opinion stated that there is a distinct market⁷⁵. However, amongst those respondents who advocated a distinct market for spent copper anodes, several commented at the same time that spent copper anodes are in the same market as copper blister⁷⁶. Therefore, these responses have only a limited significance.
- (68) With respect to the geographic market, the majority of respondents stated that the geographic market for copper blister, copper spent anodes and custom copper anodes is global⁷⁷.
- (69) The Commission therefore concludes that the narrowest plausible product markets are a distinct product market on the one hand for copper blister (and copper spent anodes) and on the other hand a distinct product market for custom copper anodes. The relevant geographic market is worldwide for both of these product markets.
- (70) The Commission takes note of Metallo's upstream market shares in copper anodes on the merchant market of [10-20]% in 2018⁷⁸ and in copper blister on the merchant market of [10-20]% in 2018⁷⁹, as well as of Aurubis' and Metallo's downstream combined market share of [5-10]%, which is the highest combined market share of

⁶⁸ Spent anodes refer to thin 'skeleton' of the anode, which remains after copper units have been transferred from custom-cast anodes to cathode starter sheets during the process of electrolysis; M.6541 – *Glencore/Xstrata*, recitals 241 *et seq.*, footnote 224.

⁶⁹ Case M.6541 – *Glencore/Xstrata*, recitals 241 *et seq.*, footnote 224 and recital 245 and Form CO, paragraph 295: Custom cast anodes are anodes sourced from third parties, which are produced in accordance with the specifications of a particular refinery, i.e. in the shape which would fit the refinery's tank-house (electrolytic refining stage).

⁷⁰ Case M.6541 – *Glencore/Xstrata*, recital 249.

⁷¹ Replies to question 15 of Q2_ Questionnaire to Refiners of Copper Scrap, DocID3098.

⁷² Replies to question 16 of Q2_ Questionnaire to Refiners of Copper Scrap, DocID3098.

⁷³ Replies to question 17 of Q2_ Questionnaire to Refiners of Copper Scrap, DocID3098.

⁷⁴ Replies to question 19 of Q2_ Questionnaire to Refiners of Copper Scrap, DocID3098.

⁷⁵ Replies to question 18 of Q2_ Questionnaire to Refiners of Copper Scrap, DocID3098.

⁷⁶ Replies to question 18.1 of Q2_ Questionnaire to Refiners of Copper Scrap, DocID3098.

⁷⁷ Replies to question 38 of Q2_ Questionnaire to Refiners of Copper Scrap, DocID3098.

⁷⁸ Form CO, Annex 6-L, the market shares in 2017 and 2016 are largely the same.

⁷⁹ Form CO, Annex 6-M, the market shares in 2017 and 2016 are largely the same.

all plausible copper cathodes markets in 2018⁸⁰. Therefore, those vertical links do not result in affected markets.

5.1.14. *Vertical links through Aurubis upstream selling tin alloy and slag to Metallo downstream for extraction of tin and for further refining*

- (71) Metallo sources tin-lead alloy and occasionally Conti Melt slag ('CTM slag') from Aurubis⁸¹. Metallo extracts tin from the tin-lead alloy for the production of refined tin ingots⁸². With respect to the slag, Metallo treats the CTM slag [...] in order to produce Metallo's anodes and blister products and/or off-grade cathodes⁸³.
- (72) With respect to the tin-lead alloy, the Notifying Party submits that PbSn alloy is an intermediate product, which is often processed. It contends that Aurubis and Metallo lack information on the overall production of PbSn alloy in the EEA and are unable to give various estimates this regarding that alloy. In particular, an estimate of sales values were not possible, because the metal price is essential and highly volatile. Also, it is not possible to estimate overall volume of PbSn as generated in Lünen or market shares in this regard. The Notifying Party further argues that it is only an intermediary product, which is mainly used internally and is in addition only generated by a number of other smelters/refiners who use comparable processes as Lünen. For example, PbSn is also (to a limited extent) present in copper scrap no.2, that is to say, it can be assumed that all smelters consuming copper scrap no.2 will generate some PbSn materials. Therefore, this particular PbSn is not regarded to be a market by the Parties. In any event, the Notifying Party claims, a potential market share would not be significant⁸⁴ and would not be as high as 30% or higher⁸⁵. It submits that the annual sales value amounted to EUR [...] million in 2018 and to EUR [...] million in 2019⁸⁶.
- (73) With respect to the CTM slag, the Notifying Party claims that this slag from its plant in Olen as well as all other slags from all smelters are different in composition, namely no two samples from the same slag are actually the same. The Notifying Party estimates that in the EEA roughly 8.6 million tons of slag are generated in copper production. This excludes slags from non-copper smelters in the EEA, which are very significant in comparison. Furthermore, similarly to Aurubis, all other smelters decide, based on commercial and metallurgical as well as regulatory parameters, whether they process their slag internally, or sell their slag to third parties, or dispose their slag. Aurubis processes its Olen slag internally. Aurubis contends that it sells it to third parties only in exceptional circumstances when internal processing is not possible, for example, due to a smelter shut-down. Aurubis' market share is thus very low; Aurubis estimates it to be below 0.5% given the estimated slag market volume of 8.6 million tons. According to Aurubis, an estimate of sales values was not possible, due to the fact that the composition and in particular the metal content of each slag varies, as well as that the respective metal price is in most cases highly volatile. Since Aurubis processes such slag only internally, it

⁸⁰ Section 5.1.3. As Metallo also produces copper cathodes, to reflect the Merged Entity's strength on the downstream market the Commission takes into account the combined market shares.

⁸¹ Form CO, paragraph 531 and footnote 131: Aurubis sells about [...] kilotons of PbSn alloy to Metallo. In the past Aurubis sold so-called Contimelt slag generated in Olen to Metallo in 2018. [...].

⁸² Reply to request for information RFI 51, question 5.2.

⁸³ Reply to request for information RFI 51, question 5.2.

⁸⁴ Reply to request for information RFI 50, question 1.2.

⁸⁵ Reply to request for information RFI 51, question 5.2.

⁸⁶ Reply to request for information RFI 50, question 1.1.

claims that it is not regarded to be a separate market by the Parties. In any event, a potential market share would be not significant⁸⁷.

(74) For the upstream markets, the Commission notes that, with respect to tin-lead alloy, Aurubis confirmed that its market share is not as high as 30% or higher. Regarding CTM slag, Aurubis' market share is smaller than 1%.

(75) As regards the downstream markets, the Commission further takes note of Metallo's and Aurubis'⁸⁸ combined market share in the tin products makes up to [0-5]% of the global market⁸⁹. As regards Metallo's products, for which the CTM slag is a potential input, namely anodes and blister products and/or off-grade cathodes, Metallo's market shares are as follows: copper anodes [10-20]%, copper blister [10-20]%⁹⁰ and copper cathodes [5-10]%⁹¹. Therefore, those vertical links do not result in affected markets.

5.1.15. *Vertical links through Metallo upstream potentially selling copper cathodes to Aurubis downstream for the production of copper bars and profiles on the one hand and copper rolled products on the other hand*

(76) Whereas Metallo produces and sell copper cathodes upstream, Aurubis purchases copper cathodes, albeit not from Metallo, for its downstream production of copper bars and profiles⁹² and copper rolled products⁹³.

(77) On the upstream market, Metallo and Aurubis have a combined worldwide market share of [5-10]%, which is the highest combined market share of all plausible copper cathodes markets in 2018⁹⁴. On the downstream market, Aurubis' market share based on production volumes⁹⁵ is [5-10]% for copper bars and profiles EEA-wide in 2018⁹⁶ and based on sales volume [10-20]% for copper rolled products EEA-wide in 2018⁹⁷.

(78) Therefore, those vertical links do not result in affected markets.

5.2. **Affected markets and not affected markets regarding horizontal overlaps and vertical links**

(79) In light of Sections 5.1.1, 5.1.2, 5.1.11 and 5.1.12, the Commission notes that the following Parties' activities result in affected markets:

- (1) Horizontal overlap through purchasing of CSSR;
- (2) Horizontal overlap through purchasing of copper scrap no.2;
- (3) Vertical link through Metallo's potential supply of copper cathodes upstream to Aurubis for its copper rods on the plausible EEA-wide market downstream;

⁸⁷ Reply to request for information RFI 50, question 1.3.

⁸⁸ In order to reflect the strengths of the Merged Entity, the Commission takes into account a potentially combined market share of both Metallo and Aurubis.

⁸⁹ Section 5.1.9.

⁹⁰ For both Section 5.1.13.

⁹¹ Section 5.1.3; this is the combined market share of Metallo and Aurubis on the plausible market, where the Parties have the highest plausible market share.

⁹² Form CO, paragraph 546.

⁹³ Form CO, paragraph 548.

⁹⁴ Section 5.1.3. As Aurubis also produces copper cathodes, to reflect the Merged Entity's strength on the upstream market the Commission takes into account the combined market shares.

⁹⁵ The Notifying Party provided market shares based on the production volume as it did not know to which extent these products are being exported.

⁹⁶ Form CO, paragraph 546.

⁹⁷ Form CO, paragraph 548.

- (4) Vertical link through Metallo's potential supply of copper cathodes upstream to Aurubis for its copper shapes on the plausible EEA-wide market downstream.
- (80) For the other Parties' activities referred to in
- (1) Sections 5.1.3 to 5.1.10, that is to say the production and sale of copper cathodes, the extraction and sale of gold, the extraction and sale of silver, the extraction and sale of nickel, the extraction and sale of zinc oxide, the extraction and sale of lead, extraction and sale of tin and the extraction and sale of iron silicate, and
 - (2) Sections 5.1.13 to 5.1.15, that is to say Metallo upstream selling copper anodes and copper blister to Aurubis downstream for the production of copper cathodes, Aurubis upstream selling tin alloy and slag to Metallo downstream for extraction of tin and for further refining, and Metallo upstream potentially selling copper cathodes to Aurubis downstream for the production of copper bars and profiles on the one hand and copper rolled products on the other hand,
- in light of recital (32) of the Merger Regulation⁹⁸, it may be presumed that the proposed Transaction is not liable to impede effective competition in the internal market. Therefore, these products are not analysed further in this Decision.

6. COPPER PRODUCTION AND RECYCLING

- (81) Copper is a malleable and ductile metallic natural product that is an excellent conductor of heat and electricity. Copper cathodes are the standard product traded on the LME.
- (82) For the production of copper cathodes, the primary raw material is copper concentrate, also known as 'primary copper', and the smelters where these are produced are also referred to as 'primary smelters'. However, since copper is fully recyclable, copper scrap, also known as 'secondary copper', constitutes an important alternative to copper concentrate. In particular, there is *'no metallurgical difference between copper products produced out of primary and secondary materials; they have exactly the same properties and can be used for the same functions, thus not restricting demand for secondary metals'*⁹⁹.
- (83) Copper scrap is becoming an increasingly important input for the production of copper in the so-called secondary smelters¹⁰⁰. Based on the data provided by the Notifying Party, in the EEA approximately 70% of cathodes are produced from copper concentrates and 30% from copper scrap¹⁰¹.
- (84) Copper scrap is not only used as a feedstock in the production of cathodes. Primary smelters that only use copper concentrates as their input also use copper scrap with high copper content and low impurities in order to maintain their furnaces in a correct thermal balance (these scraps are sometimes referred to as 'scraps for cooling' and the said thermal balance as 'cooling').

⁹⁸ Recital (32) of the Merger Regulation reads: "*Concentrations which, by reason of the limited market share of the undertakings concerned, are not liable to impede effective competition may be presumed to be compatible with the common market. Without prejudice to Articles 81 and 82 of the Treaty, an indication to this effect exists, in particular, where the market share of the undertakings concerned does not exceed 25 % either in the common market or in a substantial part of it.*"

⁹⁹ Form CO, Annex 5.4 – X, [...], slide 15.

¹⁰⁰ Secondary smelters are also referred to as smelters and refiners, and sometimes only refiners.

¹⁰¹ Form CO, Annex 6 – I.

- (85) Furthermore, certain types of copper scrap do not need refining because they are pure enough to be melted for the production of copper products or semi-finished products¹⁰². For example, downstream of copper cathodes producers, semi-finished copper product manufacturers use high copper content scrap or clean copper alloy scrap without impurities as a direct input for the production of their copper semi-finished products.
- (86) Overall, roughly 45% of copper demand in Europe is covered by copper manufactured from copper scrap¹⁰³, which shows that Europe meets its metal demand by a balanced combination of primary and secondary raw materials¹⁰⁴.
- (87) For the production of copper cathodes, copper concentrate (primary copper) and copper scrap (secondary copper) are first processed into copper blister and then converted into anodes, which are used to produce copper cathodes (flat pieces produced in various grades) in an electrolytic process in a copper tank house.
- (88) On downstream markets, copper cathodes are further processed into copper rods, copper shapes, or melted directly into other semi-finished products through manufacturing processes such as, for example, the continuous casting of rolled products. Copper rod is the main input for power cables and wires, while copper shapes are further processed into pre-rolled strips and then into rolled material (sheets, strips and plates). Copper shapes could also be extruded and drawn to tubes and sections. The main customers for these semi-finished products are large groups active in the cable, electrical and electronic engineering, automotive, telecommunications, building, machine building and construction industries¹⁰⁵.
- (89) Figure 1 shows that the recyclers of copper scrap in the Union achieve the highest recycling rates of copper as compared to the other regions in the world. Figure 1 measures the recycling rate through two different indicators, namely the recycling input rate, which is the ratio between the recycled and the overall (namely recycled plus non-recycled) copper that is used as input for manufacturing copper, and the End-of-Life ('EoL') recycling rate, which is the share of EoL scraps that is ultimately recycled.
- (90) Whereas the global average recycling input rate is about 32% and the global average EoL recycling rate about 41%, the same recycling indicators in the Union are much higher. In the Union these indicators are, respectively, about 51% and about 70%. This means that in the Union per 100 kilogram of copper used as input, more than half comes from recycled copper, and per 100 kilogram of EoL scrap generated, about 70% is eventually recycled. As shown in Figure 1, the recovery indicators are lower in other regions of the world.

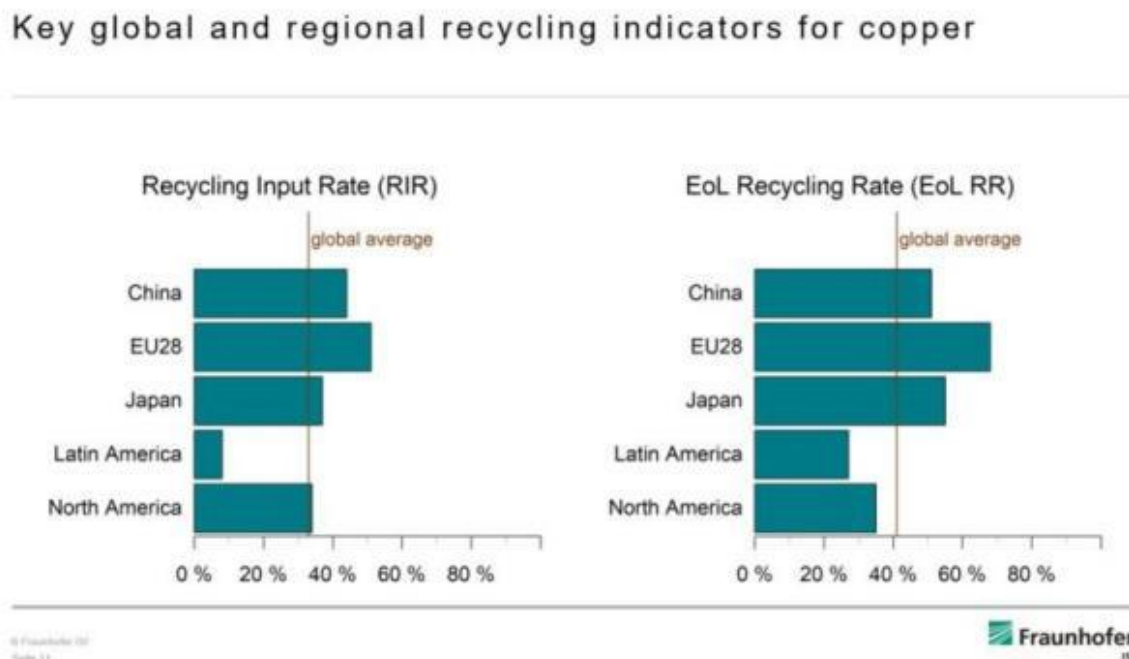
¹⁰² Such a direct use of the scrap is also referred to as direct melt because the scrap is melt in the furnace without going through any smelting or refining process.

¹⁰³ Compared to below 30% on the global level (Form CO, Annex 7.2-C, page 103), or according to another estimate 13% (Form CO, Annex 5.4-X, page 11).

¹⁰⁴ Form CO, Annex 8.13: International Copper Study Group (ICSG): *'Global use and trade of recycled copper and fabrication of copper and alloy products: trends in recent ICSG data'*, page 103.

¹⁰⁵ Form CO, paragraph 81.

Figure 1 – Copper recycling indicators by region



Source: DocID1570-70009 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00854677.pptx).

6.1. The purchase and sale of copper scrap

- (91) Figure 2 represents the value chain for copper scrap, showing the flow from scrap generators to the ultimate users.
- (92) As further explained in Section 6.2, copper scrap can originate from industrial processes, such as chemical plants, metallurgical plants, manufacturing plants for the production of copper-based products (such as electrical and electronic components), but also from products that arrived to the end of their useful life (EoL products). These include, for example, the items resulting from vehicle and building demolition, from the collection of EoL electronics and appliances.
- (93) Copper scraps originated from manufacturing processes are often referred to as 'new scraps', whereas those originated from EoL products are also referred to as 'old scraps'.
- (94) Only a limited number of copper scraps can be processed as direct melt without the need of any intermediate process. The majority of copper scrap requires some type of pre-treatment, which can vary depending on the scrap type and its final use. After the pre-treatment, the resulting copper scrap is processed in secondary smelters, and, to a lower extent, in primary smelters and for direct melting purposes.

6.1.1. Sources of copper scrap

- (95) Figure 2 further illustrates how copper scrap moves in the processing value chain from the source of its generation to its ultimate user (secondary copper smelters or primary copper smelters with some processing facilities for scraps). However, some copper scrap materials can also be processed after a pre-processing step by non refiners (such as ingot makers or semi-finished product manufacturers).

Figure 2 – Sourcing flows of complex material

[...]

Source: DocID1574-64231, (The Parties' reply to the Commission's request for information 16, M.9409_BAK17702_00654064.pptx), page 4.

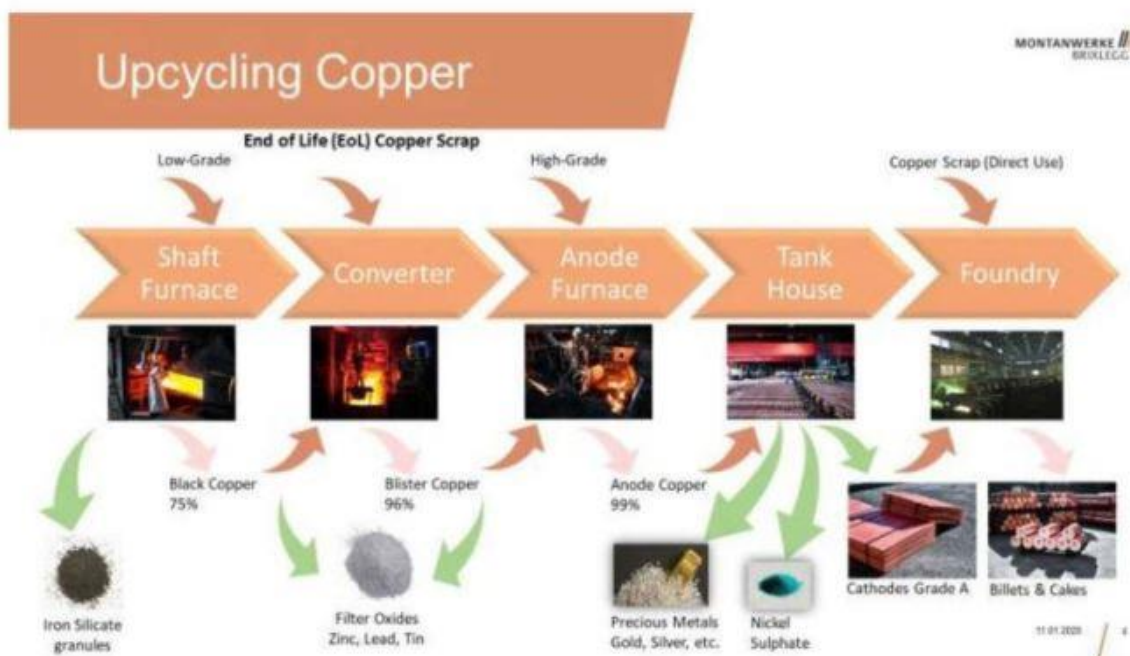
- (96) Users of scrap such as copper refiners can use either direct sourcing (Figure 2, 'Sourcing' column) or indirect sourcing (Figure 2, 'Pre-Treatment' column) to fulfil their demand for copper scrap. The Parties are purchasing around [...] (Aurubis) and [...] (Metallo) of their total intake of copper scrap for refining from industrial suppliers directly¹⁰⁶. The remaining share of this material is purchased from intermediaries such as traders and pre-processors.
- (97) With respect to direct sourcing, copper refiners can directly source scrap from industrial suppliers, namely industrial generators of copper scrap that are for example active in the automotive, housing, plumbing, electronic and industrial wire production industry, or produce certain semi-finished products using copper¹⁰⁷.
- (98) For industrial suppliers, copper scrap is generated as a by-product of the overall production process. For example, the core business of some semi-finished product manufacturers is the production of flat rolled copper products. During production, for example when a flat rolled copper product is shaped, some copper is carved off and is not used for other purposes in the production process. This left-over copper, which is a type of copper scrap, is a by-product and its production is typically minimised by the manufacturers, because it represents a reduction of productivity.
- (99) Direct sourcing from industrial suppliers is typically done via long-term contracts, because industrial generators of copper scrap produce it continuously and therefore have a need to sell it to a buyer that guarantees a continuous offload of that scrap. Furthermore, since the sale of copper scrap is not in the core business those industrial generators of scrap, spot contracts would be too time-consuming and, more generally, a non-preferred option.
- (100) Indirect sourcing occurs through intermediary channels (Figure 2, 'Pre-Treatment' column). Intermediaries between those who generate copper scrap and those who ultimately use copper scrap are traders, pre-processors and scrap collectors.
- (101) Traders buy copper scrap, possibly finance the storage, and sell the copper scrap to the ultimate users of copper scrap or to other intermediaries, as shown in Figure 2. Traders do not process the scrap in any way. In the market for the purchase of copper scrap, traders do not generate demand themselves, because ultimately they sell copper scrap to copper refiners or other final users, which is where demand is generated.

¹⁰⁶ Reply to request for information 35.

¹⁰⁷ Minutes of a call with a supplier on 9.12.2019, DocID3286.

- (102) Pre-processors and recyclers collect, dismantle and pre-treat copper scrap to various degrees¹⁰⁸. Those market participants process and bundle copper scrap to various degrees. To a limited degree, they upgrade copper scrap through processes such as sorting, mixing, and shredding. While in certain instances, scrap processors may upgrade the scrap material so that it can be used for direct melt, to a large extent, the pre-processed, treated, or shredded material will be sold to copper refiners for ultimate processing and valorisation of copper and other metals via smelting and refining.
- (103) Traders, pre-processors, and scrap collectors source from similar direct sources as refiners and subsequently sell to these refiners or other final users.
- 6.1.2. *Demand for copper scrap*
- (104) The ultimate demand of copper scrap stems from the users of copper scrap (Figure 2, 'Processing' column): primary smelters, secondary smelters, and other purchasers that can process copper scrap but are not represented in Figure 2.
- (105) Figure 3 illustrates the activities of a secondary smelter, showing that different types of copper scrap are used as a feedstock at different stages of smelting and refining. High copper content scrap (also referred to as high-grade copper scrap) can be fed into an anode furnace, while low copper content scrap (also referred to as low grade copper scrap) has first to be pre-processed in a shaft furnace (also referred to as smelter) and in a converter furnace (also referred to as Top Blown Rotary Converter). The product coming out of the shaft furnace is commonly called black copper, whereas the product of the Top Blown Rotary Converter is known as blister copper.

Figure 3 – Processes of a secondary smelter



Source: Submission by a third party on 11.1.2020, DocID2801.

¹⁰⁸ DocID1570-41657 (Reply to request for information 16, "M.9409_BAK17702_00007736.pptx").

- (106) Metallo operates its main secondary smelting plant in Beerse, Belgium, while another secondary smelter, which is capable to produce only black copper as an input for the Beerse plant, is located in Berango, Spain. Aurubis' main secondary smelting plant is located in Lünen, Germany. Aurubis' Olen (Belgium) plant utilises only high-grade copper scrap.
- (107) Primary smelters also purchase certain high grade copper scraps with low levels of impurities, however they use these scraps only for cooling their furnaces. Aurubis' plants in Hamburg, Germany and Pirdop, Bulgaria, for example, are primary smelting plants which utilise a type of high-grade copper scrap called copper scrap no.2 (see Section 7.2) for cooling purposes.
- (108) Other purchasers, for example, ingot makers of brass and bronze, and copper semi-finished product manufacturers, mainly use clean high-grade or clean alloy copper scrap directly in their production processes, namely for direct melt. Copper scrap for direct melt, as opposed to scrap for refining, has a high copper content and is relatively clean (does not contain at all or only limited quantities of other metal elements, and no organic elements). As explained in Section 7, to a reduced extent, other purchasers can also purchase copper scrap that are also suitable for smelting and refining.

6.1.3. *The determination of copper scrap prices*

- (109) The pricing of copper scrap consists of different elements. In general, the price of copper scrap is composed of the quoted LME price¹⁰⁹ for net copper content and a refining charge which is deducted from the LME price. The refining charge is the charge per tonne of copper present in the scrap (and therefore the copper ultimately recovered), which is deducted from the LME price¹¹⁰. The refining charge, or any other deductions (such as deductions for impurities and an overall treatment charge; for simplicity all charges together are collectively referred to as 'refining charge'), are meant to cover the cost of the extraction by the refiner of the valuable content from the scrap.
- (110) The refining charges typically depend on the metallurgical characteristics of a scrap and on the refining processes that are required for recovering copper. Typically, the lower the copper content, the higher the average refining charge for a particular grade, in order to compensate for the cost of additional refining required¹¹¹. The presence of certain undesired metals might also lead to higher refining charges, as it is often the case, for example, for arsenic and chloride (depending on the technical capabilities of refiners, different materials are regarded as impurities and therefore would incur a penalty)¹¹².
- (111) The part of the price that is formed by the LME is not negotiable. This price component is also the largest, compared to other price components. While refining charges are typically in the range of few hundreds of euros per tonnes¹¹³, LME price is in the range of several thousands of euros per tonne. In January 2020, for example, the LME price for copper per tonne fluctuated roughly around EUR 5 300.

¹⁰⁹ There are regional exceptions for U.S. domestic trade, which is based on COMEX quotations, as well as Chinese domestic trade, which is based on SHFE quotations; Form CO, paragraph 638.

¹¹⁰ Form CO, paragraph 413, Annex 5.4 – X, page 150.

¹¹¹ Form CO, paragraph 639.

¹¹² Form CO, paragraph 413, Annex 5.4 – X, [...], slide 150.

¹¹³ For the Parties' refining charges, please refer to requests for information 16 and 38, and Form CO, Annex 6 QQ.

- (112) Fluctuations of the LME price are subject to daily as well as longer-term cycles. In the period between January 2015 and February 2020, for example, LME price fluctuations varied between a minimum of about US Dollar 4 500 per tonne to a maximum of about US Dollar 7 000 per tonne¹¹⁴. Since LME price is the largest price component of copper scraps, their value (and therefore, in some cases, their availability on the market) is also subject to fluctuations.
- (113) Some market participants in the CSSR value chain financially hedge the fluctuation of the LME price, and therefore, to a large extent, they are not exposed to LME price fluctuations. For these market participants, refining charges would be the main source of potential price variations for their copper scraps.
- (114) For example, manufacturers of semi-finished products, such as rolled copper products, purchase copper cathodes at LME price, plus a fabrication cost, and sell their scrap at LME price minus the refining charge. Such manufacturers would typically financially hedge LME price fluctuation between the time they purchase their input materials (typically copper cathodes or copper shapes), and the time they sell the resulting rolled copper product to their customers¹¹⁵ and the scrap to refiners or to traders. In some cases, a manufacturer of semi-finished products might also enter into a tolling agreement with a secondary refiner, according to which the refiner extracts and returns the copper content in the scrap and only refining charges are paid to the refiner (that is to say, that no LME price is paid to the refiners).
- (115) On the other hand, for market participants that do not financially hedge LME price fluctuations, the impact of refining charge variations is typically not significant, compared to LME price changes. As explained in Section 9.2.6.2, these market participants are certain traders, collectors and pre-processors of copper scraps.
- (116) As the Notifying Party claims in its Reply to the SO¹¹⁶, these companies might either not have access to sophisticated financial instruments, or might have business models with margins that do not allow to afford the costs of these financial instruments.
- (117) Some other companies might even have business models according to which they can take advantage of LME price fluctuations. This is the case, for example, of traders or of other market participants that are capable of purchasing and stocking copper scrap when LME price is low, and to destock and sell this scrap when the LME price is high.
- (118) To those companies, an increase in refining charges would have a reduced impact compared to the LME price variation, and therefore the buyer power of copper refiners vis-à-vis these market participants is limited.
- (119) In addition to paying for net copper content, a refiner may also pay for other valuable elements contained in copper scrap, in case it is able to extract such value through its refining process. [Difference of Metallo from other refiners in terms of capabilities]¹¹⁷.
- (120) Refiners that are unable to valorise the tin will not pay for it, and thus, overall they would pay less for tin-bearing copper scrap, comparing to companies that can

¹¹⁴ Reply to the SO, paragraph 152, and Figure 5.

¹¹⁵ The customers of rolled copper product manufacturers are typically original equipment manufacturers (also known as OEM).

¹¹⁶ Reply to the SO, Section 2.3.3.

¹¹⁷ Reply to request for information 3, question 10, [explanation of Metallo's strategy regarding process for tin].

recover tin¹¹⁸. Aurubis is also able to recover tin, but is less efficient than Metallo [explanation of the Parties' pricing for tin].

- (121) The copper content and hence the copper scrap value is generally determined through a method called metallurgical assaying, which is a compositional analysis of the scrap. However, in certain instances concerning more standardised copper scrap categories, such as copper scrap no.2, the value is determined by visual estimation (see Section 7.1.3.3 - 7.1.3.4).

6.1.4. The value chain of copper scrap is circular

- (122) Figure 4 shows that every part of the value chain generates copper scrap, which can be sourced back into the start of the copper value chain through refining (as well as through certain direct melting processes).

Figure 4 – Circular value chain of copper

[...]

Source: Reply to request for information 18, Annex Q4.a.3, slide 3.

- (123) The Transaction takes place in the context of a market with circular characteristics, where secondary copper smelters producing copper cathodes source copper scrap from all other production stages downstream in the value chain (semi-finished products, finished products) and from the final consumer (worn out equipment/end-of life) in order to reintroduce these materials into the production (of copper anodes or cathodes). This circular nature of copper production and recycling is depicted in Figure 4.

6.2. Generation of copper scrap is largely not determined by demand

- (124) As a report prepared for Metallo sets out, [...] ¹¹⁹. This is because copper scrap is largely generated irrespective of the demand for it, simply because it is either a fixed-ratio by-product of industrial production processes or it is recovered at the EoL from copper containing products.
- (125) Furthermore, [...] ¹²⁰. The availability of scrap is in turn dependent on [...] ¹²¹.
- (126) As explained in recital (93), one can distinguish old copper scrap (or EoL copper scrap) from new copper scrap (or copper scrap from industrial suppliers). The drivers for the supply of copper scrap as set out in recital (125) are not equally applicable to these different types of copper scrap.
- (127) **First**, new copper scrap is often a by-product from industrial production processes. An important characteristic of the generation of new scrap is that the generators attempt to minimise its generation. Generators of copper scrap try to be as efficient as possible by producing as little copper scrap as possible.
- (128) Generators of copper scrap are not sensitive for the price they obtain for the copper scrap in terms of adjusting their manufacturing activities. They will produce copper scrap irrespective of the price because it is a by-product, generally produced in fixed proportion to the main downstream products of the industrial player in question.

¹¹⁸ Form CO, paragraph 352 et seq.

¹¹⁹ Form CO, Annex 5.4 – X, [...], slide 35.

¹²⁰ Form CO, Annex 5.4 – X, [...], slide 11.

¹²¹ Form CO, Annex 5.4 – X, page 11.

Since its supply is not dependent on price, the supply of new copper scrap can generally be considered to be very inelastic.

- (129) **Second**, old copper scrap stems from EoL products and generally is gathered by scrap collectors, recyclers and pre-processors who can disassemble, sort and shred EoL products and sell the copper containing parts as copper scrap. As a consequence, collectors of old scrap have some sensitivity to the price for copper scrap, that is to say, they might decide to collect less EoL containing copper, when the price paid for copper scraps (of which the LME price is the largest part) is low. However, this price sensitivity is rather limited, due to the collectors' fixed costs related to the investments made, for example, in machinery, personnel and training.
- (130) The distinction between new and old scrap are not always clear. For example, incinerator bottom ashes ('IBA') containing copper originate from the ashes of a waste incinerator, which has the main purpose of properly disposing waste (typically municipal solid waste). As such, IBA could be categorised as an old copper scrap because EoL products are contained in the incinerated waste. However, from the point of view of price sensitivity, IBA have all the characteristics of new scrap because it is generated through incineration, which is a process generating the scrap in a fixed proportion to the waste being incinerated. Furthermore, IBA is generated irrespective of the price for copper scrap because of the need (in part regulatory) of continuously disposing (municipal) waste through incineration.

6.3. Regulatory framework for the transboundary transport of waste

- (131) The transboundary movement of copper scrap entering, exiting, or transiting through the Union is subject to the regulatory framework of waste for recovery. The regulatory framework consists of three main pieces of regulation: the Basel Convention on the Control of Transboundary Movements of Hazardous Wastes and their Disposal (the 'Basel Convention'), the OECD Decision C(2001)107/Final (the 'OECD Decision')¹²², and Regulation (EC) No 1013/2006 of the European Parliament and of the Council, commonly/also known as the EU Waste Shipment Regulation (the 'EU WSR'), which implemented the former two regulatory documents¹²³. Under this relevant regulatory framework, copper scrap is a '*waste destined for recovery operations (in other words, where a waste is processed to recover a usable product or converted into a fuel)*'¹²⁴.
- (132) The Basel Convention regulates the movement of certain waste¹²⁵ based on the principle of prior informed consent. This requires exporters to complete a notification document, which sets out the details of a proposed movement, and send that document to the competent authorities in the countries of export, import and transit for their assessment and authorisation. Article 11 of the Convention allows parties to enter into other agreements concerning trans-frontier movements as long as they do not deviate from the environmentally friendly management of wastes required by the Convention. The OECD Decision is such an agreement.

¹²² OECD Decision C(2001)107/Final, "Decision of the Council concerning the revision of the decision C(92)39/Final on the control of transboundary movements of wastes destined for recovery operations".

¹²³ Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste.

¹²⁴ Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste.

¹²⁵ Hazardous waste as defined in art. 1.1 of the Basel Convention, and "other" waste as defined in art. 1.2 of the Basel Convention.

- (133) The OECD Decision applies to shipments of waste to and from countries that are party to the OECD, in accordance with the framework established by the Basel Convention. The OECD Decision adds detail to the Basel Convention regime as regards the procedures to be followed for wastes to be recovered. Those wastes are classified into two categories according to their hazard, namely the ‘green listed’ and the ‘amber listed’ waste. In accordance with the OECD Decision, notification of shipments must be given to the appropriate competent authorities using the OECD notification form for their assessment and consent. The OECD Decision also sets out a simplified ‘information only’ procedure for green listed wastes.
- (134) The EU WSR implements the legislative frameworks outlined in recitals (131) to (133) and contains comprehensive rules on the shipments of waste designed to protect the environment and human health, and to implement international obligations.
- (135) The EU WSR applies to shipments of copper scrap: (i) between Union countries or transiting via non-Union countries; (ii) imported into the Union from non-Union countries; (iii) exported from the Union to non-Union countries; and (iv) in transit through the Union, on the way from or to non-Union countries. The regime of the WSR also distinguishes between non-Union countries depending on whether they are inside or outside the OECD.
- (136) Consistent with the OECD Decision, the EU WSR distinguishes between green-listed waste and amber-listed waste¹²⁶. The procedure for notification and consent depends on the category of the waste. Specifically for copper scrap (which is considered as waste for recovery), the following requirements apply. For green listed copper scrap, the ‘General Information Requirements’ applies¹²⁷. For amber listed copper scrap, the shipment requires notification to and consent from the competent authorities of all countries concerned (the sending country, receiving country, and the country of transit). This only applies between OECD Decision countries, including Union Member States. Export of amber-listed copper scrap to non-OECD countries is banned¹²⁸.
- (137) Both Parties purchase copper scraps that are amber listed. In particular, Aurubis purchases, amongst others, the following amber-listed copper scraps: [...] ¹²⁹. Metallo purchases at least the following amber-listed copper scraps: [...] ¹³⁰. The Notifying Party submits that tin residues can be both green or amber listed (for example, tin lead slags and ashes, tin lead filtercake and tin oxide, all amber listed) ¹³¹.
- (138) The notification procedure as set out in the EU WSR provides that amber listed copper scrap (which is considered as waste for recovery) can only be imported, exported or transited subject to, among others, the following requirements: (i) The

¹²⁶ Regulation (EC) No 1013/2006 of the European Parliament and of the Council of 14 June 2006 on shipments of waste, Annex III and Annex IV. The OECD Decision also categorises red-listed waste, which cannot be exported. The EU WSR does not use this categorisation but does however implement (in its art. 36) a ban on the export of amber-listed wastes to non-OECD-countries, which is an Amendment to the Basel Convention. The EU WSR implements this ban since long, while the amendment only entered into force on a global level on 5 December 2019.

¹²⁷ EU WSR, Article 3(2) and 18.

¹²⁸ EU WSR, Article 36.

¹²⁹ Reply to request for information 28, Annex Q17.1.

¹³⁰ Reply to request for information 28, question 17.

¹³¹ Reply to request for information 28, question 15.

notifier¹³² provides written notification to the competent authorities of the countries of import, export, and transit (Article 4 EU WSR); (ii) the scrap should be subject to a contract concluded between the notifier and the receiving facility (Article 5 EU WSR); (iii) the notifier or another natural legal person makes sure there is a financial guarantee for transport, recovery or disposal, and storage for 90 days in case the transboundary shipment cannot be completed or is illegal (Article 6 EU WSR); (iv) the competent authorities of the countries concerned do not object to the movement within 30 days (Article 9 EU WSR); (v) the shipment is accompanied by the relevant documents (Article 16(c) EU WSR); (vi) the notifier and the competent authorities receive a written confirmation of receipt of the waste as soon as it receives the shipment (Article 16(d) EU WSR); and (vii) the receiving facility issues a certificate of recovery to the notifier and the competent authorities as soon as possible, but no later than 30 days after completion of the recovery and no later than one calendar year following receipt of the waste.

- (139) According to Article 37 of the EU WSR, the notification procedure applies by default to exports of specific *green-listed material to non-OECD countries*, unless the country has indicated that it accepts the simplified General Information Procedure, or unless it otherwise restricts or fully prohibits the import of that type of scrap.
- (140) For amber-listed copper scrap, the notification procedure applies in the OECD within the Union and for imports into the Union¹³³.
- (141) In light of the regulatory framework, the Commission notes that exports and imports of certain types of copper scrap are restricted, especially those that are amber-listed or green-listed if exported, or shipped through, non-OECD countries. In particular, as explained in recital (136), with respect to exports to non-OECD countries, amber-listed copper scrap may not be exported, and green-listed copper scrap would typically not benefit of the green-listed waste procedure. For imports of amber-listed copper scrap into the Union the notification procedure would apply, while for green-listed copper scrap the general information requirements typically apply.

7. PRODUCT MARKET DEFINITION

- (142) The Parties' activities mainly overlap in purchasing of copper scrap for smelting and refining operations. Both Parties refine copper scrap to produce copper blister and copper anodes, which are then used as intermediate products to produce copper cathodes (copper scrap for refining, in other words, copper scrap which generally, in most cases¹³⁴, undergoes a refining process). In addition, Aurubis sources copper scrap to use in the production of its downstream products, such as copper rods (copper scrap for direct melt, in other words, copper scrap that can generally be directly melted into semi-finished copper products without refining).
- (143) The Commission also notes that Metallo sells copper anodes and copper blister. While it sells copper anodes [...] to Aurubis, it sells [...] copper blister to Aurubis

¹³² In many cases, but not all, this is the exporter.

¹³³ Reply to request for information 28, Annex Q9.

¹³⁴ Some exceptions of refining need are, for example, described in Section 9.2.3.

and [...] to third parties¹³⁵. Aurubis, on the other hand, does not sell any of its copper blister or copper anodes production to third parties.

7.1. Procurement of copper scrap for smelting and refining (CSSR)

7.1.1. The Notifying Party's view

- (144) The Notifying Party submits that there is one market for secondary copper products, which include at least copper blister, copper scrap and spent copper anodes¹³⁶. In particular, the Notifying Party argues that all these products are substitutable from the demand side perspective for the production of copper, regardless of their different pricing. As regards supply-side substitution, the Notifying Party argues that there are no barriers for scrap suppliers to expand their portfolio with blister¹³⁷.
- (145) In addition, the Notifying Party submits that the only viable way to segment the copper scrap market would be on the basis of copper content because copper content is a major factor for purchasing decisions and also for the pre-processing steps which are required before copper scrap can be used as input for production of copper anodes¹³⁸. In light of this, the Notifying Party suggests segmenting the copper scrap market into high-grade scrap with copper content of above 85%, mid-grade scrap with copper content between 50% and 85%, and low-grade scrap with copper content below 50%¹³⁹.
- (146) While the Notifying Party provided data based also on segmenting the copper scrap market by use (namely copper scrap for direct melt and copper scrap for refining), it also submitted that such segmentation is not relevant, as the same materials can be used for direct melt as well as for refining¹⁴⁰. In particular, the Notifying Party submitted that such segmentation is not relevant for copper scrap no.2 as defined under Institute for Scrap Recycling Industries (ISRI) classification¹⁴¹. The Notifying Party explained that copper scrap no.2 is one homogenous category of copper scrap, which is used for direct melting and for refining, and that both types of purchasers (namely semi-finished products manufacturers and copper refiners) compete for volumes of this type of scrap¹⁴².
- (147) In the Reply to the SO, the Notifying Party argued that in buyer power cases the relevant market definition in terms of demand-side substitution should also consider the extent to which buyers that currently do not buy CSSR could quickly change their purchasing behaviour and start buying CSSR instead of other materials if the prices for CSSR were to fall¹⁴³. In the present case, the Notifying Party argues in particular that the competitive constraints exerted by purchasers of electronic equipment scrap ('e-scrap') should be taken into account¹⁴⁴.

¹³⁵ In 2018, Metallo sold copper blister to [...] other customers apart from Aurubis, Form CO, paragraph 294.

¹³⁶ Form CO, paragraph 150.

¹³⁷ Response to Article 6(1)(c) Decision, paragraphs 60-61.

¹³⁸ Form CO, paragraph 152; Notifying Party's submission 'On the Sub-Segmentation of Copper Scrap' of 7 January 2019.

¹³⁹ Form CO, paragraph 153.

¹⁴⁰ Response to Article 6(1)(c) Decision, paragraphs 62-65.

¹⁴¹ According to the ISRI definition, copper scrap no.2 is scrap with copper content of 94% – 96% and with little or no non-metallic impurities (but the delta to 100% could be filled by zinc, tin, lead, aluminium, glass, sand, however no grease, oil, or burned copper wires, Form CO, paragraph 204.

¹⁴² Form CO, paragraph 337; Response to Article 6(1)(c) Decision, paragraphs 62-65.

¹⁴³ Reply to the SO, paragraph 98.

¹⁴⁴ Reply to the SO, paragraphs 119-121.

7.1.2. *The Commission's past practice*

- (148) In previous decisions, the Commission concluded that the market for copper scrap is distinct from the market for copper concentrate¹⁴⁵. It has also considered the segmentation of the copper scrap market by use, distinguishing between scrap for refining and scrap for direct melt¹⁴⁶, but ultimately left the precise market definition open. In *Glencore/Xstrata*¹⁴⁷, the Commission has defined a market for secondary copper products, which included copper scrap and the intermediate products obtained in the production of copper cathodes: copper blister and spent copper anodes. However, the Commission left open whether the secondary copper products market includes custom cast anodes¹⁴⁸.

7.1.3. *The Commission's assessment*

- (149) The main purpose of market definition, as explained in the Commission Notice on the definition of the relevant market (the 'Notice on the relevant market definition'), is to identify in a systematic way the competitive constraints that the undertakings involved face¹⁴⁹. The objective of defining a market in both its product and geographic dimension is to identify those actual competitors of the undertakings involved that are capable of constraining those undertakings' behaviour independently of effective competitive pressure. The Notice on the relevant market definition further explains '*from an economic point of view, for the definition of the relevant market, demand substitution constitutes the most immediate and effective disciplinary force on the suppliers of a given product, in particular in relation to their pricing decisions*'¹⁵⁰. In this regard, and with reference to cases concerning the concentration of buying power, the Notice on the relevant market definition explains that the starting point for the assessment is identifying '*the alternative distribution channels or outlets for the supplier's products*'¹⁵¹.
- (150) As a second competitive constraint, '*supply-side substitutability may also be taken into account when defining markets in those situations in which its effects are equivalent to those of demand substitution in terms of effectiveness and immediacy*'¹⁵². In the context of a case concerning concentration of buyer power, supply-side substitutability would analyse whether suppliers would be able to switch to producing other inputs.
- (151) In light of those principles outlined in recitals (149) to (150), the Commission considers that for purposes of defining the relevant product market in this case, it is relevant to consider the segmentation by type of copper scrap materials that are used for smelting and refining. In particular, the Commission considers that it is appropriate to distinguish the market for copper scrap for smelting and refining (CSSR) as distinct from the market for (i) copper blister and copper anodes because these are not copper scrap materials generated as a waste or a by-product but intermediate products of copper smelting and refining, and because these products are largely produced and supplied by different groups of suppliers; (ii) copper scrap

¹⁴⁵ Case M.4781 – *Norddeutsche Affinerie/Cumerio*, recital 21.

¹⁴⁶ Case M.6316 – *Aurubis/Luvata Rolled Products*, recital 11, footnote 13.

¹⁴⁷ Case M.6541 – *Glencore/Xstrata*, recital 244-245.

¹⁴⁸ Case M.6541 – *Glencore/Xstrata*, recital 245.

¹⁴⁹ Commission Notice on the definition of relevant market for the purposes of Community competition law, OJ C372/5, 9.12.97, paragraph 2.

¹⁵⁰ The Notice on the relevant market definition, paragraph 13.

¹⁵¹ The Notice on the relevant market definition, paragraph 17.

¹⁵² The Notice on the relevant market definition, paragraph 20.

for direct melt used by ingot makers and semi-product manufacturers because copper scrap suppliers would likely not be able to switch easily for most CSSR materials to ingot makers and semi-product manufacturers. Nonetheless, as purchasers of scrap for direct melt exert certain competitive constraint on the CSSR market (and purchase certain CSSR materials), the Commission, in order to fully appraise the impact of the Transaction for purchasing of CSSR, will consider the competitive constraints arising from ingot makers and semi-finished product manufacturers in its competitive assessment. In addition, (iii) though copper scrap no.2 and e-scrap concern copper scrap that is destined for refining, these two types have features of distinct market and concern more standardised materials.

- (152) Subsequently, the Commission considers that the relevant market for CSSR (i) is highly differentiated because it covers different types of copper scrap materials, which are non-standard and largely require metallurgical assaying, as well different know-how and equipment to process; and (ii) consists of multiple segments, which are characterised by different competition conditions and intensity of competition.
- 7.1.3.1. Copper scrap for smelting and refining (CSSR) is distinct from the market of copper blister and copper anodes
- (153) The majority of respondents to the market investigation expressing the views consider copper scrap to be a distinct market upstream from copper blister and copper anodes, while the overall majority of the respondents to the relevant questions indicated 'I do not know'¹⁵³. The majority of respondents to the Commission's market investigation expressing views considered that there is a distinct market for copper anodes¹⁵⁴ and for copper blister¹⁵⁵.
- (154) Some respondents explained that the products concerned have different quality and require different equipment or expertise to process: *'Copper scraps come in a large variety of purity grades. The recycling process is totally different and requires other equipment in orde[r] to process it'*¹⁵⁶. Similarly, other respondents also underlined that substitution between these products depends on whether refiners have the necessary technology or knowhow: *'We see these products as different in nature as their intended usage is different. However, copper scrap can be used as a raw material for the other categories given that the right production tools and knowhow exists'*¹⁵⁷ and *'it depends on production process and technology used'*¹⁵⁸.
- (155) While few respondents to the market investigation suggested that, from a technical perspective, scrap, blister and anodes could be considered as alternatives¹⁵⁹, the in-depth investigation shows that this could be true only to some limited extent and only in relation to high copper content and high purity categories of scrap. For example, one market participant explained that blister of around 96% copper content and copper scrap no.2 are supplementary feeds in their system at the same stage

¹⁵³ Replies to question 5.3 of Q1_Questionnaire to Suppliers of Copper Scrap, DocID3100; Replies to questions 7.1.1. and 7.3 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

¹⁵⁴ Replies to questions 18 and 19 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

¹⁵⁵ Replies to question 17 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

¹⁵⁶ Replies to question 5.3.1 of Q1_Questionnaire to Suppliers of Copper Scrap, DocID3100.

¹⁵⁷ Replies to question 5.1 of Q1_Questionnaire to Suppliers of Copper Scrap, DocID3100.

¹⁵⁸ Courtesy translation from original German text, which reads: *'das hängt vom jeweiligen Produktionsprozess und der verwendeten Technologie ab'*; Replies to question 7.1.1 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

¹⁵⁹ Replies to question 5.1 of Q1_Questionnaire to Suppliers of Copper Scrap, DocID3100 and Replies to question 17.1 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

(anode furnace)¹⁶⁰. Similarly, the Notifying Party's internal document explains that Aurubis may use blister and anodes as a substitute of copper scrap no.1¹⁶¹, namely scrap with even higher copper content than copper scrap no.2 and largely without any impurities used for direct melt¹⁶².

- (156) Furthermore, some respondents to the market investigation submitted that copper blister, anodes and scrap are priced differently and that price difference could be significant, which would indicate that copper blister and anodes do not belong to the same product market as copper scrap for smelting and refining. For example, as one respondent explained: *'Copper blister and copper anodes can be taken instead of copper scrap, but would be much more expensive'*¹⁶³, or similarly explained by another respondent: *'<...> Cu scrap does not necessarily attract the same premium as Blisters or Cu anodes'*¹⁶⁴. Similarly a market respondent explained: *'Once No.2 Copper scrap is less available for us, we either have to cut production or have to buy expensive alternative raw material, like external Blister'*¹⁶⁵. Notably, the Notifying Party also acknowledged that copper blister is priced higher than a specific category of copper scrap that the Notifying Party claims can be used as alternative to blister¹⁶⁶.
- (157) As regards supply side substitution, the large majority of copper scrap suppliers expressing views in the market investigation indicated that they would not be able to switch to supplying copper blister or spent anodes¹⁶⁷ swiftly and without incurring significant cost¹⁶⁸. For example, as one respondent explained: *'because copper-scrap-markets and copper Blister and/or spent anodes-markets are totally different. Blister copper and spent anodes [...] will be sold partly directly from Producers, only some quantities will be handled by a handful of big trading houses because of logistics and financing reasons. Also scrap suppliers does [sic] not have such liquidity for Blister/spent anodes-business.'*¹⁶⁹ Similarly, one EEA based refiner explained: *'[...] Usually scrap dealers are not involved in copper blister trading (especially European origin) as this market is quite transparent and European smelters consuming blister when sourcing this material are using either commodity trading companies or do the business directly with producers'*¹⁷⁰. This is in line with the Notifying Party's internal document showing that trade in copper blister and anode mainly takes place directly between smelters, while traders share is minimal and no scrap pre-processors are listed¹⁷¹.

¹⁶⁰ Submission by a third party on 11.1.2020, DocID3338.

¹⁶¹ DocID1572-785 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00890104.pptx), slide 13.

¹⁶² Replies to question 3.2 of Q1_Questionnaire to Suppliers of Copper Scrap, DocID3100.

¹⁶³ Replies to question 5.1.1 of Q1_Questionnaire to Suppliers of Copper Scrap, DocID3100; see also replies to question 7.1.1 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

¹⁶⁴ Replies to question 5.3.1. of Q1_Questionnaire to Suppliers of Copper Scrap, DocID3100.

¹⁶⁵ Submission by a third party on 11.1.2020, DocID3338.

¹⁶⁶ Response to Article 6(1)(c) Decision, paragraph 60.

¹⁶⁷ Spent anodes refer to thin 'skeleton' of the anode, which remains after copper units have been transferred from custom-cast anodes to cathode starter sheets during the process of electrolysis. Custom cast anodes are produced in accordance with the specifications of a particular refinery, i.e. in the shape which would fit the refinery's tank-house (electrolytic refining stage); see case M.6541 – *Glencore/Xstrata*, recitals 241 et seq., footnote 224.

¹⁶⁸ Replies to question 5.2 of Q1_Questionnaire to Suppliers of Copper Scrap, DocID3100.

¹⁶⁹ Replies to question 5.2.1 of Q1_Questionnaire to Suppliers of Copper Scrap, DocID3100.

¹⁷⁰ Replies to questions 17.1 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

¹⁷¹ DocID1572-785 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00890104.pptx), slides 4, 6-7 11.

- (158) In light of the analysis in this Section 7.1.3.1 and for the purposes of this case, the Commission considers that it is likely that copper blister and anodes do not belong to the market of copper scrap for smelting and refining.
- 7.1.3.2. Copper scrap for smelting and refining (CSSR) is distinct from the market for direct melt
- (159) The results of the market investigation indicate that there is a clear distinction between relatively homogeneous copper scrap that can be used directly in the production of copper products without having to metallurgically refine it (namely scrap for direct melt) and more heterogeneous copper scrap that needs to be refined (namely copper scrap for smelting and refining)¹⁷².
- (160) **First**, the chemical characteristics of copper scrap for smelting and refining and copper scrap for direct melt are different. The respondents to the market investigation considered that copper scrap for direct melt is characterised by high copper content and without (or with very limited) impurities (namely, high-grade copper scrap). Scrap for direct melt may also include copper scrap with lower copper content, however it has to be a clean¹⁷³ copper alloy scrap (for example, pure copper/zinc alloys, pure copper/tin alloys) and is usually collected from industrial processes (for example, generated from stamping) or copper cleaned and sorted by scrap pre-processors¹⁷⁴.
- (161) **Second**, copper scrap for direct melt seems to include scrap of clearly defined purity to fit the fabrication process of downstream semi-finished copper products manufacturers, such as KME, Wieland, LaFarga, or Gnutti¹⁷⁵. For example, one respondent to the market investigation explained: *'This can be either scrap nr 1 (= same purity as LME A-grade cathode) or copper alloys that have a known composition and can be used to make other copper alloys'*¹⁷⁶. Similarly, while the Parties claim that brass and bronze ingot makers constitute an efficient alternative to copper refiners, a copper scrap supplier distinguished between the materials supplied to copper refiners and ingot makers: *'Brass and bronze ingot makers are not usually capable of using copper scrap material in the form of refinery grade brass and bronzes, as it contains too many impurities. Ingot makers usually only purchase clean brass, bronze, and copper scrap material that has specific alloy classifications'*¹⁷⁷. On the other hand, the Notifying Party argued that bronze manufacturers *'can and do take certain tinned scrap materials for direct melt'*¹⁷⁸. The Commission also notes that some respondents to the Commission's market investigation have indicated that when tracking demand conditions for certain copper scrap for refining categories, including mid-grade (50%-85% copper content), which

¹⁷² Replies to question 6.4 of Q1_Questionnaire to Suppliers of Copper Scrap, DocID3100 and replies to question 8.4 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098; (large majority of respondents expressing their view).

¹⁷³ The qualification 'clean' refers to chemical composition of the alloy and means that it is not contaminated by other metals ('impurities').

¹⁷⁴ See, for example, replies to question 6.1 of Q1_Questionnaire to Suppliers of Copper Scrap, DocID3100.

¹⁷⁵ See Form CO, Annex 5.4 – X, page 89.

¹⁷⁶ Replies to question 8 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

¹⁷⁷ Minutes of a call with a supplier of 9.12.2019, paragraph 27, DocID3286.

¹⁷⁸ Response to Article 6(1)(c) Decision, paragraph 65.

would fall within CSSR, consider ingot makers and semi-finished products manufacturers alongside copper refiners¹⁷⁹.

- (162) **Third**, the internal documents of the Notifying Party suggest that distinction based on use is material and that ‘*clean scrap grades*’ are different from ‘*smelter scrap grades*’ (see Figure 5 and Figure 6). In particular, the scrap for direct melt, as referred to in Figure 6, is used in ‘*fabrication of alloys shapes, rod, cast products in substitution of copper cathodes*’. Furthermore, Aurubis has defined quality requirements for copper scrap to be used as direct melt for its downstream copper products manufacturing. The material that does not fulfil these requirements because of impurities, organic materials or other physical properties, is sent for smelting and refining¹⁸⁰.

Figure 5 – Differentiating scrap by use

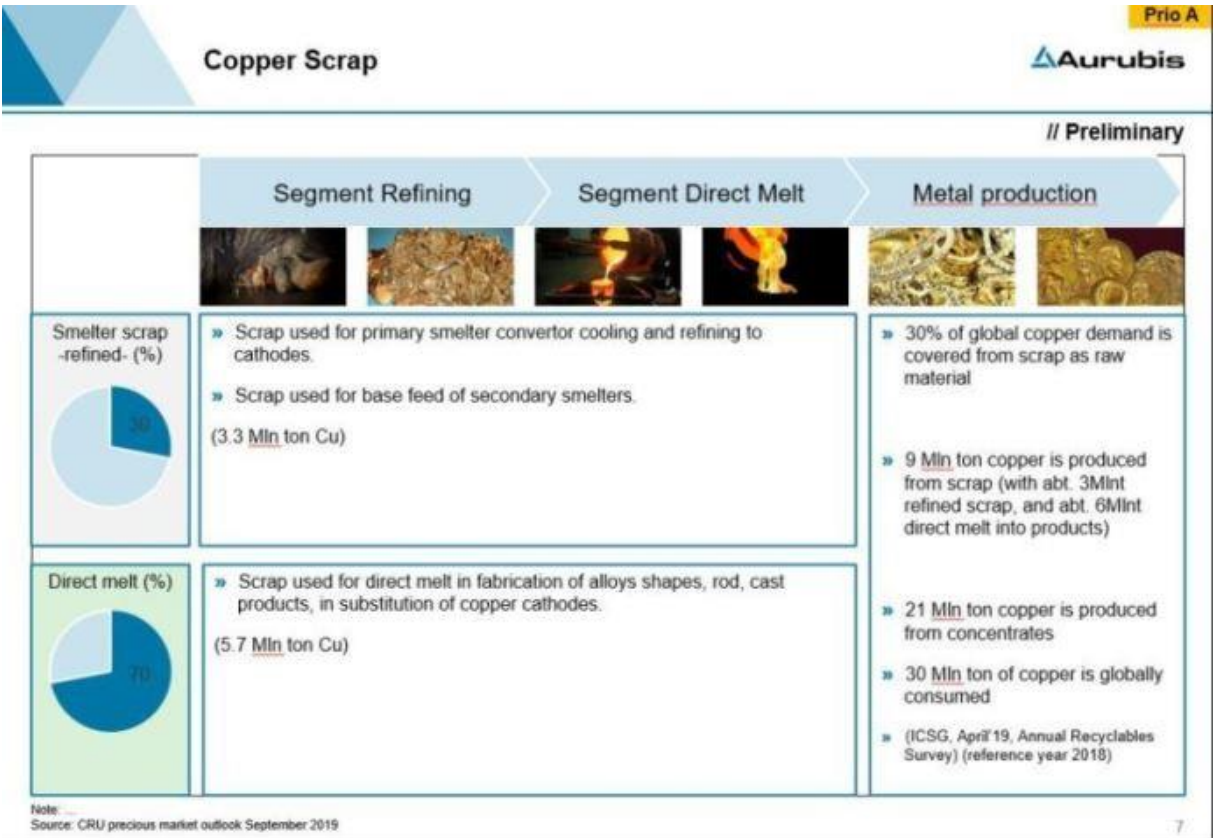
Clean scrap grades	
Direct melt scrap: scrap grades destined to replace cathodes	
» Millberry (via rod customers, trade)	
» Enamelled wire scrap (via rod customers, trade)	
» Clean alloyed scrap , e. g. clean tinned wire scrap (via rod customers, trade)	
» Clean brass scrap (via brass manufacturers/ trade)	
Cable scrap and products:	
» Cable scrap (via rod customers and energy providers, trade)	
» Granules (via rod customers by own slitting, cable manufacturers via old cable scrap), use in semi fabrication, chemical plants, smelters depending on quality	
Smelter scrap grades	
All production scrap at copper product customers' plants destined to be treated in secondary smelting & refining to replace other No 2 scrap grades	
» Mixed tinned copper and alloyed scrap (via shapes or strip customers, e. g. stampings, in metallic form and with a high degree of unpaid/ paid metals Ni, Sn, Ag)	
» Complex copper scrap grades and residues, e. g. slags, drosses, runouts with or without PMs (via foundries/ semi fabrication)	
» Various other materials (via product customer, e. g. clad materials from the automotive industry)	

Source: Reply to request for information 18, Annex Q4.a.1.

¹⁷⁹ Replies to question 36 of Q1-b Questionnaire to Suppliers of Copper scrap, DocID3097.

¹⁸⁰ See for example DocID1578-80421 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00475190.msg).

Figure 6 – Aurubis distinguishes between scrap for direct melt and scrap for refining



Source: Reply to request for information 37, Annex 4, 191105 market mapping slide deck_VPE_V2.pptx.

- (163) **Fourth**, the results of the market investigation suggest that scrap for direct melt is more expensive and follows a different price setting formula. Generally, copper scrap is sold by net copper content set at an LME rate minus the discount for the effort and cost needed to refine it (i.e. the refining charge). Copper scrap for direct use has the lowest cost because it does not need to be refined. Therefore, the price of copper scrap for direct melt is higher since there is no deduction of refining charges. Respondents to the market investigation explained the different pricing for the purchase of scrap for direct melt compared to scrap for refining: ‘Generally the terms [for] direct melt scrap are fairly simple, comprising of the lowest of the four respective LME quotations for the metal concerned with a fixed discount or percentage discount. For refinery scrap the process required will dictate the pricing formulae, which are far more complex [...]. The more refining steps required, the more complex the formula can become’¹⁸¹. Similarly, another respondent explained: ‘If you have a pure copper scrap you can reach for the direct use a better price. But only for very pure material. For 90% of the market you need a smelter’¹⁸², or as a semi-finished products manufacturer submitted: ‘We expect a higher Price for direct melt scrap as consumption of material for direct melt is less cost intensive than for refining’¹⁸³.
- (164) **Fifth**, the Notifying Party argues that ‘the very same lot of scrap can be ‘scrap for refining for one refiner and direct melt for another metal producer. Indeed, Aurubis

¹⁸¹ Replies to question 6.3 of Q1_Questionnaire to Suppliers of Copper Scrap, DocID3100.

¹⁸² Replies to question 6.3 of Q1_Questionnaire to Suppliers of Copper Scrap, DocID3100.

¹⁸³ Replies to question 4.2.1. of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

*has used direct melt in refining process when scrap was scarce*¹⁸⁴. The Commission considers that even if Aurubis may use copper scrap of direct melt quality, it is likely not a regular practice. An internal Aurubis communication suggests that purchasing of direct melt quality scrap for refining could be envisaged in *‘very selected market scenarios – extreme tightness of No2 scrap – direct melt scrap on stock may be used for treatment in CTM*¹⁸⁵’. The likely reason for this is that it may not be economically attractive to use such material in refining operations because it was bought at a price based on its direct melt quality and did not account for relevant treatment and refining charges.

- (165) Accordingly, while copper refiners and ingot makers may both purchase certain types of copper scrap and thus exert to a certain extent competitive constraint on purchasing of CSSR, on balance, the evidence suggests that copper scrap suppliers can only to a limited extent arbitrage between ingot makers and bronze manufacturers, on the one hand, and copper refiners on the other hand. In light of the analysis in this Section 7.1.3.2, the Commission considers that copper scrap for direct melt does not belong to the market of copper scrap for smelting and refining. However, in order to fully appraise the impact of the Transaction for purchasing of CSSR, the Commission will consider the competitive constraints arising from ingot makers and semi-finished product manufacturers in its competitive assessment.
- 7.1.3.3. Copper scrap no.2 and worn-out electronic equipment scrap (‘e-scrap’) are not part of CSSR as each has features of a distinct market
- (166) Copper scrap no.2 and e-scrap concern scrap for smelting and refining. However, the Commission considers that these two categories are likely distinct from an overall CSSR market as each has features of being a distinct market (see also Section 7.2).
- (167) **First**, copper scrap no.2 and worn-out e-scrap are copper scrap categories with distinct characteristics and relatively clear boundaries. Those scrap categories are also identified as such by market participants.
- (168) Copper scrap no.2 is a relatively standardised copper scrap category, which is traded as a commodity¹⁸⁶. Copper scrap no.2 contains high copper content and only limited impurities. The copper scrap that qualifies as copper scrap no.2 is defined by the ISRI classification as copper scrap with a copper content of 94% to 96% and with little or no metallic impurities¹⁸⁷ (Figure 7)¹⁸⁸. Accordingly, copper scrap no.2 is relatively pure, possibly with limited traces of other metal elements, such as tin, nickel, or aluminium.

¹⁸⁴ Response to Article 6(1)(c) Decision, paragraph 65.

¹⁸⁵ CTM stands for contimelt, where only high-grade copper scrap (or copper scrap no.2 for refining) can be fed, Form CO, paragraphs 127, 130, and 208; DocID1578-80421 (Reply to request for information 16, M.9409_BAK17702_00475190.msg).

¹⁸⁶ ‘On the Sub-Segmentation of Copper Scrap’, submitted by the Notifying Party on 7.1.2020, page 9.

¹⁸⁷ According to the ISRI definition, copper scrap no.2 is scrap with copper content of 94% – 96% and with little or no non-metallic impurities (but the delta to 100% could be filled by zinc, tin, lead, aluminium, glass, sand, however no grease, oil, or burned copper wires, Form CO, paragraph 204. For internal reporting purposes, Aurubis refers to copper scrap no.2 with a copper content in the higher range of 90% to 98.5%.

¹⁸⁸ See also DocID1570-90676 (The Parties’ reply to the Commission’s request for information RFI 16, M.9409_BAK17702_00877738.pptx), slide 20.

Figure 7 – Copper scrap no.2 is a commodity

[...]

Source: DocID1570-55410 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00836978.pptx), slide 22.

- (169) In addition, the definition of copper scrap no.2 as a commodity is further supported by the finding that when purchasing this type of copper scrap no assaying is performed. While generally the precise metallurgical composition (and thus the value) of each batch of copper scrap is determined through assaying, scrap no.2 is more homogenous than other types of scrap and thus '*detailed sampling and assaying of each lot may not be economically feasible*' as purchasers undertake '*a visual estimate*'¹⁸⁹. While quick and reliable assaying is of essential importance in the sale and purchase of complex non-standardised materials for those active in the market, and that any lack of assaying capabilities may limit '*access to the market*'¹⁹⁰, the Notifying Party explains that assaying is not required for scrap no.2 because a visual estimate suffices¹⁹¹. As suppliers have other alternative outlets competing for copper scrap no.2, it can be traded without knowing the precise copper content and its metallurgical composition¹⁹², which indicates that competition conditions for this category of copper scrap compared to other CSSR materials are sufficiently different.
- (170) Similarly, e-scrap is also a rather homogenous copper scrap category with distinct characteristics of other types of CSSR because of organic materials that are contained next to copper and other metallic elements. As the Notifying Party explains, e-scrap mainly consists of printed circuit boards ('PCBs') and is always low grade¹⁹³. The Notifying Party submits itself that e-scrap can be considered a separate category because unlike other types of copper scrap it contains significant amount of organic compounds¹⁹⁴.
- (171) **Second**, the evidence shows that each of these two categories have sufficiently distinct buyer groups.
- (172) As regards copper scrap no.2, scrap suppliers can sell it to secondary copper smelters, since they use this relatively pure copper scrap to dilute impurities of their feed mix. In addition to secondary copper refiners, primary copper smelters also consume copper scrap no.2 for cooling purposes. According to the Notifying Party's internal documents, while copper smelters and refiners constitute the main source of demand for copper scrap no.2, accounting for more than 70% of the overall demand in the EEA, semi-finished copper products fabricators and ingot makers also consume copper scrap no.2 (see Figure 10).

¹⁸⁹ The Notifying Party's submission '*On the Sub-Segmentation of Copper Scrap*' of 7.1.2020, page 2.

¹⁹⁰ See DocID1578-62395 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00457156.pptx), slide 2; DocID1578-62395 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00457156.pptx), slide 3 (highlighted by the Commission).

¹⁹¹ An Aurubis internal document suggests that out of [...] batches purchased per year [...] % need to be sampled and assayed, DocID1569-74198, (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00954752.pptx), slide 116.

¹⁹² See DocID1578-66248 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00461011.pptx), slide 12.

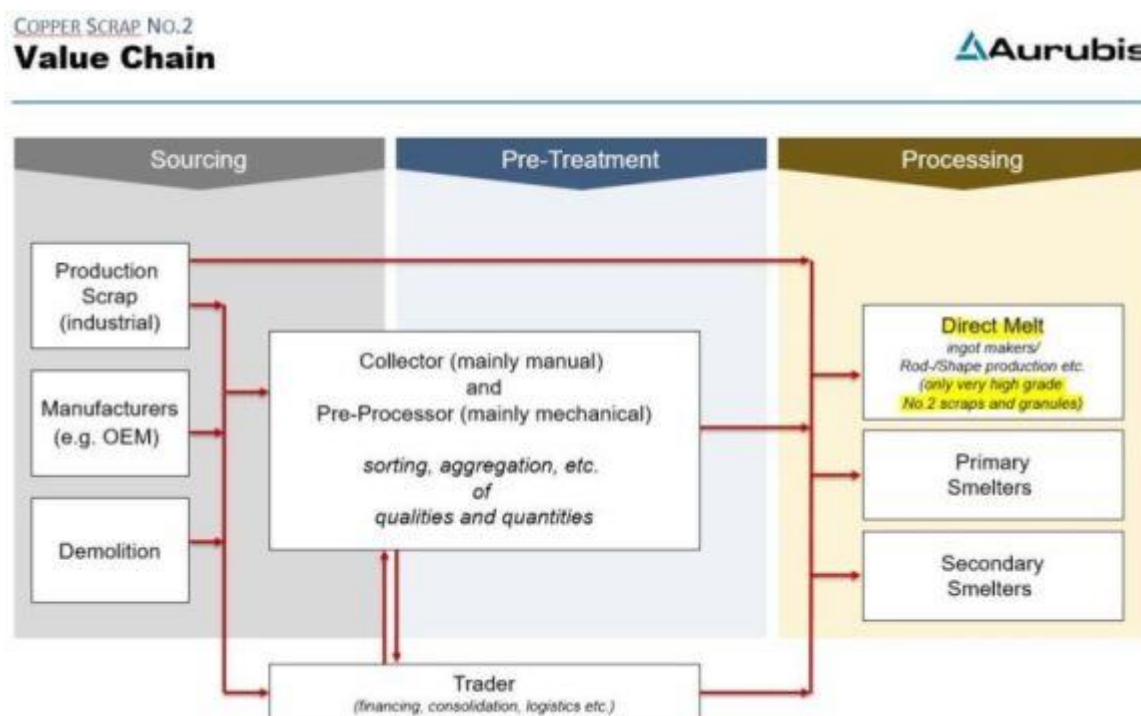
¹⁹³ Form CO, paragraph 154.

¹⁹⁴ The Notifying Party's submission '*On the Sub-Segmentation of Copper Scrap*' of 7.1.2020, page 9.

- (173) While several respondents to the market investigation submitted that in addition to primary and secondary copper refiners they also consider alloy makers as customers for copper scrap no.2, the respondents qualified their answers by explaining that alloy makers require a specific quality and purity of scrap materials¹⁹⁵. For example, *'Alloy makers typically look for material with a quality/specification which comes close to their end-product'*¹⁹⁶; similarly another respondent submitted *'If cu scrap No 2 has only limited impurities, we as a bronze ingot maker can use it as it is'*¹⁹⁷. In addition, another respondent in the market investigation further emphasised that only limited quantities of copper scrap no.2 may be sold for direct melt users: *'Impurities or side elements in the No 2 Cu Scraps may not be harmful to some direct users. But consumption for this use maybe limited'*¹⁹⁸. In addition, when asked whether in case of a 5-10% increase in refining charges for copper scrap no.2 by Aurubis and Metallo the suppliers could re-allocate at least some of their sales of copper scrap no.2 to brass/bronze ingot makers or semi-finished products manufacturers, the majority responded in the affirmative¹⁹⁹.
- (174) However, other respondents to the market investigation suggested that copper scrap no.2 does not qualify for direct melt: *'No-2-scrap will not be used for direct melt because of the different impurities'*²⁰⁰; similarly another respondent explained *'direct smelters need a higher quality than refineries do'*²⁰¹, as well as also stating that *'Copper scrap no 2 demand tends to be limited to refiners'*²⁰² and *'No 2 Copper scraps ex USA are scraps for refining and not for direct melt purpose'*²⁰³. In addition, a large majority of respondents expressing their views distinguished copper scrap no.2 for refining and copper scrap no.2 for direct melt submitting that there are material differences between the materials of these two uses (for example, because of impurities) and that they command a different price in the market²⁰⁴.
- (175) The results of the market investigation, suggesting that only a limited share of copper scrap no.2 materials could potentially be used by other than primary and secondary copper refiners correspond to the explanations found in the internal documents of the Notifying Party. In particular, as Figure 8 indicates, ingot makers and semi-finished products manufacturers use copper scrap no.2 for direct melt but *'only very high grade No.2 scraps and granules'*. In addition, when discussing a competitive landscape for copper scrap no.2, Aurubis lists as competitors only primary and secondary smelters (Figure 9).

¹⁹⁵ Replies to questions 36 and 36.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.
¹⁹⁶ Reply to question 36.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.
¹⁹⁷ Reply to question 36.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.
¹⁹⁸ Reply to question 5.2.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.
¹⁹⁹ Replies to question B.12 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.
²⁰⁰ Reply to question 5.2.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.
²⁰¹ Reply to question 5.2.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.
²⁰² Reply to question 4.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.
²⁰³ Reply to question 4.1.1 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.
²⁰⁴ Replies to questions 4.1, 4.1.1, 4.2 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096 and replies to questions 5.1, 5.2 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

Figure 8 – Only high purity copper scrap no.2 materials are sold to ingot makers and semi-finished products manufacturers



Source: DocID1569-74198 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00954752.pptx), slide 118, highlighted by the Commission).

Figure 9 – Primary and secondary copper refiners compete with the Parties for scrap no.2

[...]

Source: DocID1569-74198 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00954752.pptx), slide 119.

- (176) Accordingly, the results of the market investigation and the internal documents of the Notifying Party suggest that copper scrap no.2 materials for which copper refiners compete are likely not the same as those which semi-finished copper products manufacturers and ingot makers consume. However, it cannot be excluded that at the boundaries of the market certain copper scrap no.2 materials might be used by smelters and ingot makers and semi-finished product manufacturers.
- (177) As regards e-scrap, because of organic material components only copper refiners with specific capabilities and equipment can process this type of copper scrap. In line with this, the Notifying Party explains *'there are high requirements, especially on metallurgical know-how, for recycling of PCBs due to the complex device structures and its organic material composition'*²⁰⁵. In contrast to Aurubis, Metallo does not have the technical capabilities to recycle e-scrap and thus does not source it for its operations²⁰⁶. Similarly, as can be seen in Figure 10, Aurubis does not consider Brixlegg to have capabilities in e-scrap treatment²⁰⁷. A market participant active in

²⁰⁵ Form CO, paragraph 154.

²⁰⁶ Form CO, paragraphs 49, 154.

²⁰⁷ See also Response to Article 6(1)(c) Decision, paragraph 75.

e-scrap also explained: *'As far as Metallo, KGHM and Brixlegg are concerned we understand that the organics contained in e-scrap preclude them from consuming such material'*²⁰⁸.

- (178) In addition, as regards suppliers, the large majority of e-scrap suppliers, as appear in the internal documents of the Notifying Party, are scrap collectors and pre-processors²⁰⁹ that collect, sort, pre-process and remove hazardous components to prepare the material for smelting and refining²¹⁰. Accordingly, suppliers of e-scrap may consider that only refiners, which have special technical capabilities and know-how to treat e-scrap are, for them, viable outlets.
- (179) As regards the Notifying Party's argument that e-scrap nonetheless needs to be considered as part of the relevant CSSR market because e-scrap purchasers have the capabilities to process CSSR and could switch to buying CSSR in case its price decreases, the Commission considers that in light of the different characteristics of e-scrap, there is no demand-side substitutability and that price arbitrage between purchasers of e-scrap and CSSR is not sufficiently strong to consider both types as belonging to the same market. The Commission acknowledges that while there could be one-way substitution because e-scrap refiners have the capabilities to process CSSR, the ability of e-scrap refiners to exert competitive pressure for purchasing CSSR could be considered as an out-of-market constraint. In this regard, the Commission also notes that the extent to which e-scrap refiners might exert competitive pressure for purchasing of CSSR will depend on their incentive to switch their input in case of CSSR price decrease. For example, the Notifying Party explained that by [...] ²¹¹.
- (180) **Third**, the internal documents of the Notifying Party show that Aurubis monitors the developments in the market and assesses the competitive dynamics for copper scrap no.2 and e-scrap separately from other secondary materials (Figure 10²¹²).

Figure 10 – Separate demand for copper scrap no.2 and e-scrap

[...]

Source: DocID1570-41657 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00007736.pptx), slide 24.

- (181) In light of the analysis in this Section 7.1.3.3, the Commission considers that copper scrap no.2 and e-scrap are distinct from other types of copper scrap, and in particular from CSSR materials and thus do not belong to the CSSR market. However, given the e-scrap refiners capabilities to process CSSR, the Commission will consider the competitive constraints arising from e-scrap refiners in its competitive assessment, in order to fully appraise the impact of the Transaction for purchasing of CSSR.

²⁰⁸ Reply to question C.3.1. of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

²⁰⁹ DocID1574-74863 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00665975.pptx).

²¹⁰ DocID1574-85418 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00676540.pptx), slide 2.

²¹¹ Form CO, paragraph 48; Reply to the SO, paragraph 118.

²¹² See also DocID1570-90676 (Reply to request for information 16, M.9409_BAK17702_00877738.pptx), slide 18.

7.1.3.4. Copper scrap for smelting and refining (CSSR) is highly differentiated

- (A) CSSR comprises largely non-standardised materials requiring assaying
- (182) The market for copper scrap for smelting and refining includes copper scrap materials generated from different sources, such as end-of-life cycle materials from construction, home appliances, transportation, etc. An important part of the CSSR materials are generated in industrial processes. As outlined in Section 7.1.3.3, CSSR does not include very high copper content, and clean scrap categories such as copper scrap no.2 and copper scrap containing organic components (e-scrap) because they each have features of a distinct market characterised by distinct competition conditions.
- (183) The CSSR market has a spectrum of non-standardised materials ranging from less complex materials, such as certain copper alloy scrap and copper iron scrap, to more complex materials such as metal fractions from municipal waste incinerators (IBA containing copper) or industrial residues containing copper, which are more difficult to process. The materials have different copper content ranging from high to low grade.
- (184) For example, residues containing copper may include slags, drosses, run-outs. These materials are generated by foundries, semi-finished products manufacturing and other industrial processes. They largely have a lower copper content and may also have precious metals and other elements (impurities). Similarly, different tin-bearing copper and copper alloy scrap, which largely comes from semi-finished and finished copper products manufacturers (for example, stampings) can have either high copper or mid copper content, and may contain also other metals (for example, tin, nickel, or silver). In addition, another category of CSSR materials is incineration bottom ashes containing copper ('IBA containing copper') coming from household waste incinerators after being treated and processed to a specific shredder fraction to be used in smelters. IBA containing copper may contain up to 60% copper content and other valuable elements, such as precious metals.
- (185) The Commission considers that a three-tier segmentation based on copper content only (high-grade, mid-grade and low-grade) is not sufficient to appreciate fully whether supply and demand conditions are sufficiently homogenous across the whole spectrum of copper scrap for smelting and refining. In particular, the Parties' internal documents suggest that in their regular course of business the Parties use and organise their purchasing of copper scrap not based only on copper content but also on complexity (Figure 11) and impurities or the presence of other metallic elements than copper (Figure 12). For example, an internal document of Metallo (Figure 12) refers to [...] different groups of copper scrap types encompassing [...] copper scrap types in the Metallo purchasing model ranging from high to low-grade. The excerpt of the document shown in Figure 12 also acknowledges that the copper scrap market is '*highly heterogeneous*'. In addition, in its 'future strategy for recycling' document, Aurubis ranks different copper scrap types according to their respective '*market structure*' and '*complexity*' (see Figure 11). The document defines the differentiation based on market structure as follows: '*A specialised market is identified by different legal regulations and/or high fragmentation and/or no standardised material descriptions*'. According to this document, copper scrap categories such as 'copper residues' and 'shredder' materials concern complex materials that are subject to different legal regulations and are not standardised. Notably, the Notifying Party

referred to shredder materials and copper residues as ‘most complex materials’ for which it indicates that also purchasing is carried out differently²¹³. Accordingly, contrary to the Notifying Party’s claim, it appears that copper content is not the only ‘critical’²¹⁴ dimension when determining demand and supply conditions for copper scrap for smelting and refining.

Figure 11 – Aurubis categories of secondary materials based on complexity and market specialisation

[...]

Source: Form CO, Annex 6-S, page 4, (slide 8).

Figure 12 – [...]

[...]

Source: Form CO, Annex 5.4 – X, page 130.

- (186) The CSSR materials are largely non-standardised materials that generally require metallurgical assaying to determine their composition and value. Results of the assaying would also determine to which outlet the material could be sold (by determining levels of impurities' that refiners accept or by levels of metals that refiners can valorise and seek in their portfolio). For example, the same material may be offered to different outlets, however, the results of their assaying may differ and thus the value offered for the material depends on the efficiency of the assaying department and also capabilities of the outlet to valorise it. As one industrial supplier explained: *'The company [...] is a potential customer for drosses (they process them but do not refine). [Company] found the material not good enough (the properties of the material led to a worse assaying). Therefore, no further material was sold to [Company]'*²¹⁵.
- (187) Accordingly, assaying is an important feature of the CSSR market, and absence of assaying capabilities may limit access to the market, or, efficient capabilities of assaying grant an important competitive advantage (see Figure 13 and recital (169)).

Figure 13 – Importance of assaying capabilities for CSSR market

[...]

Source: DocID1519-53153 (The Parties’ reply to the Commission’s request for information RFI 17, M.9409_SID17703_00356727.docx).

(B) Supply-side substitutability is limited

- (188) The Notifying Party argues that traders and recyclers are not focusing on one type or group of scrap materials, but that rather they do arbitrage trading and do not depend

²¹³ Form CO, paragraph 655.

²¹⁴ The Notifying Party’s submission ‘On the Sub-Segmentation of Copper Scrap’ of 7.1.2020, page 8.

²¹⁵ Minutes of a call with a supplier on 5.11.2019, DocID3365. Courtesy translation. The original German text reads: *‘Die Firma [...] ist ein potentieller Abnehmer für Krätze (sie bearbeiten es weiter, aber raffinieren nicht). [...] fand jedoch das Material des Unternehmens ebenfalls nicht gut genug (Materialbeschaffenheit führte zu einer schlechteren Bewertung). Deshalb kam kein weiterer Verkauf an [...] zustande’.*

on any type of scrap²¹⁶. In addition, copper scrap suppliers can pre-process and upgrade copper scrap to sell to other outlets²¹⁷.

- (189) **First**, the suppliers of CSSR materials are to a large extent scrap collectors and pre-processors, as well as industrial suppliers that cannot switch easily between different types of copper scrap. For example, scrap collectors and pre-processors, together with industrial suppliers, supply [...] % of shredder material to Aurubis and [...] % of residues and slimes²¹⁸. Similarly, more than [...] of Metallo's suppliers are not traders²¹⁹. While prima facie traders could have more flexibility in switching between different types of materials, traders are an intermediary between the scrap generators/scrap pre-processors and the customers. Therefore, for the purposes of determining the supply-side substitutability it is appropriate to look at the ability to switch to different types of copper scrap of those that generate and process copper scrap.
- (190) **Second**, as regards in particular industrial scrap suppliers, they supply the type of copper scrap that arises as a by-product of their manufacturing processes, for example, drosses of the alloy manufacturing process²²⁰. For example, an industrial supplier of drosses is probably not price sensitive and would, at least largely, continue generating the same type of copper scrap even if the refining charge for its by-product increased²²¹. Given the nature of generating copper scrap as a by-product of the core industrial processes, the ability and incentive of an industrial supplier to quickly and without incurring significant costs sort and upgrade the material to the extent that, for example, low copper content drosses could be sold as copper scrap no.2 enabling to reach a broader range of alternative outlets, if any, is limited. In this regard, an industrial supplier submitted: *'If sorting or upgrading would be economically possible we would do it already'*²²². Accordingly, the industrial suppliers have a largely inelastic supply and their ability to switch quickly and without incurring significant costs to generating a different material is an unlikely viable option.
- (191) **Third**, for scrap collectors and pre-processors it may not be easy in all cases to switch from one material to preparing another input. However, the information gathered in the market investigation points in different directions.
- (192) On the one hand, the market investigation and the internal documents of the Parties suggest that upgrading by scrap suppliers is more likely to take place for high grade scrap²²³. In addition, copper scrap collectors and pre-processors at least to certain extent focus on processing specific materials, in particular where processing and recycling activities require investing in special machinery and equipment²²⁴. This

²¹⁶ 'White Paper 4: Low grade copper scrap', submitted by the Notifying Party on 31.10.2019.

²¹⁷ Response to Article 6(1)(c) Decision, paragraph 154.

²¹⁸ DocID1569-37220 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00917496.pptx), slides 15 and 18.

²¹⁹ Reply to request for information 35, Annex 4.

²²⁰ Minutes of a call with a supplier on 5.11.2019, DocID3365.

²²¹ See Section 9.1.2 and, in particular recital (379).

²²² Reply to question 43.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

²²³ Notifying Party provided examples concerning upgrade of copper scrap no.2 to copper scrap no.1; Form CO, paragraph 214-216.

²²⁴ DocID1569-37220 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00917496.pptx), slide 14. Courtesy translation. The original German text reads: *'Shredderbranche/Carshredder investiert aktuell stark in Sortiertechnik zur Erstellung besserer*

would indicate that their ability to quickly and without incurring significant cost switch to producing other materials is rather limited.

- (193) On the other hand, some suppliers indicated in the market investigation that re-sorting and/or upgrading is an alternative, irrespective of the category of copper scrap for refining²²⁵. It should be noted that not all did so; one copper scrap pre-processor that treats scrap materials coming largely from industrial suppliers explained: *'The Company cannot viably shift to dealing in other types of copper scrap, because it has to deal with those materials, which the market (i.e. its suppliers) generates'*²²⁶. However, another supplier of IBA containing copper suggested that there is a possibility for ingot makers to melt IBA containing copper²²⁷, though it was not substantiated to what extent that is an economical and effective way to process this type of CSSR. In addition, such processing would likely change the physical characteristics but would likely not lead to a different metallurgical quality, namely material composition, and would likely not change the demand pattern.
- (194) Similarly, for preparing and separating of copper iron materials a copper scrap pre-processor who has *'a dedicated shredding equipment'*²²⁸ could potentially upgrade the material. However, if few sophisticated copper scrap pre-processors that have special technologies for shredding, chopping, or granulating may to a limited extent process other CSSR materials, such as IBA, into higher-grade, as was suggested by one supplier²²⁹, these nonetheless would be targeting copper refiners.
- (195) In light of the analysis in this Section 7.1.3.4 (B), the Commission considers that the supply-side substitutability in terms of copper scrap suppliers switching to preparing a different input and reaching further groups of customers is limited. Nonetheless, the Commission acknowledges that to a certain extent the option of upgrading may exert competitive constraint for purchasing of CSSR and will therefore consider it in its competitive assessment (see Section 9.2.3.4).

(C) Demand-side substitutability

- (196) There are also limitations to the demand-side substitution meaning that some purchasers of CSSR are focused on certain segments and do not or only to a limited extent purchase other CSSR materials. Which CSSR materials customers purchase depends on the equipment they have, their know-how, and the requirements for their output (in other words, to manage the required purity of their products or on which metal elements the commercial focus lies (for example, copper, zinc, tin, lead).
- (197) **First**, the demand for CSSR materials primarily comes from copper refiners that are capable to process a wide array of specific copper scrap types and are able to valorise copper, and likely also other metals. For example, a respondent to the market investigation submitted, regarding purchasing of copper scrap *'only copper refineries*

Qualitaten'; DocID1569-37220 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00917496.pptx), slide 18.

²²⁵ The questions referred to copper scrap no.2, high-grade copper scrap for refining, mid-grade copper scrap for refining, and low-grade copper scrap for refining; Replies to questions 42, 43, 44 and 45 of Q1-b _Questionnaire to Suppliers of Copper Scrap, DocID3097.

²²⁶ Minutes of a call with a supplier on 3.12.2019, DocID3288.

²²⁷ Reply to question G.3.1 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

²²⁸ DocID1571-9062 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00081130.msg). Courtesy translation. The original German text reads: *'insbesondere Betreiber von spezialisierten Schredder-Aggregaten in der EU'*.

²²⁹ See minutes of a call with a supplier on 2.12.2019, DocID3390.

and traders have capacity to take up copper scrap. However, traders must ultimately sell it to refineries²³⁰.

- (198) The Fraunhofer Institute document on conditions for copper scrap recycling characterises the copper scrap ecosystem as ‘a few large companies (mainly in recycling, smelters) with many SMEs in collecting, sorting, separating, [and] delivering to the recycling plants involved’²³¹. Accordingly, smelters like Aurubis and Metallo are at the end of the value chain, while companies active in collection, sorting and separation of copper scrap materials are active at a different stage of the copper scrap value chain.
- (199) Similarly, the Notifying Party’s internal document shows that at the end of the recycling value chain is Aurubis, a copper refiner (Figure 14). In addition, also in the industry a customer of complex copper scrap materials is considered to be the ‘end-processor, final refining’ (Figure 15).

Figure 14 – CSSR materials ultimately are sold to copper refiners

[...]

Source: DocID1569-74198, (The Parties’ reply to the Commission’s request for information RFI 16, M.9409_BAK17702_00954752.pptx), slide 127.

Figure 15 – Demand defined by end-processor, final refining

[...]

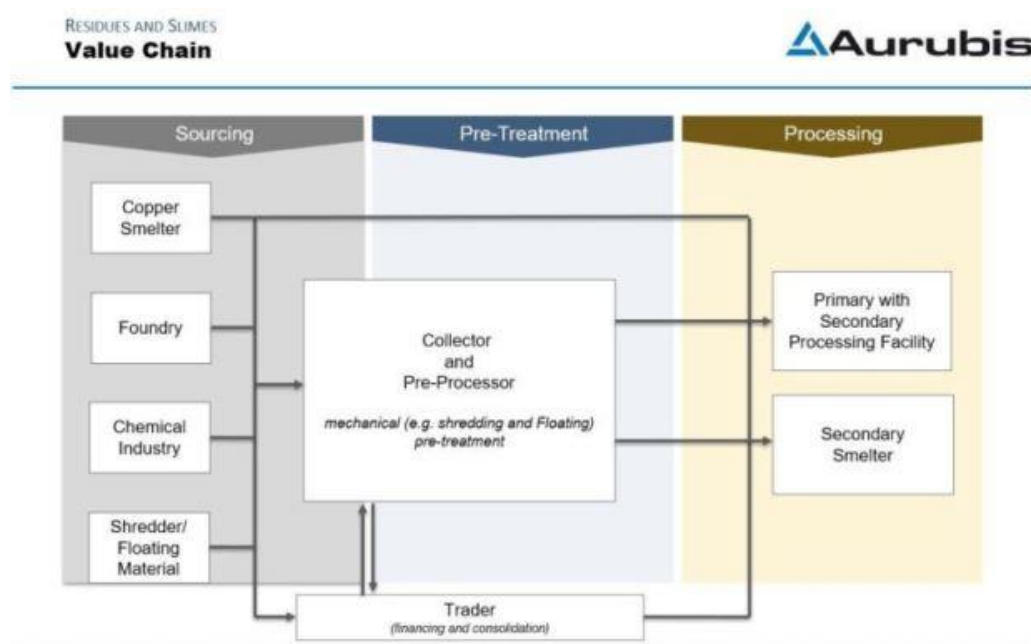
Source: DocID1574-85418 (The Parties’ reply to the Commission’s request for information RFI 16, M.9409_BAK17702_00676540.pptx, (highlighted by the Commission)).

²³⁰ Reply to question 36.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097. Courtesy translation. The original German text reads: ‘nur Raffinierhütten sowie Händler und Broker entsprechende Kapazitäten für die Aufnahme der Schrotte auf. Aber Händler und Broker müssen letztendlich auch wieder an Raffinierhütten herantreten’.

²³¹ DocID1570-70009 (The Parties’ reply to the Commission’s request for information RFI16, M.9409_BAK17702_00854677.pptx).

- (200) Similarly, the following Notifying Party's document (Figure 16), prepared in the ordinary course of business shows that at the end of the value chain there are the copper refiners.

Figure 16 – Residues after pre-treatment end with smelters and refiners



Source: DocID1569-74198, (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00954752.pptx), slide 124.

- (201) Consequently, while copper scrap collectors and pre-processors or traders would also buy such CSSR materials, the competition between copper refiners, their capacities and capabilities to process and valorise CSSR materials would to large extent determine the conditions for initial purchasing. The Commission notes in this regard, that analysis of competitive constraints from other purchasers of CSSR (such as ingot makers or non-copper refiners) would be relevant.
- (202) **Second**, while the Notifying Party claims that non-copper smelters, such as lead, zinc, or tin smelters, buy significant volumes of CSSR materials containing metals they valorise²³², the results of the market investigation suggest that demand for CSSR from non-copper refiners is limited. A majority of responding suppliers submitted that in case of a 5-10% increase by Aurubis and Metallo in refining charge for the CSSR materials, such as copper iron, tin bearing copper scrap, and industrial residues containing copper, they would not be able to switch any of the sales of these materials to EEA non-copper refiners/smelters²³³.
- (203) A supplier of copper scrap explained that refining copper and other metals such as nickel, tin or lead require different technological capabilities²³⁴. The results of the market investigation suggest that non-copper refiners have more limited capabilities than the majority of copper refiners to process CSSR materials, such as tin bearing copper scrap, industrial residues containing copper, and IBA containing copper²³⁵.

²³² Form CO, paragraph 329, footnotes 129, 147 and paragraph 564. See also 'White Paper 4: Low grade copper scrap', submitted by the Notifying Party on 31.10.2019.

²³³ Replies to questions D.12, E.12 and F.12 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

²³⁴ Minutes of a call with a supplier on 17.9.2019, DocID1230.

²³⁵ Replies to questions E.3, F.3 and G.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

For example, as one market participant explained in relation to tin containing copper scrap: *‘For non-copper scrap refiners copper content is often a problem as for them it is an impurity. As copper tin alloy scrap usually has a high copper content most non copper refiners wouldn’t accept it or even if they do, they might not pay for copper content’*²³⁶. In response to this, the Notifying Party argued that while non-copper refiners may not be paying for the copper content, they would pay for other metals found in CSSR, and that in CSSR of low grade copper content, the majority of non-copper materials could be paid for and valorised²³⁷.

- (204) However, the Commission notes that the results of the market investigation do not support the position that non-copper refiners would be a viable alternative for diverting sales of CSSR in case of a 5-10% increase in refining charges by Aurubis and Metallo (see recital (202)) to be included for the purposes of the relevant market definition. Furthermore, the Commission notes that copper refiners, who constitute the major source of demand for CSSR are to a different extent also refiners of other metals (see Figure 18 and recital (211)), which would make them the preferred option for CSSR containing other metals, as they would pay copper as well as other materials.
- (205) The Commission further refers to an internal document of Metallo produced in the ordinary course of business, which analyses Metallo’s strengths in tin refining versus its competitors. For example, [...] ²³⁸, [...] ²³⁹. This indicates that, at least as regards tin refiners, the competitive constraint that these companies exert on the copper refiners for purchasing of CSSR, is likely limited.
- (206) Similarly, another copper refiner explained that zinc refiners are also limited in treating copper²⁴⁰.
- (207) Furthermore, the Notifying Party refers to the sales of its intermediate by-product KRS oxide containing principally zinc and some copper to support its claim that zinc smelters are an important alternative for purchasing copper scrap²⁴¹. The Commission cannot accept this piece of evidence to show the capabilities of zinc refiners. First, KRS oxide is a smelter intermediate product and thus is not part of the CSSR market. Second, the contract that the Notifying Party submitted as evidence is with a trader and not with a zinc smelter. In addition, based on a different Aurubis’ internal document regarding KRS oxide, it is apparent that Aurubis sells this by-product for zinc separation as a pre-processing step but that ultimately the KRS oxide is returned to Aurubis for further processing of copper, lead and tin (Figure 17).

Figure 17 – Closed loop for KRS oxide

[...]

Source: DocID1571-24863 (Reply to the request for information 16, M.9409_BAK17702_00745426.msg) (highlighted by the Commission).

²³⁶ Reply to question 53.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097, see also 57.1.
²³⁷ Response to the Article 6(1)(c) Decision, paragraph 76.
²³⁸ DocID1519-17380 (The Parties’ reply to the Commission’s request for information RFI 17, M.9409_SID17703_00457970.pptx), slide 9.
²³⁹ DocID1519-17380 (The Parties’ reply to the Commission’s request for information RFI 17, M.9409_SID17703_00457970.pptx), slide 12.
²⁴⁰ Minutes of a call with supplier on 5.11.2019, DocID1151.
²⁴¹ ‘White Paper 4: Low grade copper scrap’, submitted by the Notifying Party on 31.10.2019; Reply to request for information 44, question 3.

- (208) Accordingly, the Commission considers that non-copper smelters may only have residual demand for CSSR limited to their refining and smelting capabilities, which would likely be reflected in the lower price offered for CSSR (see also recital (223)). Nonetheless, in order to fully appreciate the impact of the Transaction on the market for the CSSR, the Commission will consider the competitive constraints arising from non-copper refiners (see Section 9.2.3.3).
- (209) As regards the refining and smelting capabilities of copper refiners, the results of the market investigation suggest that copper refiners have varying capabilities allowing them to efficiently treat different types of copper scrap. Although all copper refiners, who expressed views, confirmed that they have capabilities to process any type of high-grade copper scrap²⁴²; for low-grade copper scrap, half of all responding refiners submitted that they do not have capabilities or provided a qualified answer suggesting that they could refine only some types of scrap within this category²⁴³.
- (210) The copper refiners have equipment to treat different types of CSSR. Largely copper refiners buy different types of copper scrap materials and mix them in their smelters. Their demand is driven by particular needs for their smelter process and their technical capabilities to recover from the material metals other than copper. For example, a copper refiner explained: *'The Company aims to achieve a stable output of refined copper at a stable quality. To this end, it will adjust inputs of secondary feed according to the most profitable options available'*²⁴⁴. In relation to residues containing copper, a copper scrap pre-processor explained that in principle all copper refiners have capabilities to process them but that *'every refinery has its focus, which means that each has its own product portfolio'*²⁴⁵.
- (211) The internal documents of the Parties show the mapping of refining capabilities of the competing purchasers for copper scrap, including complex and lower copper content containing CSSR, as well as capabilities to valorise other metals that often are contained in the same batch of copper scrap. [...].

Figure 18 – [...]

[...]

Source: Form CO, Annex 5.4-X, page 97.

(D) Competition conditions differ between different segments

- (212) As explained in recitals (183) to (186) CSSR concerns highly differentiated non-standardised materials, covering many combinations of copper with different metal elements (copper zinc, copper lead, and other impurities), varying copper content and complexity, and generated from different origin (municipal waste incineration, industrial residues, dismantled end-of-life cycle transport vehicles, etc.).
- (213) The Commission considers that CSSR materials can be grouped into several different segments, such as IBA containing copper, industrial residues containing copper, tin-bearing copper scrap, copper iron scrap, and copper alloy (for example, brass).

²⁴² Reply to question 32 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

²⁴³ Reply to question 32 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

²⁴⁴ Minutes of a call with a supplier on 12.12.2019, DocID3316.

²⁴⁵ Minutes of a call with a supplier on 4-5.11.2019, DocID1186. Courtesy translation. The original German text reads: *'Da liegt der Fokus bei jeder Huette immer woanders, d.h. jede Huette hat ein anderes Produktportfolio'*.

- (214) Market participants have different systems for tracking the relevant CSSR materials and assigning them to special categories. For example, Metallo tracks IBA containing copper under the category of [...], Aurubis has a specific category for them [...], while another refiner assigns them to its 'alloy' category²⁴⁶.
- (215) While it is not possible to trace discrete boundaries between different segments within the CSSR, the results of the market investigation indicate that demand-side substitution and competition conditions vary between the different segments of the CSSR.
- (216) For example, as regards copper-iron materials, the majority of respondents expressing their views indicated that in case of a 5-10% refining charge increase by Aurubis and Metallo, they would be able to reallocate some of their sales to Brixlegg and other EEA copper refiners/smelters (except for Boliden, KGHM, Umicore) and EEA processors/recyclers, and some non-EEA purchasers²⁴⁷. In line with this, a scrap processor explained to the CEO of Aurubis in an email that copper iron materials may be sold to copper refiners, copper scrap pre-processors with specialised shredding machinery, and to other outlets for manual disassembly²⁴⁸. In the same e-mail it is suggested that main demand of this type of CSSR material does not come from copper refiners but rather from pre-processors and for manual separation leading to upgrading of copper-iron scrap into iron and high purity copper.
- (217) In contrast, industrial residues containing copper are mainly subject to metallurgical smelting and refining. In relation to industrial residues containing copper, a majority of respondents expressing their views indicated that in case of a 5-10% refining charge increase by Aurubis and Metallo, they would be able to reallocate at least some of the sales to Brixlegg and 'other EEA copper refiners/smelters', but only minority of respondents indicated they would be able to reallocate at least some of their sales to Boliden, KGHM and Umicore²⁴⁹. However, for this specific type of CSSR materials the majority of respondents expressing their views submitted that they would not at all be able to switch their sales to any of the following: EEA non-copper refiners/smelters, EEA processors/recyclers, EEA ingot makers and non-EEA purchasers²⁵⁰. However, the Commission also notes that the results of the market reconstruction show that considerable volumes of industrial residues containing copper are exported from the EEA²⁵¹.
- (218) As regards tin-bearing scrap, the results of the market investigation suggest that the degree of demand-side substitution for tin-bearing copper scrap is low.
- (219) The results of the market investigation suggest that brass/bronze ingot makers and semi-finished products manufacturers have capabilities to process tin-bearing copper scrap²⁵². However, there is some evidence suggesting that the materials, at least to some extent, which these players buy are likely different from those on which the

²⁴⁶ Minutes of a call with a competitor on 5.11.2019, DocID1151. See also 'White paper 15: Clarification on Calculation of Aurubis Purchasing Volumes', submitted by the Notifying Party on 26.1.2020.

²⁴⁷ Replies to question D.12 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

²⁴⁸ DocID1571-5093 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00077029.msg). E-mail to Chief Executive of Aurubis from a copper scrap supplier of 12 November 2019.

²⁴⁹ Replies to question F.12 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094; as regards Umicore, half of the respondents opted for this option.

²⁵⁰ Replies to question F.12 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

²⁵¹ Annex to the Decision, Table 2.

²⁵² Replies to question E.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

Parties focus for their smelting and refining operations. For example, as a copper scrap supplier submitted *‘EEA brass/bronze Ingot makers or semi-manufacturers are buying different material in comparison to Aurubis and Metallo’*²⁵³. Similarly, a semi-finished products manufacturer explained that it rather sells the tin-bearing copper scrap it generates in its production process only to copper refiners than that it uses that scrap itself: *‘The Company also sells some tin-bearing copper scrap, for which Aurubis is currently the largest buyer via its Lünen plant. Other customers for tin-bearing copper are also Metallo and Brixlegg through traders’*. It added that it can use tinned copper-alloy scrap only to a *‘very limited [extent] in its own production process’*²⁵⁴. A bronze ingot maker further explained how impurities contained in materials limit their use in its own manufacturing: *‘We are bronze manufacturers.[...] [N]ot only the tin content is important. As well the side elements like Si/Ni. Very often, cu scrap tinned has those little elements which are harmful to us. This is one of the main reasons, cu scrap tinned moves to refinery instead direct use’*²⁵⁵. Accordingly, while abilities of ingot makers and semi-finished products manufacturers are more limited than those of copper refiners, to a certain extent these buyers may exert competitive constraint for purchasing CSSR materials (that is to say, as long as tin bearing copper scrap material does not have grease, plastic, oil, iron and other materials²⁵⁶ or such materials have been removed (for example, by a pre-processor) before they are used in production by ingot makers or semi-finished products manufacturers).

- (220) Accordingly, the Commission considers that ingot makers and semi-finished products manufacturers are likely not effective alternative buyers for the suppliers of the CSSR materials as their demand is limited by their capabilities to process only certain specific types of materials within the tin-bearing copper scrap segment, and in the overall CSSR market. Nonetheless, in order to fully appreciate the impact of the Transaction on the market for the CSSR, the Commission will consider the competitive constraints arising from ingot makers and semi-finished products manufacturers (see Section 9.2.3.3).
- (221) As regards copper refiners, their capabilities and demand for tin-bearing copper scrap differ. One copper refiner indicated that its processes allow it to use small volumes of tin-bearing copper scrap: *‘We can only blend small tonnages [...] together with other scraps’*²⁵⁷. Another refiner submitted not to have technical capabilities to process tin-bearing copper scrap²⁵⁸. Furthermore, the technical limitations are reflected in demand patterns: *‘While other producers, such as KMGH and most recently also Brixlegg, do not want tin-containing materials, Metallo creates a value out of it by refining it up to LME-grade tin’*²⁵⁹.
- (222) Copper refiners that do not have capabilities to valorise certain base elements other than copper are managing how much of those elements they can feed in their copper scrap mix. Consequently, the impurity in a batch of scrap may be accounted for in the price through deductions or penalties, or at least by not paying for the ‘impurity’. For example, as one market participant explained the pricing of copper scrap:

²⁵³ Reply to question E.3.1 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

²⁵⁴ Minutes of a call with a supplier on 16.12.2019, DocID3029.

²⁵⁵ Reply to question 52 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

²⁵⁶ Reply to question 52.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

²⁵⁷ Replies to questions 32.5, 32.6, 46.1 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

²⁵⁸ Replies to questions 32.5, 32.6 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096; see also replies to E.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

²⁵⁹ Minutes of a call with a supplier on 3.12.2019, DocID3288.

‘Copper yield and whether there are either contaminants that have a negative cost for disposal or contaminants that have a positive value’²⁶⁰.

- (223) Furthermore, as can be seen on the basis of the example for tin-bearing scrap²⁶¹ and contrary to the Notifying Party's argument that purchasing of copper scrap does not depend on capabilities²⁶², the pricing of the scrap materials is driven not only by the value of the copper, but equally by the capabilities to process specific materials. [...] ²⁶³. Similarly, a market participant explained: *‘The way prices are set are clearly based on what the Company’s competitors are buying material for, the grade, the purity and what capabilities it has to process’²⁶⁴*. This would further support the findings of the market investigation regarding the demand for the CSSR generated by different outlets.
- (224) In light of the analysis in this Section 7.1.3.4 (D), the Commission considers that for certain segments of the CSSR market there are different categories of purchasers depending on their ability to take and valorise the copper scrap with specific impurities and that price arbitrage with customers that do not have this ability may not be as effective.
- (225) Furthermore, the Notifying Party's internal documents prepared in the ordinary course of business also suggest that the competitive landscape and competition conditions differ between segments. In particular, for shredder materials, including IBA containing copper (Figure 19), the main suppliers are copper scrap pre-processors that treat and prepare the material for feeding into smelting and refining²⁶⁵. In contrast, as regards residues, the copper refiners seem to be doing some of the pre-processing themselves, and procure more at the source from those that generate residues. In addition to final processors, which are copper refiners, Figure 20 features some copper scrap pre-processors, such as Siegfried Jacob, showing a limited overlap with copper refiners at the processing step. However, even though certain scrap pre-processors would compete with the copper refiners to some extent for residues sourcing; this does not put into doubt the finding that ultimate main demand comes from copper refiners. Notably, evidence in the file also suggests that Siegfried Jacob prepares and sells a significant share of residues to copper refiners²⁶⁶.

Figure 19 – Competitive landscape for shredder, including IBA containing copper

[...]

Source: Reply to request for information 36, Annex 5, 20170616 Strategy market trends pre-read.pdf, page 94.

²⁶⁰ Reply to question 30 of Q1_Questionnaire to Suppliers of Copper Scrap, DocID3100.

²⁶¹ See Form CO, paragraphs 351 et seq. and 620. Aurubis generally pays only at the value of copper, while Metallo to some of its suppliers pays the tin value. See also reply to request for information 3.

²⁶² Response to the Article 6(1)(c) Decision, paragraph 75.

²⁶³ DocID001519-012847 (The Parties’ reply to the Commission’s request for information RFI 17, M.9409_SID17703_00330216.docx).

²⁶⁴ Minutes of a call with a competitor on 6.12.2019, DocID2731.

²⁶⁵ Minutes of a call with a supplier on 5.11.2019, DocID3361. Minutes of a call with a market participant on 17.12.2019, DocID3034.

²⁶⁶ Minutes of a call with a supplier on 4-5.11.2019, DocID1186.

Figure 20 – Competitive landscape for residues and slimes

[...]

Source: DocID1569-74198 (*The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00954752.pptx*), slide 125.

- (226) As indicated recitals (183) to (185), CSSR materials range from less complex, such as copper alloy scrap or copper iron materials to more complex materials such as metal fractions from municipal waste incinerators. The Commission considers that while competition conditions and intensity of competition vary greatly between the different segments of CSSR, there is an overall market for copper scrap for smelting and refining because to some extent copper refiners can switch between different types of CSSR materials (for example, Aurubis substitutes to certain extent residues with shredder materials)²⁶⁷ and it is not possible to draw discrete lines between the different segments.

7.1.3.5. Conclusion in relation to CSSR

- (227) In light of the analysis in this Section 7.1.3, the Commission concludes that there is an overall market for CSSR, which excludes copper scrap no.2 and e-scrap. This overall CSSR market is highly differentiated in terms of material composition, and origin, as well as technical capabilities to process metal elements contained in those materials. The Commission will assess the likely effects of the Transaction both at the overall CSSR market and at a segment level, in particular in relation to those segments where the Parties' activities mainly overlap, such as industrial residues, IBA containing copper, and tin-bearing copper scrap. In addition, in order to fully appreciate competition conditions and the effects of the Transaction, in the competitive assessment the Commission will also consider to what extent non-refining purchasers such as semi-finished products manufacturers, ingot makers, as well as e-scrap refiners and non-copper smelters could exert competitive constraints for purchasing of CSSR.

7.2. Copper scrap no.2

- (228) Copper scrap no.2 forms a distinct product market amongst the variety of copper scrap.
- (229) Copper scrap no.2 has been sufficiently characterised and described in the context of the product market definition of CSSR. With reference to Section 7.1.3.3, the Commission summarises and recalls the relevant features of copper scrap no.2 as follows:
- (230) **Firstly**, copper scrap no.2 is a relatively standardised copper scrap category, which is traded as a commodity. The copper scrap that qualifies as copper scrap no.2 is defined by the ISRI classification as scrap with copper content of 94% – 96% and with little or no non-metallic impurities (but the delta to 100% could be filled by zinc, tin, lead, aluminium, glass, sand, however no grease, oil, or burned copper wires). Accordingly, copper scrap no.2 is relatively pure, possibly with limited traces of other metal elements, such as tin, nickel, or aluminium²⁶⁸.

²⁶⁷ Reply to request for information RFI 36, Annex 5, slide 5.
²⁶⁸ Section 7.1.3.3.

- (231) **Secondly**, typically no assaying is required of copper scrap no.2 and therefore its character is close to a commodity and clearly more commoditised than other types of copper scrap²⁶⁹.
- (232) **Thirdly**, copper scrap no.2 has a specific range of consumers, such as secondary copper smelters, primary copper smelters, semi-finished copper products fabricators and ingot makers²⁷⁰.
- (233) **Fourthly**, the Parties are tracking copper scrap no.2 separately from other types of copper scrap for refining²⁷¹.

7.3. Other affected markets

- (234) The Commission has also analysed the effects of the concentration on the following vertically affected markets: copper cathodes, copper rods and copper shapes.

7.3.1. Copper cathodes

- (235) Copper cathodes constitute a separate product market²⁷². The Commission considers that it can be left open, whether this market should be further segmented by the grade of the copper cathodes as the combined market shares of the Parties both in view of the horizontal overlap²⁷³ as well as the potential vertical links do not result in a significant impediment of effective competition²⁷⁴.

7.3.2. Copper rods

- (236) Copper rod is a string of copper, which is mainly used in the production of wires, braids, and cables. Copper rods are processed by melting and casting copper cathodes. Copper rod is mainly produced in two ways, (i) continuous casting and rolling, or (ii) direct casting. Copper rod processed by direct casting contains less oxygen, making it suitable for more specific applications, for example, wires for which hydrogen embrittlement is an issue, such as fire-resistant cables²⁷⁵.
- (237) In a previous decision, the Commission concluded that the supply of copper rod constitutes a distinct product market²⁷⁶. The Commission considered that a further segmentation of the product market by the two different production processes (continuous casting and rolling as well as direct casting) is not appropriate²⁷⁷. It also found that different diameters of copper rod do not result in distinct markets along different diameters²⁷⁸.
- (238) The Notifying Party submits, in line with the Commission's previous decision, the relevant product market is copper rod²⁷⁹.
- (239) The market investigation confirmed, in line with the Commission's previous decision as well as the Notifying Party's submission, that copper rod constitute a distinct

²⁶⁹ Section 7.1.3.3.

²⁷⁰ Section 7.1.3.3.

²⁷¹ Section 7.1.3.3.

²⁷² Section 5.1.3.

²⁷³ Section 5.1.3 - the horizontal overlap does not lead to affected markets under any plausible product market definition.

²⁷⁴ Sections 5.1.11 and 5.1.12 for the vertical links with copper cathodes upstream and copper rods and copper shapes, respectively, downstream.

²⁷⁵ Reply to request for information RFI 50, question 2.1.

²⁷⁶ Case M.4781 – *Norddeutsche Affinerie/Cumerio*, recital 37 *et seq.*

²⁷⁷ Case M.4781 – *Norddeutsche Affinerie/Cumerio*, recital 43.

²⁷⁸ Case M.4781 – *Norddeutsche Affinerie/Cumerio*, recitals 44 to 48.

²⁷⁹ Reply to request for information RFI 50, question 2.1.

product market. A large majority of copper rod customers held the view that copper rod forms a distinct product market whereas no respondent disagreed²⁸⁰, and while a majority of responding competitors²⁸¹ indicated '*I do not know*', among those competitors expressing an opinion a clear majority also considered copper rod to constitute a separate product market²⁸².

- (240) The Commission therefore concludes that in light of its previous decision, the Notifying Party's submission as well as the responses from the market copper rods form a distinct relevant product market.

7.3.3. *Copper shapes*

- (241) Copper shapes are semi-finished products that are processed by melting and casting copper cathodes or high-grade copper scrap. Copper shapes are then further processed into pre-rolled strips and then into rolled material (sheets, strips and plates). Copper shapes could also be extruded and drawn to tubes and sections. Copper shapes can be of two types (namely billets and cakes) and may have a different content of copper and impurities²⁸³.
- (242) In its decision *Norddeutsche Affinerie/Cumerio*, the Commission concluded that copper shapes constitute a single market regardless of their size and weight or the specific copper quality²⁸⁴.
- (243) The Notifying Party agrees with the Commission's assessment of copper shapes constituting a distinct product market²⁸⁵.
- (244) Respondents to Commission's questionnaires clearly confirmed the established approach in the decision *Norddeutsche Affinerie/Cumerio*. The majority of all copper shapes customers opined that there is a distinct market for copper shapes while only one respondent took the opposite position²⁸⁶. Competitors in copper shapes provided responses with an almost identical result: The majority of all respondents stated that copper shapes form one product market and none of the respondents disagreed²⁸⁷.
- (245) The Commission therefore concludes that in light of its previous decision, the Notifying Party's submission as well as the responses from the market copper shapes form a distinct relevant product market.

²⁸⁰ Reply to question B.1 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091; the other respondents responded with '*I do not know*'.

²⁸¹ 'Competitors' in this context means competitors in the production and sale of copper rods and shapes.

²⁸² Reply to question C.1 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090.

²⁸³ Reply to request for information RFI 50, question 2.1. (1). To a large extent, copper shapes are used in-house for further production. Other key customers for these semi-finished products are large groups active in the cable, electrical and electronic engineering, automotive, telecommunications, building, machine building and construction industries.

²⁸⁴ Case M.4781 – *Norddeutsche Affinerie/Cumerio*, recital 51 *et seq.*

²⁸⁵ Reply to request for information RFI 50, question 2.1.

²⁸⁶ Reply to question B.2 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091; almost half of the respondents answered '*I do not know*'.

²⁸⁷ Reply to question C.2 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090; all other respondents answered '*I do not know*'.

8. GEOGRAPHIC MARKET DEFINITION

8.1. The Notifying party's view

- (246) Under the assumption of one market for secondary copper products²⁸⁸, at most segmented into high-grade scrap, mid-grade scrap and low-grade scrap²⁸⁹ the Notifying Party submits that the relevant geographic market for the purchasing of copper scrap is global in scope²⁹⁰.
- (247) The Notifying Party contends that secondary raw materials are traded globally on the basis of prices set at the LME. Furthermore, the Notifying Party claims that transportation costs are insignificant; scrap traders are active worldwide making use of arbitrage; there are no considerable barriers to trade scrap worldwide; and exports of copper scrap in and from the EEA are significant²⁹¹. In this context, the Notifying Party submitted several internal estimates and third parties' documents regarding exports from the EEA. The figures of these documents and estimates are summarised and consolidated in two further submissions of the Notifying Party, where exports from the EEA are estimated to be approximately 786 thousand tonnes²⁹².
- (248) In particular, the Notifying Party states that copper scrap is exported from the EEA to purchasers of copper scrap for refining, who are based outside the EEA. Among other things, the Notifying Party emphasises the high amounts of exports in general as well as the competition which the Notifying Party faces from copper scrap purchasers from outside the EEA²⁹³.

8.2. The Commission's past practice

- (249) In previous cases, the Commission found that the relevant geographic market for copper scrap overall is at least EEA-wide²⁹⁴ and concluded in subsequent cases that the geographic market is worldwide²⁹⁵. Since, in the previous cases, the Commission has not established any distinction between CSSR as a relevant product market on the one hand and plausible product markets on the other hand (see Section 7.1.2), the Commission's assessments of the relevant geographic market in the previous cases has only limited relevance for the assessment in this Decision.

8.3. The Commission's assessment

8.3.1. Introduction

- (250) In light of the Commission's conclusions with respect to relevant product market (Section 7.1.3.5), for the purpose of this Decision, the Commission will assess the relevant geographic market for CSSR, which is distinct from copper blister and copper anodes²⁹⁶, copper scrap for direct melt²⁹⁷, coppers scrap no.2 and e-scrap²⁹⁸.

²⁸⁸ Section 6.1.1, this market including at least copper blister, copper scrap and spent copper anodes.

²⁸⁹ Section 6.1.1.

²⁹⁰ Form CO, paragraphs 158 *et seq.*; response to Article 6(1)(c) Decision, paragraph 79.

²⁹¹ Form CO, paragraphs 159-161; Response to Article 6(1)(c) Decision, paragraph 79.

²⁹² 'White Paper 1. Correct approach for the market definition as well as calculation of volume and shares for the EEA segment of copper scrap purchasing and its potential sub segments', submitted by the Notifying Party on 16.9.2019, section 4; and 'White Paper 3. Evidence of exports of copper scrap from the EEA', submitted by the Notifying Party on 18.9.2019, section 2.

²⁹³ Form CO, Annex 7.2-F.1 and Annex 7.2-G.1.

²⁹⁴ Case M.4469 – SCHOLZ/VOESTALPINE/SCHOLZ AUSTRIA, paragraphs 14 and 15 (only in German); M.2196 – ENRON/BERGMANN/HUTZLER, paragraphs 13 *et seq.*

²⁹⁵ Case M.4781 – Norddeutsche Affinerie/Cumerio, paragraphs 25 *et seq.*, confirmed in M.6541 – Glencore/Xstrata, paragraphs 246 *et seq.*

²⁹⁶ Section 7.1.3.1.

Furthermore, as the Transaction results in affected markets with respect to these relevant product markets, the Commission will assess the relevant geographic market for copper scrap no.2, copper cathodes, copper rods and copper shapes.

8.3.2. Legal framework of the assessment

- (251) According to the Market Definition Notice, *'[t]he objective of defining a market in both its product and geographic dimension is to identify those actual competitors of the undertakings involved that are capable of constraining those undertakings' behaviour and of preventing them from behaving independently of effective competitive pressure*²⁹⁹. For the relevant product markets in this case, the geographic scope is therefore defined by considering the locations of those secondary copper refiners that constitute a competitive constraint for the Parties.
- (252) Paragraph 8 of the Market Definition Notice states that *'[t]he relevant geographic market comprises the area in which the undertakings concerned are involved in the supply and demand of products or services, in which the conditions of competition are sufficiently homogeneous and which can be distinguished from neighbouring areas because the conditions of competition are appreciably different in those area*³⁰⁰.
- (253) More specifically, the Commission takes a view on the basis of broad indications as to the distribution of market shares between the parties and their competitors, as well as an analysis of pricing and price differences at national and Union or EEA level³⁰¹. In a further step, the Commission will identify possible obstacles and barriers isolating companies located in a given area from the competitive pressure of companies located outside that area, so as to determine the precise degree of market interpenetration at national, European or global level³⁰². For this purpose, the Commission will consider the following type of evidence: past evidence of orders to other areas, basic demand characteristics, views of customers and competitors, current geographic pattern of purchases, trade flows and pattern of shipments and barriers and switching costs associated to divert orders to companies located in other areas³⁰³. It is important to note that, *'[a]ccess to distribution in a given area, regulatory barriers still existing in certain sectors, quotas and custom tariffs might also constitute barriers isolating a geographic area from the competitive pressure of companies located outside that area*³⁰⁴.

8.3.3. Relevant geographic market of CSSR

- (254) The Commission recalls that CSSR as defined in this Decision comprises non-standardised materials ranging from less complex, such as (i) copper alloy scrap and

²⁹⁷ Section 7.1.3.2.

²⁹⁸ Section 7.1.3.3.

²⁹⁹ Market Definition Notice, paragraph 2.

³⁰⁰ Market Definition Notice, paragraph 8.

³⁰¹ Market Definition Notice, paragraph 28: This initial view is used basically as a working hypothesis to focus the Commission's enquiries for the purpose of arriving at a precise geographic market definition.

³⁰² Market Definition Notice, paragraphs 29 and 30: This further analysis includes an examination or requirements for a local presence in order to sell in that area, the conditions of access to distributors channels, costs associated with setting up a distribution network, and the presence or absence of regulatory arising from public procurement, price regulations, quotas and tariffs limiting trade or production, technical standards, monopolies, freedom of establishment, requirements for administrative authorisations, packaging regulation etc.

³⁰³ Market Definition Notice, paragraphs 45 to 50.

³⁰⁴ Market Definition Notice, paragraph 50.

(ii) copper iron scrap to more complex materials such as (iii) tin-bearing copper scrap, (iv) IBA containing copper or (v) industrial residues containing copper, which are more difficult to process³⁰⁵.

8.3.3.1. Effects of assaying costs on exports; related risks

- (255) The need to carry out elaborate assaying of CSSR³⁰⁶ – as compared to other types of copper scrap, specifically copper scrap no.2 and e-scrap – for the purpose of trading requires time, entails costs and involves business risks. The significance of in particular the time component and the costs component increases with the distance, over which the CSSR is traded. Additionally, business risks attached to assaying by purchasers located outside the EEA are considered to be higher than the same type of business risk with respect to EEA-based purchasers. As a general principle, this is likely to lower the incentives of CSSR suppliers to engage in exporting of CSSR outside the EEA.
- (256) The time component linked to assaying of complex copper scrap is summarised in an internal email of Aurubis (see Figure 21). This internal email not only demonstrates the importance of fast assaying, but also that the speed of assaying has a direct impact on the financials and the costs in particular of the supplier.

Figure 21 – Aurubis internal email on Stella (Metallo) and assaying

[...]

Source: DocID1570-11882, M.9409_BAK17702_00993687.msg.

(A) Time component

- (257) With respect to the time component, the Commission recalls that quick assaying is crucial for the competitiveness in purchasing of copper scrap and in particular of the non-standardised CSSR³⁰⁷. Since, as a general rule, exporting to outlets outside of the EEA takes more time than shipment within the EEA, and, as the assaying is carried out only following delivery of the scrap, longer shipment of the scrap is likely to delay the assaying³⁰⁸ and hence the payment.
- (258) Therefore, the time component of assaying may render exporting of CSSR outside of the EEA less attractive from the commercial point of view.

(B) Costs component

- (259) On the one hand, assaying involves expense, as samples have to be taken and analysed. It appears that two aspects are likely to increase assaying-caused costs for exports outside of the EEA. Firstly, scrap suppliers are pre-financing the scrap in the period between delivery to the purchaser and receipt of payment. The longer this period is, as it is in general the case with respect to exports compared to scrap deliveries within the EEA, the more pre-financing costs does the supplier incur. One scrap supplier explained that *'[s]crap traders have to pre-finance large amounts because of the delay between delivery and payment, which is up to 100 days for materials containing precious metals and other materials that require detailed*

³⁰⁵ Section 7.1.3.

³⁰⁶ Section 7.1.3.3.

³⁰⁷ Section 7.1.3.3.

³⁰⁸ One EEA based market participants noted that *'[e]xporting to Japan or Korea would add a minimum of three weeks of time between shipping and payment, as this is always done afterwards'*, Minutes of a call with a supplier on 4.12.2019, DocID3360.

analyses [...] ³⁰⁹. Secondly, the assaying costs for commissioning a third party expert outside of the EEA can be significantly higher than within the EEA ³¹⁰. In particular, when comparing assaying costs linked to scrap delivery to the Parties with assaying costs incurred in Korea and Japan, the latter can be more than 300% of the assaying costs with Aurubis or Metallo. According to one scrap supplier, *'[a]nother issue with exporting is the assaying of the material at the copper refiner's site. When it is done at Metallo or Aurubis, the [scrap supplier] always hires a third party surveyor to check a sample as well. There are different surveyors that operate worldwide, and who represent the suppliers at the refiner's facility and carry out their own analysis of a sample to compare to that of the refiner. The surveyor is paid for by the Company. The analysis in Japan and Korea costs up to EUR 2, 500-3,000. At Metallo and Aurubis it's app EUR [...]'* ³¹¹.

- (260) On the other hand, it can be argued that such costs arise independently on whether an EEA-based suppliers deliver scrap within or outside the EEA. This is notably the case when a supplier does not commission an 'own' third party surveyor but relies on the assaying carried out by the scrap purchaser. Nevertheless, it appears that assaying costs are a more relevant cost factor for exports out of the EEA.
- (261) The Commission finds that the differences in assaying costs for commissioning a third party expert, as presented by one supplier in recital (259), may bear relevance for the business conduct of CSSR suppliers. [Details on assaying costs] ³¹². In the second place, a difference of around EUR 2 000 for a third party assaying expert is likely to have an impact on the supplier's margin. For instance, when a supplier delivers material with a value of EUR [...], Metallo deducts EUR [...] as refining charge leaving the supplier with a purchase price of EUR [...] ³¹³. This amount, however, is not the supplier's profit, as the supplier sourced the material itself whilst taking into account the material value ³¹⁴ and its own deductions. Therefore, a supplier may consider an amount of EUR 2 000 as significant even if the transaction value should be a multiple of the given example. This may prompt the supplier to renounce the third party surveyor, or, if the supplier does not trust the purchaser's assaying, to even entirely refrain from the specific business.
- (262) Therefore, to a certain extent, the costs component of assaying renders exporting of CSSR less attractive from the commercial point of view.
- (C) Business risk component
- (263) The business risk component linked to exports and assaying is mainly that the assay is not correct, which may lead to a purchase price that does not correspond to the value of the CSSR.
- (264) The market investigation showed that the standard of assaying may be different from time to time also within the EEA as one respondent stated that analysis from *'companies [from a particular Union Member State] [...] are most of the time*

³⁰⁹ Minutes of a call with a supplier on 2.12.2019, DocID3390.

³¹⁰ This relates to assaying costs incurred by the supplier commissioning a third party expert, as opposed to assaying costs of the Parties, which are part of the Parties' internal calculation.

³¹¹ Minutes of a call with a supplier on 4.12.2019, DocID3360.

³¹² [...].

³¹³ Metallo's contract with a supplier of 3.12.2019, DocID1416, (The Parties' reply to the Commission's request for information RFI 20, Annex 1a.3 (2316_001), page 217.

³¹⁴ For instance the LME price, which is being passed through, Section 6.1.3.

incorrect³¹⁵. However, some market participants consider the risk of receiving an incorrect assay as significantly higher outside the EEA. One market participant highlighted during the market investigation: *'Export of "ex incineration ashes" is theoretically possible, but at lower prices and higher business risk due to assays and the value given by the foreign customer (communication on the value and assay process is easier with customers in Europe). [...] It would also mean higher delivery costs [...]'*³¹⁶. Another respondent explained that *'if you sell copper abroad and far from your countries you can receive a bad essay [sic] more than 3 weeks later your delivery and you can't afford in a matter of time and money to resend back your material at home. you must accept the bad essay [sic]'*³¹⁷.

- (265) One of the Commission's questionnaire lead to mixed results. Whereas some market participants indicated that there is a higher risk of incorrect assay outside of the EEA compared to inside, not all respondents endorsed this opinion³¹⁸.
- (266) When asked to rate the risk of receiving an incorrect assay from potential purchasers of copper scrap for refining, with respect to statements that there is either 'some risk' or 'high risk' for individual or a classified group of potential purchasers, the respondents answered as follows³¹⁹.
- (1) The risk of incorrect assays appears to be relatively low for the biggest EEA-based refiners/smelters, potentially with an exception in the case of Brixlegg. For Aurubis, Metallo, Boliden, KGHM and Umicore, at the maximum 21% of respondents said that there is 'some risk' or 'high risk' of incorrect assays and for some of these companies the percentage is significantly lower³²⁰.
 - (2) The percentages and therefore the (some or high) risk of incorrect assaying increases for Glencore in Canada and the Japanese and Korean refiners/smelters. More than 30% (Glencore) and almost 50% (Japanese and Korean refiners/smelters) of respondents see either 'some risk' or 'high risk'.
 - (3) With respect to Chinese refiners/smelters and other Asian refiners/smelters, almost 60% (China) and more than 60% (other Asian refiners/smelters) respondents submitted that there is some or high risk of incorrect assaying.
- (267) Therefore, there are indications from the market investigation that assaying renders exporting of CSSR less attractive than selling to the Merged Entity from the commercial point of view. However, the market investigation also showed that apparently this does not apply to all market participants, who are active in the sale or purchase of CSSR.

³¹⁵ Reply to question A.9 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

³¹⁶ Minutes of a call with a supplier, 5.11.2019, DocID3361.

³¹⁷ Reply to question A.9 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

³¹⁸ Replies to questions D.5, E.5, F.5 and G.5 of Phase II – Q4 – Questionnaire to Exporters, DocID3095. The questions in the sections D, E, F and G of this questionnaire were targeted on copper iron scrap, tin-bearing copper scrap, industrial residues containing copper and IBA containing copper, respectively. Whereas between 2 to 4 respondents indicated that this risk exists, overall less respondents stated that there is no such risk or any other risk linked to export outside the EEA.

³¹⁹ Replies to question A.6 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094, 2735, 3054.

³²⁰ For the remaining, other EEA based copper refiners/smelters, who, however, account for a very small portion of the share of in CSSR purchasing, the risk of incorrect assaying is perceived with almost 60% respondents as significantly higher.

8.3.3.2. The effects of risk of default on export

- (268) Risk of default of the CSSR purchaser may constitute an obstacle to export CSSR to a purchasers located outside of the EEA in comparison to purchasers located inside the EEA.
- (269) The most prominent risk of default is the one of non-payment, or, as the case may be, delayed payment. When asked to rate the risk of not being paid by potential purchasers of copper scrap for refining or the risk of receiving late payments, with respect to statements that there is 'some risk' or 'high risk' risk of not being paid or receiving only late payment, for individual or a classified group of potential purchasers the respondents answered as follows³²¹:
- (1) The risk of not being paid or receive late payment by the biggest EEA-based refiners/smelters, again with an exception in the case of Brixlegg, is low. For Aurubis, Metallo, Boliden, KGHM and Umicore, no more than 10% of the respondents see such risk for non-payment and no more than 14% for late payment³²².
 - (2) For Glencore in Canada (twice almost 20%) and the Japanese and Korean refiners/smelters (more than 30% for non-payment and roughly 40%, for late payment), a higher number of respondents than for EEA-based refiners/smelters see payment risks.
 - (3) With respect to Chinese refiners/smelters (more than 50% of respondents for non-payment and roughly 60%, for late payment) and to other Asian refiners/smelters (roughly 70% for non-payment and more than 60%, for late payment), the majority of the respondents, who expressed an opinion, see some or high risk for non-payment or late payment.
- (270) However, in another questionnaire addressed specifically to exporters of coppers scrap from the EEA, the responses did not show a clear picture of the business risk of not receiving payments when selling to purchasers located outside the EEA as compared to EEA-based purchasers³²³.
- (271) Furthermore, the Commission identified through its market investigation additional risks of default linked to exporting outside of the EEA as compared to selling CSSR within the EEA.
- (272) **First**, the Commission notes that also the insurability of payments differs between the EEA and outside the EEA. One market respondents stated that *'[m]ost large refiners/smelters operating in the West are insurable and reliable but this means you are limited in the tonnage you can supply as can not exceed the level of cover the insurer will issue. The credit insurers tend to be cautious in the level of risk they will take on. There are some European refiners whom the insurers will not offer any cover on and some where only very limited cover is available. Very limited insurance*

³²¹ Replies to question A.7 and A.8 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

³²² For the remaining other EEA based copper refiners/smelters, who, however, account for a very small portion of the share of in CSSR purchasing, the risk of non-payment or late payment is perceived by around 80% and around 70%, respectively, respondents as significantly higher.

³²³ Replies to questions D.5, E.5, F.5 and G.5 of Phase II – Q4 – Questionnaire to Exporters, DocID3095. The questions in the sections D, E, F and G of this questionnaire were targeted on copper iron scrap, tin-bearing copper scrap, industrial residues containing copper and IBA containing copper, respectively. Whereas between 2 to 3 respondents indicated that this risk exists, overall approximately the same amount of respondents stated that there is no such risk or any other risk linked to export outside the EEA.

*cover is available on smelters/refiners in the developing world but sometimes bank guarantees are possible and these can also offer a level of payment protection*³²⁴. One respondent added: *‘Eastern european- and asian-purchasers are not reliable and you will not get any insurance*³²⁵.

- (273) **Second**, one respondent states that already having to deal with different jurisdictions has a limiting effect on this business outside of the EEA: *‘We do not engage in sales business outside the EEA mainly because we want to avoid non-EEA jurisdiction and do not have the manpower to handle quality issues outside of the EEA*³²⁶.
- (274) **Third**, suppliers may face business risks when exporting outside of the EEA, as submitted by one supplier of copper scrap: *‘Sales to Asia results in: Risk in communication misunderstanding[,] Small sampling quantity[,] Cash flow delay[,] Worse Terms*³²⁷.
- (275) **Fourth**, there are concerns about compliance with legal requirements as one supplier *‘does not sell copper scrap for refining outside the EEA directly, and for indirect sales ensures all scrap is sold within the EEA to mitigate its payment default risk and to ensure that its deliveries comply with legal (mainly environmental) requirements*³²⁸.
- (276) Overall, while the Commission takes note of submission from the market, according to which no appreciable difference exists between sales to EEA-based purchaser and those based outside the EEA, overall it observes that there is a risk of default for exporters of CSSR outside the EEA and many market participants perceive this risk to be higher in comparison to sales to EEA-based purchasers.

8.3.3.3. Effects of regulatory and administrative barriers on export

- (277) CSSR is, in general, subject to the regulatory framework for the transboundary transport of waste³²⁹.
- (278) In this regard, the Notifying Party argues that whilst it is true that companies needed to comply with environmental regulations in almost all industrial markets worldwide, it could not be assumed that this would hinder global trade flows. It further contends that such environmental regulations differ - even within the EEA - yet there is no suggestion that scrap would not flow freely within the EEA. A meaningful barrier to scrap flows presented by regulation would not exist, as smart traders take advantage of EEA-wide, and global arbitrage³³⁰. Especially with respect to China's import regulations, the Notifying Party brings forward that trade flows have not been impacted in quantity as a consequence but merely diverted to other countries such as India, Pakistan, Malaysia and others³³¹. In this regard, the Notifying Party contends that China's import regulations and its effects demonstrate that the geographic market of CSSR is global in scope. The Chinese regulations have changed the demand dynamics not only in China itself but also in the EEA, in the USA and in other part of the world. In the Notifying Party's opinion, this shows that exports of CSSR from the EEA, and global trade flows in general, are a major factor on the

³²⁴ Reply to question A.7.1 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

³²⁵ Reply to question A.9 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

³²⁶ Reply to question A.9 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

³²⁷ Reply to question A.9 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

³²⁸ Minutes of a call with a supplier on 2.12.2019, DocID3390.

³²⁹ Section 6.3.

³³⁰ Response to Article 6(1)(c) Decision, paragraph 80.

³³¹ Response to Article 6(1)(c) Decision, paragraph 81.

purchasing market for CSSR and other copper scrap³³². Other existent environmental regulations would require a mere notification and would not be that cumbersome that they give rise to any meaningful barrier to export³³³ nor would any regulatory barriers give rise to significant cost³³⁴.

- (279) The Commission notes that according to the market investigation regulatory and administrative aspects have a noticeable effect on exports of CSSR by scrap suppliers. Some market participants perceive the regulations as a barrier to export and are not willing to invest the necessary costs and efforts in order to export.
- (280) **Firstly**, there is an apparent tendency in the respondents' statements regarding with respect to which sales they see some risk or high risk of regulatory barriers³³⁵. The replies relate to four types of copper scrap for refining, which are part of the product market of CSSR. With the exception of IBA containing copper, where the number or responses was overall very low and therefore does not allow for any overall conclusions³³⁶, the Commission notes a tendency with regard to the other three types of CSSR: sales to refiners/smelters or other purchasers in the EEA are associated with lower regulatory risks than sales to refiners/smelters or other purchaser outside of the EEA.
- (1) Sales to refiners/smelters in the EEA are associated with relatively low regulatory risks. Frequently, respondents state that there is no such risk at all and only for 'industrial residues containing copper' more respondents (regularly around 30%) see this kind of risk³³⁷.
 - (2) With respect to sales to Glencore in Canada and the Japanese and Korean refiners/smelters this type of risk is named more often. Some or high risks of regulatory barriers are named by on average³³⁸ almost 40% for Glencore and by on average³³⁹ almost 70% for Japanese and Korean refiners/smelters.
 - (3) Regarding Chinese refiners/smelters and other Asian refiners/smelters, on average³⁴⁰ more than 70% respondents indicated this type of risk for the Chinese refiners/smelters and on average³⁴¹ almost 80% for other Asian refiners/smelters.

³³² White Paper 17, *Supplementary Remarks to the Statement of Objections of 11 February 2020*, paragraph 25.

³³³ Response to Article 6(1)(c) Decision, paragraph 82. The Notifying Party also argues that the regulations apply equally to exports within the Union and to export outside the EU. Therefore, in the Notifying Party's view, unless suppliers operate within the same country as Aurubis or Metallo, suppliers will already be obliged to comply with the regulations.

³³⁴ Response to Article 6(1)(c) Decision, paragraph 83.

³³⁵ Replies to questions D.7, E.7, F.7 and G.7 Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

³³⁶ With the exception of responses for Aurubis, Metallo, Boliden, Brixlegg and Umicore.

³³⁷ For purchasers within the EEA, who do not refine/smelt copper, the risk is perceived as higher.

³³⁸ Average of the percentages of respondents, who stated that there is some or high risk of regulatory barriers, for each copper iron scrap, tin-bearing copper scrap and industrial residues containing copper.

³³⁹ Average of the percentages of respondents, who stated that there is some or high risk of regulatory barriers, for each copper iron scrap, tin-bearing copper scrap and industrial residues containing copper.

³⁴⁰ Average of the percentages of respondents, who stated that there is some or high risk of regulatory barriers, for each copper iron scrap, tin-bearing copper scrap and industrial residues containing copper.

³⁴¹ Average of the percentages of respondents, who stated that there is some or high risk of regulatory barriers, for each copper iron scrap, tin-bearing copper scrap and industrial residues containing copper.

- (281) **Secondly**, market respondents indicated that regulations are relevant for exports, also between two EEA countries and that regulations are relevant for exporting to non-EEA countries³⁴².
- (282) **Thirdly**, China used to be an important importer of certain types of copper scrap. Since 2018, however, strict bans and quotas on import of copper scrap are in place. In a due diligence report prepared for Metallo, this is summarised as follows:

Figure 22 – [...]

[...]

Source: Form CO, Annex 5.4-X, page 63.

- (283) Only high-grade copper scrap without toxic impurities is allowed to be imported into China. The resulting limitations on exports to China seem to have resulted in more quantities of certain types of copper scrap being available in the EEA, as confirmed by the large majority of the respondents to the Commission's market investigation expressing an opinion on this point³⁴³ as well as by the assessment in a due diligence report prepared for Metallo:

Figure 23 – [...]

[...]

Source: Form CO, Annex 5.4-X, page 67.

Figure 24 – [...]

[...]

Source: Form CO, Annex 5.4-X, page 68.

- (284) A purchaser of copper scrap explained the effects of the Chinese import restrictions as follows: *'Chinese import restrictions affected the scrap market, especially U.S, which for years was the net exporter of scrap mainly to China. We observe that now U.S companies are looking for new channels mainly in Europe for copper scraps. So we can take advantage of differences in prices of materials changes in favour of European consumers'*³⁴⁴.
- (285) The Commission notes that already the mere existence of China's import regulations could *per se* be considered as evidence for different regulatory framework on a global basis and hence an indication that the conditions of competition are not sufficiently homogenous on a global scale. At the same time, the Commission acknowledges that the effects of China's import regulations, most relevantly the increase of availability of CSSR in the EEA, could be interpreted as an indication for a global market of CSSR before these restrictions came into existence. If separate, regional markets existed, the effects of a regulatory intervention such as in China may have been less noticeable.

³⁴² Replies to questions D.4, E.4, F.4 and G.4 of Phase II – Q4 – Questionnaire to Exporters, DocID3095.

³⁴³ Replies to question 31.3 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097, and to question 28.2 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

³⁴⁴ Reply to question 22.2 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

(286) **Fourthly**, China's import regulations are not the only regulations imposed on and thus affecting the trade of CSSR. This is evidenced by the statements, which the Commission received during the market investigation:

- (1) One market participant stated as follows: *'Tinned copper scrap could be exported outside of the EU. Copper scrap in the form of residues cannot necessarily be exported outside of the EU due to the Basel Convention, depending on the content of the residue. In particular if the material is orange listed, more effort is required to manage the export outside the EEA. For a large trader this may be possible, but not for a company like [market participant]. Economically, it does not make sense for [market participant] to send residues outside of the EU as it would have to invest time and money for the notification process. Since selling residues material is not the [market participant]'s key business, the [market participant] wants to keep the material inside of Europe in order to ensure it is treated the right way. Selling such material to outside the EEA may also not be perceived well in public. Prior to the Chinese restrictions on copper scrap material, China was the most important importer. Residues were also exported to China. Low-grade material is now sent to smelters in Malaysia and Thailand, where it is refined to send to China. The quantities imported into Malaysia and Thailand are however lower as those that were imported to China before'*³⁴⁵.
- (2) Another respondent explained with respect to the conceivable option to export: *'If Aurubis were to pay less after the merger, [market participant]'s situation for low-grade scrap would be as follows: Export is not possible, for permit reasons. In the case of exports, these materials must be exported by means of a notification (amber-listed), which is not yet legally feasible. As far as India and China are concerned, there are internationally recognised regulations, such as CCIC inspections and AQSIQ, residues do not, to our knowledge, fall into permitted categories (China Group 6 and 7 ban). China is also not an option. Malaysia and India, etc. are not an option for residues due to environmental and permit requirements. Moreover, it is not economically viable to export these materials so far away. Comparison of the value of the goods vs. transport costs! If [market participant] were to take over the further processing itself, this would also mean that the necessary purchase prices of [market participant] would be less attractive to [market participant]'s suppliers. It would be questionable to what extent the higher prices could be passed on. The quantities currently sold to Metallo and Aurubis could not be accommodated by other European refiners due to a lack of capacity'*³⁴⁶.

³⁴⁵ Minutes of a call with a supplier on 16.12.2019, DocID3029.

³⁴⁶ Minutes of a call with a supplier on 4-5.11.2019, DocID1186. Courtesy translation. The original German text reads: *'Sollte Aurubis nach der Fusion weniger zahlen, ist die Situation von [market participant] bei low-grade Schrott wie folgt: Export ist nicht möglich, aus Genehmigungsgründen. Im Export müssen diese Stoffe per Notifizierung (amber- listed) ausgeführt werden, dies ist bislang rechtlich nicht umsetzbar. Für Indien und China gibt es international anerkannte Vorschriften, wie CCIC- Inspektionen und AQSIQ, Rückstände fallen unseres Wissens nicht in erlaubte Kategorien (China Group 6 and 7 ban)..China ist auch keine Option. Malaysia und Indien etc. sind für Rückstände keine Option aufgrund von Umweltauflagen und Genehmigungsaufgaben. Außerdem ist das nicht wirtschaftlich, diese Materialien so weit weg zu exportieren. Vergleich Warenwert vs Transportkosten! Sollte [market participant] die Weiterverarbeitung selbst übernehmen, würde das auch bedeuten, dass die dann notwendigen Aufkaufpreise von [market participant] für [market participant]s Lieferanten weniger attraktiv wären. Es wäre fraglich, inwieweit man die höheren Preise weitergeben könnte. Die*

- (3) Finally, one respondent stressed the costs and administrative efforts linked to exports: *‘In addition, mid-grade - lower-value copper scrap requires separate export licenses and have to conform to strict regulations for import into Asian countries (Japan, Malaysia and Korea included). It would also mean higher delivery costs and lots of administration’*³⁴⁷.

(287) **Fifthly**, the Parties’ internal documents show the existence of regulations:

Figure 25 – [...]

[...]

Source: Reply to request for information 18, Annex Q9.c.5, slide 8.

(288) [...].

- (289) In light of the results of the market investigation as well as of the internal documents of the Parties, the Commission notes that in general, regulatory and administrative barriers likely lower the incentive to export CSSR outside the EEA.

8.3.3.4. Effects of transport costs on export

- (290) As regards the transport costs for copper scrap, the Notifying Party brings forward that this type of costs is insignificant for the supply of copper scrap and in general overstated, even if taking into account particularly low-grade scrap. The Notifying Party argues that both Aurubis and Metallo source globally including, for instance, low-grade copper scrap from among others Italy, the US, South Africa, Mexico, Japan and Russia³⁴⁸. Following the Statement of Objections, the Notifying Party made further submissions with respect to transport costs of copper scrap. It reiterates, among other things, that transport costs do not play an important role in trading copper scrap³⁴⁹.
- (291) The Commission’s market investigation at large confirms, partially contrary to the Notifying Party’s view, that transport costs can be a relevant aspect for the trade of CSSR. However, the Commission has also received several responses, which support the Notifying Party’s view. Transport costs for certain high grade types of copper scrap as a proportion of the scrap value appear to be relatively low. One market participant responded: *‘Transport cost is not so relevant under present freight markets, but location has more importance, because the shorter transport time from supplier to customer means also the quicker payment to the supplier by the customer’*³⁵⁰. For these types of scrap, depending on the scrap collection point, export to Asia may sometimes be cheaper than land-transport to certain destinations in Europe. As one respondent summarised *“Freight costs within Europe are too high compared to those [to] overseas”*³⁵¹.

Mengen, die zur Zeit an Metallo und Aurubis verkauft werden, könnten aufgrund von mangelnden Kapazitäten bei anderen europäischen Raffinieren nicht untergebracht werden’.

³⁴⁷ Minutes of a call with a supplier, 5.11.2019, DocID3361.

³⁴⁸ Response to Article 6(1)(c) Decision, paragraphs 85 to 87.

³⁴⁹ White Paper 17, *Supplementary Remarks to the Statement of Objections of 11 February 2020*, paragraphs 11 and 12.

³⁵⁰ Response to question 30.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

³⁵¹ Minutes of a call with a supplier, 30.10.2019, DocID1184. Courtesy translation. The original German text reads: *‘Frachtkosten sind innerhalb Europas zu hoch verglichen mit Übersee.’*

- (292) The overall majority of other respondents stressed the relevance of transport costs:
- (1) One market participant pointed out that transport costs matter even within the EEA: *‘Transport costs can even be a factor inside the EEA. [...] If a ton of material represents a revenue of EUR 800 for the [market participant], transport costs can be significant and make long distance transport unattractive. To Spain it could cost up to EUR 2,500 Euro per truck, making it economically not sensible’*³⁵².
 - (2) In this context, another respondent clarified that *‘[s]uppliers who are continental scrap collectors need to ship the scrap within short distances because of transport costs and therefore they would like to supply to Metallo, Aurubis, Brixlegg and Umicore’*³⁵³.
 - (3) In more detail, one supplier provided a comparison between transport costs from his place of establishment. *‘For [market participant], the geographic aspect is relevant, for [market participant] transport costs are therefore by all means relevant. Transport costs per 1 ton: a) 10 EUR to Aurubis in Lünen, b) 70 EUR to Brixlegg in Austria, c) 25 EUR to Metallo in Belgium and d) 100 EUR to Sweden to Boliden, [100-150 EUR to Asia or Japan, as the case may be]’*³⁵⁴.
 - (4) Also transport costs to outside of the EEA can prevent exports as one respondent explained: *‘Transport costs to China and India are fairly low. [...] Transport costs to other regions are quite high or even prohibitive. The exports from the EEA to Canada, for example, could make sense only if refining charges in the EEA would increase significantly’*³⁵⁵. Another submitted that *‘[d]ue to freight cost it is not worth purchasing from long distances. The US is currently an exception given its trade war with China’*³⁵⁶.
- (293) Moreover, as evidenced in the replies to one of the Commission’s questionnaires, a majority of suppliers expressing their opinion consider transport costs as a relevant cost factor, either for transport between two EEA countries or as well for exporting to non-EEA countries³⁵⁷.

³⁵² Minutes of a call with a customer on 16.12.2019, DocID3029.

³⁵³ Minutes of a call with a competitor on 5.11.2019, DocID1151.

³⁵⁴ Minutes of a call with a supplier on 4-5.11.2019, DocID1186. Courtesy translation. The original German text reads: *‘Für [market participant] spielt der geographische Aspekt eine Rolle, für [market participant] sind Transportkosten daher durchaus relevant: Frachtkosten für 1 Tonne a. 10 EUR zu Aurubis nach Lünen b. 70 EUR zu Brixlegg nach Österreich, c. 25 Euro zu Metallo nach Belgien, und d. 100 Euro nach Schweden zu Boliden. e. [100-150 Euro nach Asien, bzw. Japan]’*.

³⁵⁵ Minutes of a call with a supplier on 17.9.2019, DocID1230.

³⁵⁶ Minutes of a call with a supplier on 11.7.2019, DocID3337.

³⁵⁷ Replies to questions D.3, E.3, F.3 and G.3 of Phase II – Q4 – Questionnaire to Exporters, DocID3095. The questions in the sections D, E, F and G of this questionnaire were targeted on copper iron scrap, tin-bearing copper scrap, industrial residues containing copper and IBA containing copper, respectively. Whereas between 4 to 8 respondents indicated that transport costs are relevant also between two EEA countries and between 2 and 3 respondents stated that transport costs are relevant for exporting to non-EEA countries, overall less respondents stated that transport costs do not matter with respect to transport between two EEA countries and transport to non-EEA countries.

(294) Also Aurubis' internal documents point towards the relevance of transport costs:

Figure 26 – Assessment of Glencore's smelter in Canada partially in light of transport costs

[...]

Source: DocID1570-56136 (Reply to the request for information 16, M.9409_BAK17702_00837704.pptx), slide 1.

(295) In the internal document in Figure 26, Aurubis analyses among other matters Glencore's smelter (bottom left of the slide). According to Aurubis opinion, Glencore faces '*high transport costs due to adverse geographic location*'³⁵⁸.

(296) In light of the results of the market investigation, as well as of the internal documents of the Parties, the Commission notes that transport costs are likely a relevant factor when considering the ability to export CSSR from the EEA.

8.3.3.5. CSSR generation by industrial suppliers

(297) Significant amounts of CSSR are generated in the course of manufacturing processes of industrial generators that are active in the automotive-, housing-, plumbing-, electronic- and industrial wire production industry³⁵⁹.

(298) For these industrial scrap generators, selling of CSSR to refiners (or other final purchasers) is in no instance their core business as CSSR is only a by-product of their actual industrial production. It seems that these scrap generators are unable or not interested in engaging in price arbitrage between different regions. Their interest is to ensure that the CSSR generated in their facilities is processed

(299) One of these scrap generators explained that '*[e]conomically, it does not make sense for the [market participant] to send residues outside of the EU as it would have to invest time and money for the notification process. Since selling residues material is not the [market participant]'s key business, the [market participant] wants to keep the material inside of Europe in order to ensure it is treated the right way. Selling such material to outside the EEA may also not be perceived well in public*'³⁶⁰.

(300) Therefore, the Commission notes that it is plausible to assume that such CSSR generators will not engage in possibly more expensive and time-consuming export activities. However, industrial generators of CSSR may sell their scrap to larger trading intermediaries, the business model of which in part is focused on international sale of scrap, and who therefore are more capable to facilitate the export of CSSR.

8.3.3.6. Trade flows for CSSR

(301) The results of the market investigation show that there are indications for limited trade flows between the EEA and other regions. Such limited trade flows would speak against sufficiently homogeneous conditions of competition on a global scale and thus indicate a geographic market, which is only regional in scope and in this specific case only EEA-wide.

³⁵⁸ Courtesy translation. The original German text reads: '*Hohe Transportkosten durch ungünstige geographische Lage.*'

³⁵⁹ Section 6.

³⁶⁰ Minutes of a call with a supplier, 16.12.2019, DocID3029.

- (302) The Notifying Party claims³⁶¹ that it has provided extensive evidence that there are significant exports in and from the EEA³⁶², namely in particular Union and International Copper Study Group (ICSG) statistics³⁶³, as well as Wood Mackenzie reports³⁶⁴, CRU studies³⁶⁵ and ISRI copper scrap export statistics³⁶⁶, all evidencing the significant international trade flows for copper scrap. The Parties have also addressed the global trade flows of low-grade copper scrap in particular in further submissions³⁶⁷, allegedly substantiating that low grade copper, too, is exported to a significant extent. Following the Statement of Objections, the Parties submitted further evidence with respect to trade flows and stress that imports and exports play a significant role on the purchasing market for CSSR with exports amounting to more than 37%³⁶⁸, and present documents relating to their copper scrap trade, more specifically correspondence with (potential) business partners from countries such as India, Japan, Turkey, Pakistan, Ukraine, Russia and South Africa³⁶⁹.
- (303) The Commission notes that indeed there appear to be significant overall global trade flows of some types of copper scrap. A majority of competitors to the Parties and a majority of those suppliers, who expressed their opinions, hold the view that the market for copper scrap is global in scope³⁷⁰ and a majority of these market participants purchases copper scrap from outside of the EEA³⁷¹. However, it is important to note in this context, that the question asked of market participants was whether they consider the geographic market for ‘copper scrap’ to be global and made no distinction between copper scrap for refining and copper scrap for direct melt. Nevertheless, the assumption that global trade flows of copper scrap exist is supported by the CRU³⁷², which depicts the global copper scrap flows as follows:

³⁶¹ Response to Article 6(1)(c) Decision, paragraph 79.

³⁶² The Notifying Party references to ‘*White Paper 1. Correct approach for the market definition as well as calculation of volume and shares for the EEA segment of copper scrap purchasing and its potential sub segments*’, submitted by the Notifying Party on 16.11.2019, and to ‘*White Paper 3. Evidence of exports of copper scrap from the EEA*’, submitted by the Notifying Party on 18.9.2019.

³⁶³ The Notifying Party references to Form CO, Annex 8.13.

³⁶⁴ The Notifying Party references to Form CO Annex 6-K.

³⁶⁵ The Notifying Party references to Form CO Annexes 6-V to 6-X.

³⁶⁶ The Notifying Party references to *White Paper 1. Correct approach for the market definition as well as calculation of volume and shares for the EEA segment of copper scrap purchasing and its potential sub segments*, submitted by the Notifying Party on 16.11.2019, page 8.

³⁶⁷ ‘*White Paper 4: Low grade copper scrap*’, submitted by the Notifying Party on 31.10.2019, ‘*White Paper 5: Low grade copper scrap II*’, submitted by the Notifying Party on 3.11.2019, ‘*White Paper 6: Low grade copper scrap III (Siegfried Jacob)*’, submitted by the Notifying Party on 5.11.2019, ‘*White Paper 7: Copper Scrap Prices / Refining Charges in the EEA and China*’, submitted by the Notifying Party on 6.11.2019, and ‘*White Paper 10*’, submitted by the Notifying Party on 11.11.2019.

³⁶⁸ *White Paper 17, Supplementary Remarks to the Statement of Objections of 11 February 2020*, paragraph 6 *et seq.* and Annex 1 to this *White Paper 17*.

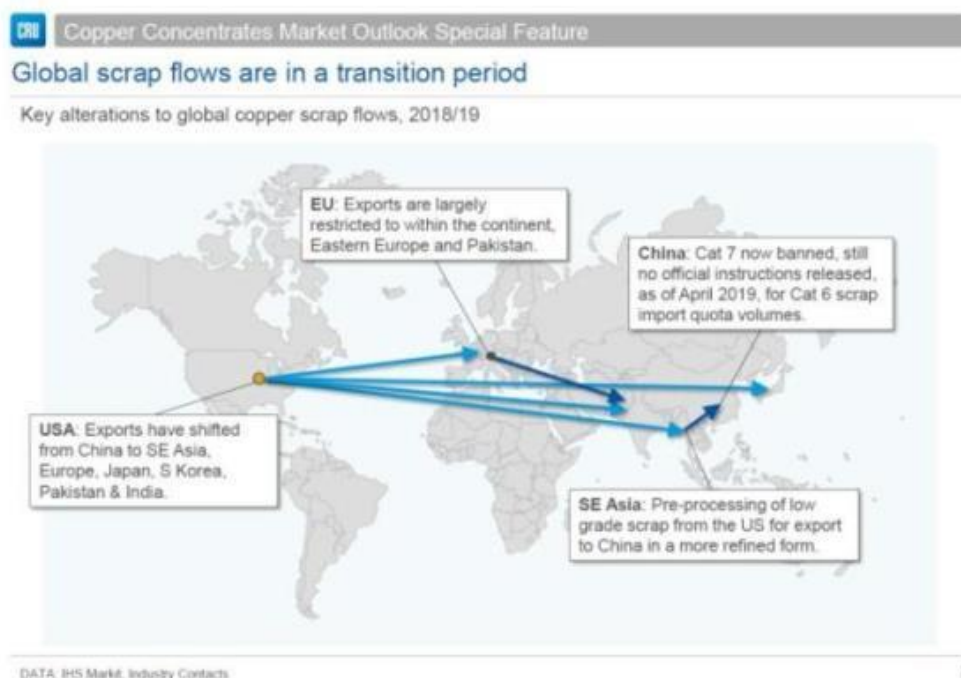
³⁶⁹ *White Paper 17, Supplementary Remarks to the Statement of Objections of 11 February 2020*, paragraph 15 *et seq.* and Annex 2 to this *White Paper 17*.

³⁷⁰ Reply to question 23 of Q1_Questionnaire to Suppliers of Copper Scrap, DocID3100; question 34 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

³⁷¹ Reply to question 12 of Q1_Questionnaire to Suppliers of Copper Scrap, DocID3100; question 22 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

³⁷² Form CO, Annex 7.2-B, page 8. CRU offers business intelligence on the global metals, mining and fertilizer industries through market analysis, price assessments, consultancy and events (<https://www.crugroup.com/>).

Figure 27 – Global copper scrap flows according to CRU



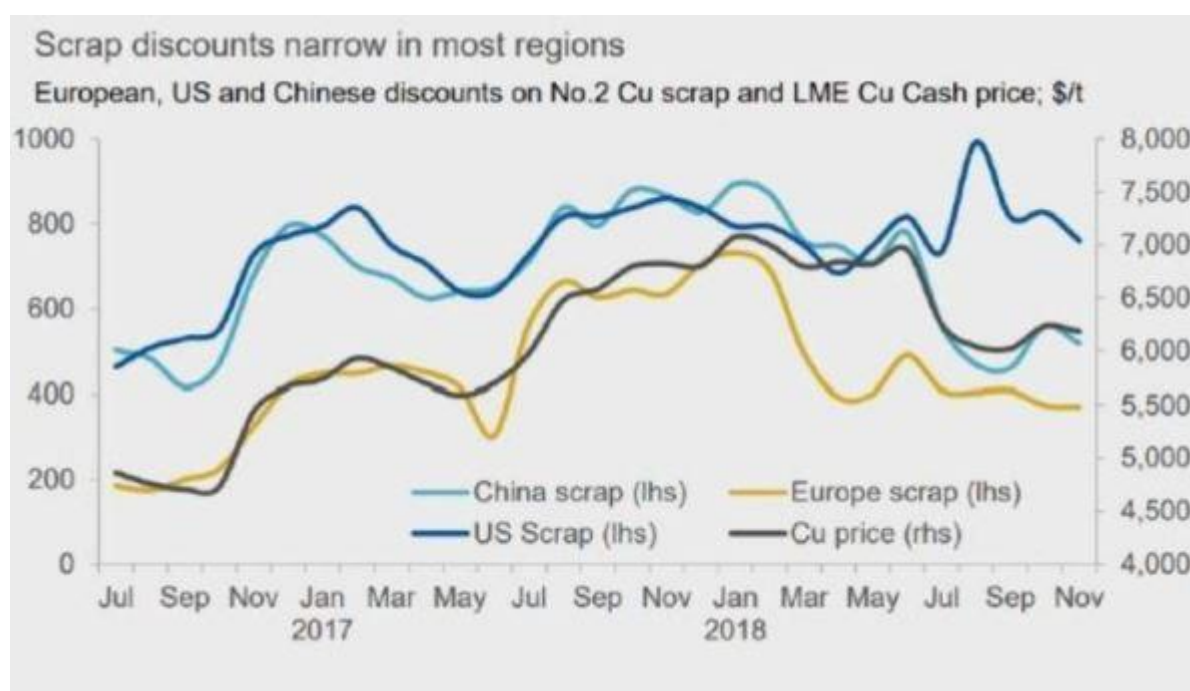
Source: Form CO, Annex 7.2-B, page 8.

- (304) In this context, several market participants expressed their view that the market for copper scrap has a global character. One respondent stated: *‘Missing refining capacities in all regions of the World makes it a global business. The market price for copper makes it profitable to transport it from Africa, South America etc to the refiners in Europe and Asia’*³⁷³. Another respondent contended that *‘[i]t’s [the market for copper scrap] global but with regional fluctuations depending supply/demand’*³⁷⁴. Finally, one market participant summarised that *‘[s]crap can easily flow to the best markets. This is not difficult nor are there any major obstacles in doing so’*³⁷⁵.
- (305) The Notifying Party also submits that apart from exports out of the EEA, there are also significant imports of copper scrap for refining into the EEA (for example 363 kt in 2018 excluding e-scrap according to Form CO, Annex 7.2-E) which was purchased by EEA based copper scrap refiners. This further points to global trade flows of copper scrap.
- (306) In this context, the Commission notes with respect to the results of its market reconstruction³⁷⁶ and specifically, exports of CSSR generated in the EEA, that 43% of the purchases of CSSR are exports out of the EEA (see Table 2). In the Commission’s view, this indicates that at least with respect to CSSR and the geographic region of the EEA there are significant trade flows between the EEA and other regions outside of the EEA.

³⁷³ Response to question 23.1 of Q1 Questionnaire to Suppliers of Copper Scrap.
³⁷⁴ Response to question 23.1 of Q1 Questionnaire to Suppliers of Copper Scrap.
³⁷⁵ Response to question 26 of Q1-b Questionnaire to Suppliers of Copper Scrap.
³⁷⁶ See Section 9.2.1.3.

- 8.3.3.7. Refining charges for standard copper scrap no.2 product which is not part of the CSSR market, in Europe, Asia and the USA
- (307) Significant level of exports of CSSR from the EEA (as outlined in Section 8.3.3.6), are however not in themselves an indicator for conditions of competition being sufficiently homogeneous between different world regions for these to be considered one geographic market.
- (308) Price levels for copper scrap no.2 (expressed as copper scrap discounts, synonymous with refining charges) as reported in leading analyst reports appear to differ between world regions and do not show strong correlation. For example, CRU³⁷⁷ scrap discount data for Europe, the US and China (Figure 28) show in part price differences and curves that do not move in a correlated manner in all instances. It is likely that a similar (or even more pronounced) trend is also observable for the more heterogeneous CSSR.

Figure 28 – Differences in scrap discounts according to CRU



Source: Form CO, Annex 6-VV.22, page 6.

- (309) As regards different price levels across the globe, the Notifying Party argues that the data for China provided by CRU were not reliable, presenting statements from CRU, which conceded this to Aurubis³⁷⁸. On the contrary, the Notifying Party brings forward that for copper scrap no.2, over the months of August, September and October 2019, the price differences between Europe and China were less than 0.5% of the total scrap price³⁷⁹. Similar differences would apply also some mid- and low-grade scrap materials³⁸⁰.

³⁷⁷ According to its website, CRU is a provider of business intelligence on the global metals, mining and fertilizer industries through market analysis, price assessments, consultancy and events; <https://www.crugroup.com/>.

³⁷⁸ Response to Article 6(1)(c) Decision, paragraph 95.

³⁷⁹ Response to Article 6(1)(c) Decision, paragraph 96.

³⁸⁰ Response to Article 6(1)(c) Decision, paragraph 97.

- (310) The Commission observes the following:
- (311) **First**, while indeed CRU appears to have ceased the publication of copper scrap no.2 discounts for China, and the CRU statement presented by the Notifying Party may cast doubts on CRU's data, nevertheless CRU is a service relied upon across the industry and has chosen to release these data on refining charges. Even in case certain data points may not be entirely reliable, the overall trend nevertheless suggests in part diverging price trends and therefore not sufficiently homogeneous conditions of competition across one global market.
- (312) **Second**, notwithstanding the question as to the reliability of CRU data on Chinese price levels, the CRU data for the US and Europe also shows price differences and curves that do not continuously move in a correlated manner.
- (313) **Third**, the Notifying Party's argument that price differences for certain months in 2019 were less than 0.5% of total scrap price is not informative. The overall value of copper scrap indeed largely consists of the LME price of the copper contained. However, companies active in the collection and supply of copper scrap, while incurring financing costs due to the LME copper value of the material, mainly consider the refining charges (and treatment charges and impurity valorisations) as the relevant cost-metrics to consider. This is mainly because the LME value of copper scrap is passed through the supply chain. In this regard, the price differences quoted by the Notifying Party between Europe and China are more considerable. To illustrate this – if the refining charge in China were USD 500 per tonne, a USD 29 difference between the EEA and China in the refining charge would be a 5.8% difference.
- (314) **Fourth**, the discount difference between the US and Europe remains high according to the latest CRU document submitted by the Notifying Party. For August 2019, the CRU reported difference stands at EUR 469 per tonne³⁸¹.
- (315) **Fifth**, internal documents of the Parties confirm that refining charges differ between different world regions.
- (316) The Aurubis internal document in Figure 29 shows that Aurubis tracks average refining charges for various different 'markets'. The document appears to relate to the second half of 2018, indicating that these observed refining charge differences may also change over time.

Figure 29 – Aurubis view on achievable refining charges across world regions

[...]

Source: DocID1569-75402 (Reply to request for information 16, M.9409_BAK17702_00955958), slide 13.

- (317) Further, in the Aurubis internal document in Figure 30, Aurubis considers that a *'further tightening in the European scrap market, would certainly have a major negative impact on discounts in Europe'*. It further expects this effect to last *'at least for the next 3-4 years'*. This suggests that Aurubis expects a price effect that is specific to a certain geographic region, in this case *'Europe'*. This is an indication for different conditions of competition between world regions and for non-functioning price arbitrage between these regions.

³⁸¹

Form CO, Annex 6-X.5.

Figure 30 – Aurubis assessment of impact on scrap discounts by geography

[...]

Source: DocID1570-13961 (Reply to request for information 16, M.9409_BAK17702_00995775).

- (318) **Sixth**, suppliers of copper scrap suggest that prices for copper scrap materials may differ across world regions.
- (319) A supplier states that if it were to export its copper scrap materials, it ‘*expects the prices and its margins to be lower than if sold under current conditions in Europe*’³⁸².
- (320) Another supplier states that it ‘*tracks non-EEA prices. For copper scrap for direct melt, these are roughly on par with EEA prices. For copper scrap for refining, EEA purchasers offer higher prices*’³⁸³.
- (321) In light of the results of the market investigation, as well as of the internal documents of the Parties, the Commission notes that price differences between world regions for copper scrap materials (for the reference material copper scrap no.2 as well as for other scrap types) are a strong indication for different conditions for competition in these regions.
- 8.3.3.8. The Parties appear to earn higher refining charges and margins for CSSR from non-EEA suppliers
- (322) The Commission's market investigation and the assessment of the Parties' internal documents shows the following³⁸⁴:
- (323) **First**, the Commission finds that Aurubis earns on average [...].
- (324) **Second**, the Commission finds that Metallo's EUR purchase margins for CSSR are [...].
- (325) **Third**, the Commission finds that Metallo's percentage purchase margins for CSSR are [...].
- (326) Therefore, Parties' pricing power appears to be higher outside the EEA than inside the EEA. This could in part be due to the absence of competitors that are technologically as capable as the Parties outside the EEA, in particular also in a region such as North America, in which only Glencore exists as a secondary copper refiner with a local presence. This alternating pricing power is a sign that the conditions of competition for the purchasing of copper scrap, and in particular for CSSR, are different across world regions.
- 8.3.3.9. The Commission's assessment of the Parties' internal documents with respect to the geographic focus of competition as regards purchasing of CSSR
- (327) In general and with respect to the results of the market investigation, the Notifying Party contends that the feedback from the market indicates a global market for copper scrap³⁸⁵. The Notifying Party emphasises that point also in its submission following the SO³⁸⁶.

³⁸² Minutes of a call with a supplier on 5.11.2019, DocID3361.

³⁸³ Minutes of a call with a supplier on 2.12.2019, DocID3390.

³⁸⁴ See Annex, Sections 3.1-3.3.

³⁸⁵ Response to Article 6(1)(c) Decision, paragraph 94.

³⁸⁶ White Paper 17, *Supplementary Remarks to the Statement of Objections of 11 February 2020*.

- (328) With regard to one of the Commission's specific interpretations of internal documents, the Notifying Party opines that whereas it is '*broadly correct*' that Aurubis and Metallo do not regularly consider non-EEA purchasers of copper scrap in their strategic internal documents, this is the case for reasons other than that non-EEA purchasers do not compete with the Parties. The Notifying Party explains that the non-EEA purchasers do not provide sufficient data in comparison to western-listed companies and that buying scrap has been carried out by a fragmented trading community in Hong Kong and China³⁸⁷.
- (329) The Commission in this context recalls that in a due diligence report prepared for Metallo, [...] ³⁸⁸. [...] ³⁸⁹.
- (330) Furthermore, a review of the assessment under the title 'Market Situation – Scrap' in Aurubis' internal documents 'Weekly/Monthly Supply Meeting' for 2019³⁹⁰ reveals that the only competing purchasers of Aurubis referred to by name are other EEA based copper refiners (in particular [...]). While these internal documents make references to exports to other geographic regions such as China, it is unclear what type of material is exported, from where it is exported and who the buyers are. In a market with homogeneous worldwide conditions of competition, one would expect the Parties to benchmark themselves also against non-EEA refiners (such as Japanese or Korean players) or regularly track the purchasing activity of these players, which should constitute a risk to the Parties.
- (331) Overall, the Commission notes that the assessment of the Parties' internal documents indicates that the Parties' focus is on the competitive landscape in the EEA rather than outside, which, in turn, indicates a regionalised market.

8.3.3.10. Conclusion on the geographic market for CSSR

- (332) The Commission finds that in light of the Parties' submissions, previous Commission practice, the market investigation including the market reconstruction as well as the assessment of internal document of the Parties, the relevant geographic market for CSSR is EEA-wide. While on the one hand, there are some indications pointing to a global market of CSSR, in particular when taking into account the share of exports out of the EEA on the CSSR purchasing market, there is clear evidence pointing to conditions of competition between world regions not being sufficiently homogenous. Many suppliers of CSSR associate a number of risks with exporting from the EEA, transport costs are a relevant factor and certain regulatory barriers to export exist. Most importantly, refining charges and copper scrap prices more generally differ between world regions, pointing to heterogeneous conditions of competition. Therefore, on balance and based on the information presented in this Section 8.3.3, the Commission considers that relevant geographic market for CSSR is EEA-wide.

8.3.4. *Relevant geographic market of copper scrap no.2*

- (333) The Commission notes that with respect to copper scrap no.2, while there are some indications pointing to a global market, strong evidence suggests that the relevant geographic market is EEA-wide. The following indications suggest that the geographic scope of the market for copper scrap no.2 is global.

³⁸⁷ Response to Article 6(1)(c) Decision, paragraph 98.

³⁸⁸ Form CO, Annex 5.4-X.

³⁸⁹ Form CO, Annex 5.4-X, page 133.

³⁹⁰ Form CO, Annex 6-RR.1 to Annex 6-RR.21.

- (334) **First**, the market investigation indicated that copper scrap no.2 has characteristics resembling a commodity. This is because its characteristics are subject to a standard that, to some extent, fixes its copper content and some other metallurgical characteristics³⁹¹. Such a standardisation, although it does not guarantee perfect homogeneity of copper scrap no.2 across different lots, it significantly facilitates its trading in different regions.
- (335) **Second**, regulatory barriers to export copper scrap no.2 appear to be limited. As explained in Section 6.3, materials for copper recovery that are green-listed under the Basel convention require less administrative efforts because their exports do not require a notification process. The evidence collected during the market investigation confirms the Notifying Party's claim that copper scrap no.2 is green-listed under the Basel Convention³⁹². In addition, since copper scrap no.2 has a standardised metal composition, both the suppliers and the refineries have certainty that the material can be classified as a green-listed and therefore the risk of misclassification and eventually of breaching export regulations is very low. Respondents to the Commission's questionnaires confirmed this view³⁹³.
- (336) **Third**, internal documents of the Parties, and in particular of Aurubis, which is more active in this market than Metallo, consider copper scrap no.2 to be a widely traded commodity.
- (337) In an internal document, Aurubis refers to copper scrap no.2 as a '*world-wide traded commodity*'³⁹⁴. In another internal Aurubis document, it is stated that '*[t]he material characteristics for No.2 copper scrap are equal on a global scale, allowing this material to be handled as a commodity*'³⁹⁵.
- (338) **Fourth**, the Commission's market reconstruction shows that significant amounts of copper scrap no.2 is exported from the EEA. For 2018, the share of copper scrap no.2 exported from the EEA is 39%. However, there is strong evidence pointing to a geographic scope of the market for copper scrap no.2 that is EEA-wide.
- (339) **First**, the market investigation suggests that the available capacity for refining copper scrap no.2 varies across regions. Such a difference would generate different demand patterns in different regions. A majority of the suppliers that expressed an opinion considered that the available capacity for refining copper no.2 in the EEA is not sufficient³⁹⁶, but a majority of the respondents, who expressed a view (whilst the overall majority answered '*I do not know*') considers that world-wide there is enough capacity³⁹⁷. These replies indicate different market conditions in the EEA compared to other geographic locations.

³⁹¹ Form CO, paragraphs 202-208.

³⁹² See for example, reply to request for information RFI 39, questions 3a and 8.

³⁹³ See for example, replies to question B.7.1 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

³⁹⁴ DocID1570-87704 (Reply to the request for information 16, M.9409_BAK17702_00874766.pptx).

³⁹⁵ DocID1577-074646 (Reply to the request for information 16, M.9409_BAK17702_01079830.pptx), slide 11.

³⁹⁶ Reply to question B.10.1 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

³⁹⁷ Reply to question B.10.2 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

- (340) **Second**, the risks that suppliers need to take when supplying copper scrap no.2 to refineries located outside the EEA appears to be higher than when the refinery is located within the EEA. For suppliers, this difference might lead to more favourable competition conditions in the EEA, compared to those existing outside the EEA. While a considerable number of suppliers that took a view during the market investigation considered that the risk to supply to EEA-based refineries is low or non-existing, for non-EEA (including Japanese, Korean, Chinese and other Asian refineries) the tendency in responses was increasingly towards 'some risks' or even 'high risk'³⁹⁸. One supplier, for example, explained that *'[r]egulations are always changing in the developing world and therefore the risk of barriers are higher in these regions'*³⁹⁹.
- (341) **Third**, in internal documents, the Parties consider an EEA or 'European' market for copper scrap no.2, as well as other regional markets for which conditions for competition appear to be distinct.
- (342) For example, in an internal Aurubis document, it is stated with respect to copper scrap no.2 that *'Aurubis makes up approx. [10-20]% of the global market but more than [10-20]% of the European market'*⁴⁰⁰.
- (343) Similarly, Aurubis' 'Market Report Baseload Scrap' documents (which mainly cover copper scrap no.2) report market dynamics and prices for different geographic regions separately. In one such document it is for example described that *'[w]e tend to believe that the Chinese impact will not be heavily impacting the market in Europe and USA'*⁴⁰¹. With respect to one of its EEA competitors, Aurubis in this document notes that *'[w]e are starting to hear La Farga, Spain entering the US market but not widely penetrating the market'*. This suggests that Aurubis perceives the US market as distinct from the EEA market and that its EEA rival (La Farga) is so far not very successful at entering the US market.
- (344) **Fourth**, the absence of an observable price correlation between different regions suggests that price arbitration between different regions occurs only to a small extent, and the impact on price is not observable⁴⁰².
- (345) In particular, as explained in detail in Section 8.3.3.7, refining charges for copper scrap no.2 appear to differ between world regions and do not show strong correlation. CRU data, displayed in Figure 28 show in part price differences and curves that do not move in a correlated manner in all instances.
- (346) Furthermore, Aurubis' refining charges are on average lower for copper scrap no.2 when the supplier is non-EEA based⁴⁰³. In a global market, in which conditions of competition are sufficiently homogeneous, such differences in refining charges would be nullified by competition with competitors. The persistence of such a difference is an indication of a geographic market that is not global.
- (347) Data from Metallo confirms this finding. [...] ⁴⁰⁴.

³⁹⁸ Reply to question B.7 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

³⁹⁹ Reply to question B.7.1 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁴⁰⁰ DocID1570-90676 (Reply to request for information 16, M.9409_BAK17702_00877738.pptx), slide 24.

⁴⁰¹ Form CO, Annex 6-RR.25.

⁴⁰² Section 8.3.3.7.

⁴⁰³ Annex, Section 3.1.

⁴⁰⁴ Annex, Section 3.1-3.2.

- (348) In this context it is also relevant to note, that internal ordinary course of business documents report on different regional markets separately. In one example from Aurubis' regular 'Market Report Baseload Scrap' document, it states that '*The US Market remains mostly stable for discounts for US material. Extreme cold has slowed availability and shipping of material from the northern 2/3rds of the States*'⁴⁰⁵. This suggests both that Aurubis considers the US to be a distinct market, and that regional circumstances (in this case cold weather) can impact regional pricing. This suggests again that such regional pricing trends are indicative of the absence for sufficiently homogeneous conditions of competition between regional markets for them to be considered as one global market.
- (349) In light of the arguments presented in this Section 8.3.4, the Commission considers that while there are some indications for a global market for copper scrap no.2, there is strong evidence for a geographic market that is EEA-wide in scope. In particular, different supply-demand patterns in different regions, risks associated with exporting from the EEA and the Parties' consideration of different regional markets in internal documents point towards an EEA market. Furthermore, and most importantly, differences in refining charges for copper scrap no.2 between world regions are a clear indicator for conditions of competition that are not sufficiently homogeneous for these regions to be considered part of the same geographic market. Therefore, the Commission considers that relevant geographic market for copper scrap no.2 is EEA-wide.

8.3.5. *Relevant geographic market of copper rods*

- (350) The Commission considered in the case *Norddeutsche Affinerie/Cumerio* that the relevant geographic market for copper rod to be EEA-wide⁴⁰⁶.
- (351) With reference to that Commission Decision, The Notifying Party contends that the geographic market is at least EEA-wide⁴⁰⁷.
- (352) Responses of market participants, which were submitted during the market investigation, are not entirely conclusive. When being asked about the maximum distance for transportation of copper rods to be economically viable, the majority of those copper rod customers, who expressed an opinion, stated that transport within the EEA is economically viable⁴⁰⁸ and thus pointing to an EEA-wide market. However, a number of the respondents opined that transport only within the radius of 500 km from the production plant would be (economically) viable⁴⁰⁹. At the same time, the majority of the competitors in copper rod, who expressed their opinion, held a view that such transport makes sense either within the EEA or worldwide⁴¹⁰. Furthermore, whereas the majority of respondents answered with '*I do not know*', a large majority of the remaining copper rod customers who expressed an opinion, stated that there are no significant differences in the fabrication fee charged on top of

⁴⁰⁵ Form CO, Annex 6-RR.25.

⁴⁰⁶ Case M.4781 – *Norddeutsche Affinerie/Cumerio*, recitals 48 to 50.

⁴⁰⁷ Reply to request for information RFI 50, question 2.1.

⁴⁰⁸ Replies to question B.3 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091.

⁴⁰⁹ Replies to question B.3 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091.

⁴¹⁰ Replies to question C.4 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090.

the metal price in the EEA compared to other world regions⁴¹¹, which is an indication for a global market. Contrary to this, whereas the majority of respondents answered with '*I do not know*', all of the remaining competitors in copper rod submitted that there are such significant differences⁴¹². One copper rods customer explained in this context that '*[c]opper-rod is a commodity product with equal prices around the world. Price differences might only exist due to transport costs to areas without own copper-rod production. However, this has nothing to do with the fabrication fees*⁴¹³'. However, a copper rods competitor stated that '*[a]s some of copper rod producers outside EEA are benefiting from their own cathode production costs and LME rates, they are offering much lower rod premiums. Some of the rod qualities are not sufficient for some certain purposes but there are some very high quality rods as well. This is also current for the producers in EEA but they don't involve in this competition due to the customs duties*⁴¹⁴'. Finally, the majority of respondents⁴¹⁵ took the view that transport costs, import duties, shipment time, security of supply as well as non-EEA origin affect the ability of non-EEA sellers of copper rods (and copper shapes⁴¹⁶) to compete effectively for EEA customers⁴¹⁷, which is an indication for an EEA-wide market.

- (353) The Commission takes note of current Union import tariffs, which are, in general, 4.8% for copper rods imported from third countries⁴¹⁸.
- (354) The Commission notes, taking into account its previous Decision in *Norddeutsche Affinerie/Cumerio*, the Notifying Party's submission, the import tariffs as well as the results of the market investigation into account the Commission notes that there are indications both for a global and an EEA-wide market for copper rods. However, for the purposes of this Decision, it can be left open whether the relevant geographic market is global or EEA-wide as the potential vertical link of the Parties' activities involving copper rods does not result in a significant impediment to effective competition under any plausible geographic market definition.

8.3.6. Relevant geographic market of copper shapes

- (355) The Commission considered - in the case *Norddeutsche Affinerie/Cumerio* – that the relevant geographic market for copper shapes to be at least EEA-wide⁴¹⁹.

⁴¹¹ Replies to question B.5 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091.

⁴¹² Replies to question C.6 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090.

⁴¹³ Reply to question B.5.1 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091.

⁴¹⁴ Reply to question C.6.1 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090.

⁴¹⁵ Depending on the specific sub-question, sometimes a majority of all respondents and sometimes a majority of those respondents, who expressed an opinion.

⁴¹⁶ For copper shapes, the significance of these responses is limited as the most of the respondents indicated that their opinion about the effects on non-EEA suppliers applies only to copper rods; Replies to question B.6.2 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091; replies to question C.7.2 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090.

⁴¹⁷ Replies to question B.6 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091; replies to question C.7 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090.

⁴¹⁸ Replies to request for information RFI 26, question 1, Annex Q1; website https://madb.europa.eu/madb/euTariffs.htm###node_1174, product code 740710, accessed 29.03.2020.

⁴¹⁹ Case M.4781 – *Norddeutsche Affinerie/Cumerio*, recitals 86 to 89.

- (356) The Notifying Party agrees with the Commission's view in this case and submits that the geographic market is least EEA-wide⁴²⁰.
- (357) The market investigation did not provide a clear result. Amongst the copper shapes customers, who expressed an opinion (whilst the majority responded with '*I do not know*'), half of the respondents consider an EEA-wide transport of copper shapes to be economically viable⁴²¹. This points towards an EEA-wide market. Other respondents, however, considered transports of copper shapes only within a smaller area as viable, but also on a global scale⁴²². Amongst those competitors in copper shapes, who expressed an opinion, more than half of the respondents view a worldwide transport or at least on the EEA-level as viable⁴²³. With respect to differences in fabrication fees charged on top of the metal price between the EEA and other regions, the majority of both copper shapes customers as well as competitors answered with '*I do not know*'. However, amongst those respondents who expressed an opinion, a large majority opined that there are no such differences⁴²⁴, which indicates a global market for copper shapes.
- (358) The Commission notes that there are currently no Union import tariffs for copper shapes imported from third countries⁴²⁵.
- (359) The Commission, taking into account its previous Decision in *Norddeutsche Affinerie/Cumerio*, the Notifying Party's submission, as well as the results of the market investigation, notes that there are indications both for a global and an EEA-wide market for copper rods. In particular, the lack of any import tariffs for copper shapes speaks in favour of a geographical market that is broader than EEA-wide. However, for the purposes of this Decision, it can be left open whether the relevant geographic market is global or EEA-wide as the potential vertical link of the Parties' activities involving copper shapes does not result in a significant impediment to effective competition under any plausible geographic market definition.

9. COMPETITIVE ASSESSMENT

9.1. Horizontal non-coordinated effects: introduction

- (360) The Transaction mainly gives rise to horizontal overlaps as regards purchasing of copper scrap for refining, and in particular CSSR and copper scrap no.2. Where the merging Parties currently purchase the same products, the Merged Entity may enjoy greater purchasing power following the Transaction than each of the merging Parties prior to the Transaction.

9.1.1. Legal framework and theory of harm in this case

- (361) The main theory of harm of this case is that the Transaction might significantly increase buyer power of the Merged Entity for the purchasing of copper scrap for

⁴²⁰ Reply to request for information RFI 50, question 2.1.

⁴²¹ Replies to question B.3 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091.

⁴²² Replies to question B.3 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091.

⁴²³ Replies to question C.4 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090.

⁴²⁴ Replies to question B.5 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091; Replies to question C.6 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090.

⁴²⁵ Replies to request for information RFI 26, question 1, Annex Q1.

refining, and in particular CSSR in the EEA⁴²⁶. Given the economic features of the market (Section 9.1.2), the increase in buyer power might lead to significant price effects harming copper scrap suppliers, thus impeding effective competition on the market for purchasing copper scrap for refining, and in particular CSSR and copper scrap no.2 (even while scrap supply may only moderately be reduced). This assessment requires an analysis of the competitive conditions in upstream markets and an evaluation of the possible positive and negative effects of the Transaction. In particular in this case, as a result of a significant increase in refining charges (1) the marginal costs and thus likely the product price of industrial suppliers of CSSR might increase, and (2) the incentives to collect and invest in copper scrap recycling might decrease due to decrease in revenues of CSSR collectors and pre-processors.

- (362) The Commission notes that the Merger Regulation applies indiscriminately to all concentrations regardless whether the selling side of the market or the buying side of the market is concerned.
- (363) Recital (24) to the Merger Regulation provides that in order to ensure a system of undistorted competition in the internal market, the Regulation must permit effective control of all concentrations from the point of view of their effect on competition in the Union.
- (364) Article 2 of the Merger Regulation provides that *'[a] concentration which would significantly impede effective competition, in the common market or in a substantial part of it, in particular as a result of the creation or strengthening of a dominant position, shall be declared incompatible with the common market.'* In its appraisal, the Commission is required by the Merger Regulation to take into account, among others, the need to maintain effective competition in view of the structure of all the markets concerned, the market position of the undertakings concerned and their economic and financial power, as well as the alternatives available to suppliers and users.
- (365) Recital (25) of the Merger Regulation clarifies that the language of Article 2 encompasses the appraisal of the effects of concentrations in oligopolistic markets, and in particular those that may significantly impede effective competition by the elimination of important competitive constraints that the merging parties had exerted upon each other as well as by a reduction of the competitive pressure on the remaining competitors.
- (366) Recital (26) of the Merger Regulation clarifies that a significant impediment to effective competition generally results from the creation or strengthening of a dominant position and that therefore the reference to the creation or strengthening of dominance was added in Article 2 of the Regulation with a view to preserving the guidance which may be drawn from past judgments of the European Courts and Commission decisions under the previous Merger Regulation.
- (367) Recital (28) of the Merger Regulation clarifies that the Commission may publish guidance aimed at providing a sound economic framework for the assessment of concentrations, with a view to determining whether or not they may be declared compatible with the internal market.

⁴²⁶ The Commission notes that the legal framework discussed in Section 9.1.1 equally applies to the Commission's assessment of the likely effects of the increased buyer power for purchasing copper scrap no.2.

- (368) In this context, the Horizontal Merger Guidelines are relevant, which in paragraph 8 provides that, through its control of mergers, the Commission prevents mergers that would be likely to deprive customers (and in the present case, *mutatis mutandis* for the suppliers) of benefits of effective competition by significantly increasing the market power of firms, acknowledging that *'both suppliers and buyers can have market power'*.
- (369) In relation to possible anti-competitive effects of horizontal mergers, paragraph 61 of the Horizontal Merger Guidelines provides that mergers creating or strengthening buyer power in upstream markets may significantly impede competition, in particular by creating or strengthening a dominant position. Paragraph 61 also lists ways in which such mergers may harm competition, for example, by reducing the purchase of inputs and, in turn lead to reducing output in the final product market, or by using buyer power vis-à-vis its suppliers to foreclose rivals in the markets downstream of the purchasing market.
- (370) The Horizontal Merger Guidelines acknowledge that increased buyer power may also benefit competition. Paragraph 62 of the Horizontal Merger Guidelines provides that if buyer power lowers inputs costs without restricting downstream competition or total output, then a proportion of this reduction is likely to be passed on to consumers in the form of lower prices. This is the case because, in the absence of specific restrictions, such as capacity constraints, and as a consequence of reduced input costs, the merged firm would likely have an incentive to reduce downstream prices and sell more units in view of increasing its market share.
- (371) To assess whether a merger that creates or strengthens buyer power would significantly impede effective competition, paragraph 63 of the Horizontal Merger Guidelines requires the Commission to analyse the competitive conditions in the upstream markets and to evaluate the possible positive and negative effects of the merger.
- (372) **First**, the Commission will assess the likelihood of non-coordinated effects in line with paragraphs 24-36 of the Horizontal Merger Guidelines, which apply *mutatis mutandis* to the buyer side of the CSSR market, to investigate whether the Transaction would result in an increase in buyer power as a result of the elimination of important competitive constraints that the merging Parties exerted upon each other prior to the Transaction.
- (373) **Second**, according to paragraph 38 of the Horizontal Merger Guidelines: *'effective competition may be significantly impeded by a merger between two important innovators, for instance between two companies with 'pipeline' products related to a specific product market. Similarly, a firm with a relatively small market share may nevertheless be an important competitive force if it has promising pipeline products'*. The Commission will assess whether it is likely that the Transaction will have negative effects concerning the incentives of the Merged Entity to continue investing in developing smelting and refining technologies and capabilities.
- (374) **Third**, in the event that the Transaction would result in an increase in buying power, the Commission is required to carry out a balancing of possible positive and negative effects of the Transaction in line with paragraph 63 of the Horizontal Merger Guidelines (Section 9.2.6.3, see also 9.1.2.5). For the purposes of this assessment, the Commission considers that also paragraphs 76-88 of the Horizontal Merger Guidelines, which apply *mutatis mutandis*, are relevant. In particular, the Commission would consider whether any likely positive effects, or efficiencies are Transaction-specific, verifiable, and bring about benefits, firstly, in those relevant

markets where it is otherwise likely that competition concerns would occur, and secondly, benefits that might accrue to the customers on the related downstream markets.

- (375) In the Reply to the SO, the Notifying Party claims that as a matter of general principle, the Merger Regulation, as well as the Horizontal Merger Guidelines presuppose finding of consumer harm for establishing a significant impediment to effective competition. Therefore, also in buyer power cases, the Notifying Party claims that a merger that creates or strengthens the market power of a buyer may significantly impede effective competition only if it gives rise to consumer harm, whereas the theory of harm pursued by the Commission is based on assessing '*fairness of rent distribution*' between the suppliers and customers irrespective of its welfare effects⁴²⁷.
- (376) In this regard, the Commission notes that the Merger Regulation and the Horizontal Merger Guidelines do not preclude the Commission from intervening in buyer power cases where direct harm to consumers cannot be demonstrated. The legal test of the Merger Regulation is whether the merger can significantly impede 'competition', which includes the protection of the competitive process, even if it cannot be demonstrated that such reduction of competition affects consumer welfare. Under the specific circumstances of the case at hand, the Commission considered, whether the Transaction might give rise to significant price effects upstream⁴²⁸. In addition, the Commission also considered whether the Transaction would be likely to reduce the incentives of collectors and pre-processors to invest in copper scrap recycling and collection.
- 9.1.2. *Economic features of the market for the procurement of CSSR which could in principle be conducive to competitive harm resulting from the Transaction*
- 9.1.2.1. Copper scrap for refining is not a conventional output but a 'waste' that is likely to be generated largely independently of market conditions
- (377) Copper scrap for refining is not purposefully produced. It can either be EoL scrap or scrap that is generated as a by-product of industrial production processes. In both cases, the volume of generated copper scrap is unlikely to change due to changes in refining charges.
- (378) **First**, in the case of EoL scrap, the generation will be largely independent of refining charges as its generation follows the economic product life cycle. For this reason, the primary supply of such scrap is relatively inelastic (in other words, unresponsive to price changes)⁴²⁹. This is also true where scrap collectors and pre-processors act as intermediaries for the original scrap generators (such as collection yards, demolition companies, and waste incineration plants). Overall supply of EoL scrap is therefore primarily driven by the original supply of scrap generators, which likely is largely unresponsive to changes in refining charges⁴³⁰.

⁴²⁷ Reply to the SO, section 2.5, see also its Annex 3.

⁴²⁸ As the Commission did not find a significant increase in buying power, the likelihood of effects linked to the pass-through down the vertical chain of the increase in marginal costs of industrial copper scrap suppliers and, thus the likelihood of consumer harm, is not further discussed in this Decision.

⁴²⁹ However, some limited elasticity likely exists – for example where suppliers can engage in stocking and de-stocking practices. Therefore, some limited response in supply is likely in case of a price (refining charge) change.

⁴³⁰ While not a merger-specific factor, supply of end-of-life copper scrap is likely to some degree responsive to LME copper price changes.

- (379) **Second**, in the case of copper scrap for refining that is generated as a by-product of industrial production processes, these industrial manufacturers aim to minimise their output of copper scrap already pre-Transaction in order to maximise their profits. Thus, there will be little room to reduce scrap output should refining charges increase. At the same time, there will be no incentive to increase scrap output in case of a refining charge decrease, as this would directly decrease the margin on their industrial output, that is to say, their core business.
- (380) Under certain circumstances, some pre-processors and collectors might engage in the stocking and de-stocking of certain types of copper scrap (EoL scrap and new scrap) with the view of getting better prices due to LME fluctuations. However, such withholding might only affect the supply of copper scrap on the market to the extent that it is a viable strategy for a sufficiently long period of time (see Section 9.2.3.5).
- (381) Purchasing and refining of copper scrap exhibits service elements. There is a legal obligation to recycle certain types of copper scrap, including in particular CSSR. This guarantees constant copper scrap supply for the copper refiners. The industry language reflects the service characteristic of refining copper scrap with terms like ‘refining charge’, ‘offering a service’ and referring to suppliers as ‘customers’. Therefore, the assessment of the proposed Transaction needs to take this into account.
- (382) Indeed, an increase in refining charges might increase the marginal cost of production of industrial suppliers, since scrap is a direct by-product of the primary production processes of these firms.

9.1.2.2. The supply side for the procurement of copper scrap is fragmented

- (383) More than [...] distinct suppliers each year supply the Parties and none of the suppliers to the merging Parties supplies more than roughly [...] per cent of each of the Parties’ demand for copper scrap for refining, including in particular CSSR and Reply to request for information.
- (384) A substantial share of suppliers are recyclers and pre-processors with investments in equipment to treat copper scrap for refining, and in particular CSSR and copper scrap no.2. These investments imply that recyclers and pre-processors may be less flexible to choose the type of scrap they treat and thus are more vulnerable to refining charge increases.
- (385) Post-Transaction, the fragmented supply side might have more limited possibilities to engage in price negotiations with the Merged Entity. This effect would be more likely if it were established that there are no sufficient alternative outlets for copper scrap for refining, and in particular CSSR materials and copper scrap no.2. In this regard, the Commission will assess to what extent EEA copper refiners, as well as whether other outlets in the EEA and export options would likely exert an effective competitive constraint on the Merged Entity.

9.1.2.3. Concentration on the demand side for the procurement of copper scrap is higher than on the supply side

- (386) The Parties are the two largest purchasers of CSSR in the EEA pre-Transaction. Post-Transaction, concentration in the market for EEA-supplied CSSR will increase. The Commission will assess whether the increase in concentration will also increase the ability of the Merged Entity to increase significantly refining charges for CSSR.
- (387) In this regard, the Commission will consider whether rivalry between the Parties for purchasing and refining of CSSR as well as materials within relevant segments of the

CSSR, has been an important source of competition on the market. If the merging Parties are each other's closest substitutes in terms of copper scrap materials they purchase, the likelihood and seriousness of competition concerns may be particularly strong. In this sense, it is not required that the merging Parties are each other's closest substitutes for competition concerns to arise. However, the level of substitutability between each of the Parties' compared to the level of substitutability between the merging Parties, on the one hand, and other competitors, on the other hand, may be relevant for the assessment⁴³¹.

(388) As regards copper scrap no.2, the Notifying Party is the largest purchaser in the EEA pre-Transaction, while Metallo purchases relatively less important volumes in the market. The Commission will assess whether the increase in concentration will also increase the ability of the Merged Entity to increase significantly refining charges for copper scrap no.2.

9.1.2.4. The exercise of buyer power by the Merged Entity would have the potential to harm competition in the upstream market

(389) In the hypothetical case that the Merged Entity could exercise buyer power in the upstream market for the purchase of copper scrap for refining, in particular CSSR and copper scrap no.2 in the EEA to the extent that it would lead to a significant increase in refining charges, copper scrap supply would be affected only moderately because of relatively low elasticity of the copper scrap for refining supply.

(390) In particular, as regards the supply of CSSR, the Commission notes that it is plausible that copper refiners would reduce their intake of CSSR even if considered that their secondary copper smelters should run at full capacity (since operating below full capacity creates high opportunity costs). In a differentiated market of CSSR, the Commission considers that it might be possible for the Parties to reduce slightly their intake of at least parts of their CSSR inputs to achieve a significant increase in the CSSR refining charges. By adjusting the input mix of different CSSR (and/or non-CSSR materials) for smelting and refining operations, the Parties might marginally reduce intake of certain high-margin categories of CSSR and replace these quantities with other types of more readily available copper scrap, without having to reduce capacity utilisation of their refineries.

(391) The Commission further notes that while the reduction of profitability of copper scrap suppliers in and of itself would not be sufficient to give rise to a significant impediment to effective competition, the Transaction might create competitive damage in the (upstream) market for the supply of copper scrap by giving rise to significant increase in refining charge for the following reasons.

(392) **First**, an effective exercise of buyer power by the Merged Entity that would give rise to a significant increase in refining charges might increase effective marginal costs of industrial suppliers for their primary products.

(393) Copper scrap for refining is a by-product of the primary production processes of industrial companies. Therefore, increases in refining charges post-Transaction would effectively increase (one-for-one) the marginal costs of production of suppliers of industrial by-products or, similarly also for companies treating certain types of old scrap like IBA containing copper. These types of copper scrap for refining account for the majority of the total supply for at least one of the Parties.

⁴³¹ Horizontal Merger Guidelines, paragraph 28 applied *mutatis mutandis*.

- (394) Accordingly, while the proposed Transaction concerns buyer power, it has similar features to those of an ordinary seller power case. Indeed, refining charges can be seen as a cost of production like any other one.
- (395) In short, since copper scrap for refining is a by-product of the production processes of industrial suppliers, the exercise of buyer power by the Merged Entity might also be viewed as indirectly raising the input prices for industrial suppliers via an increased refining charge. This is because on balance the industrial suppliers pay more for the copper they use as an input, since they receive less for the copper scrap.
- (396) **Second**, by decreasing revenues of recyclers and pre-processors, the Transaction might decrease their incentive to invest in recycling equipment and recycling technology and overall reduce the incentive to collect recycling material.
- 9.1.2.5. Consumers downstream from the Parties would not benefit from an increase in upstream buyer power
- (397) The exercise of buyer power may sometimes also lead to positive effects for the customers of the merging parties. This can be the case if the Merged Entity has the ability and incentive to pass-on its decreased purchasing costs to its own downstream customers in the form of lower prices. It is therefore necessary to assess whether or not such countervailing benefits may exist in the present case.
- (398) In general, the Commission notes that such consumer benefits are far more likely to arise in cases of bilateral bargaining between buyers and sellers in a market where both sides are concentrated. In such cases, concentrated buyers can sometimes act as 'purchasing agents' for fragmented downstream consumers, who would otherwise face dominant sellers with substantial market power. Conversely, in cases where a large number of small, fragmented sellers faces a smaller number of larger, buyers (as in the present case), consumers are far less likely to benefit from further concentration on the buying side. Moreover, in principle the effective pass-on to the consumers downstream depends on the competition conditions in the downstream market(s).
- (399) However, in the current case, the Commission considers that it is not likely that the Parties might pass-on the benefits of lower input prices to its downstream customers (for example, purchasers of copper cathodes) because the merged entity is unlikely to increase its output to serve downstream customers given that it will likely reduce, or at least not increase, its intake of copper scrap for refining upstream. This is so regardless of the competitive structure of the downstream markets.
- (400) **First**, on the demand side, the Parties already operate their smelters [...]. This implies that it would be very difficult for the Merged Entity to make substantially more sales downstream. The Merged Entity could only have an incentive to lower the prices at which it sells its copper output downstream if this would allow it increasing its output. Otherwise, such a price reduction downstream merely reduces the Merged Entity's profit margin, without bringing about any benefit in terms of increased sales.
- (401) **Second**, on the supply side, given that scrap supply is largely inelastic⁴³², suppliers are not likely to augment materially their supply of scrap in reaction to changes in refining charges. Indeed, industrial suppliers already can be expected to supply

⁴³² Largely inelastic with respect to movements in the refining charge. Supply shows some degree of elasticity with respect to (the non-Merger related) LME copper price movements. See also Section 9.2.3.5 on the ability of some suppliers to engage in stocking and de-stocking of copper scrap.

practically whatever copper waste they have to dispose of to the market (either directly or via pre-processors and collectors). Without an increase in copper scrap input, however, it would not be possible for the Merged Entity to increase sales of recycled copper products downstream. Furthermore, for this reason, the Merged Entity would not be capable of materially increasing sales, and thus will have no incentive to lower its price of copper to its customers downstream.

- (402) **Third**, the Commission notes that the Notifying Party does not claim any benefit accruing to its downstream customers from alleged lower input costs. It argues that changes on the input market for copper scrap would not materially affect prices on downstream output markets (for example, customers of cathodes, rods or shapes) (to defend against the possible allegation that monopsony power might harm copper purchasers on the downstream market)⁴³³.
- (403) In summary, the Commission considers that it would not be likely that the Merged Entity would pass-on the input price reduction to its customers downstream post-Transaction.
- (404) However, under the specific circumstances of the case at hand, the Commission notes that harm to consumers downstream could not be *a priori* excluded. If an increase of marginal costs for industrial suppliers (see recitals (392) to (395)) were demonstrated, it could be expected, as in seller power cases, that such increase would be passed-on by the Merged Entity's trading partners, at least partially along the vertical chain, and would therefore eventually negatively affect final consumers. In such a case, these price increases would likely be spread out over a large variety of different industries and thereby (ultimately) a variety of final consumers.

9.1.2.6. Theory of harm in summary

- (405) In view of the competitive dynamics for the purchasing of copper scrap for refining, and in particular CSSR and copper scrap no.2, as well as pursuant to the legal framework, the Commission considered the theory of harm that is relevant for the assessment of the Transaction as follows:
- (1) The Transaction might lead to the elimination of a competitive constraint in the market for the purchase of CSSR and copper scrap no.2, which in turn might result in a substantial increase in buyer power on the CSSR market in the case (in particular) of large combined purchasing shares, limited alternatives for sellers, and fragmented nature of sellers.
 - (2) Since the supply of copper scrap for refining might tend to be largely inelastic, the increase in buyer power might likely lead to significant price effects harming suppliers while supply of copper scrap for refining may be reduced only moderately.
 - (3) While the reduction of revenue (or profitability) of suppliers in and of itself might not be sufficient to give rise to a significant impediment to effective competition, copper scrap suppliers, and in particular collectors and pre-processors might be faced with reduced incentives to collect and invest.
 - (4) In addition, in particular for industrial suppliers, which are important suppliers to the Parties, and effectively pay a refining charge to refiners, the exercise of buyer power in this case might have direct, marginal cost increasing effects as would be the case in a case of seller power.

⁴³³ Reply to the SO, Annex 2, section 2.2.1; 'No viable buyer power theories of harm'.

- (5) If it is found to have considerably increased its buyer power, the Merged Entity might not increase its intake of copper scrap for refining, in particular CSSR and scrap no.2. In that case, the Merged Entity would also not materially increase its output downstream. Without increased output and sales downstream, the Merged Entity might not have an incentive to pass-on the benefit of lower purchase prices to its downstream customers. In addition, the negative effects on downstream markets might not be *a priori* excluded, given the likely pass-down of higher input costs by industrial suppliers via price increases for their final products (see point (4) above).

9.1.3. *Structure of the assessment*

- (406) In light of the defined legal and economic framework in Sections 9.1.1 and 9.1.2, the Commission will first assess the likely effects of the Transaction for purchasing of CSSR (Section 9.2). The Commission will subsequently assess the likely effects of the Transaction regarding purchasing of copper scrap no.2 (Section 9.3).
- (407) In particular as regards purchasing of CSSR, in line with Article 2 of the Merger Regulation and the Horizontal Merger Guidelines the Commission will, **first**, assess the purchasing shares, which provide useful indications of the market structure and the competitive importance of the merging Parties and their competitors (paragraphs 14 to 21, 27 of the Horizontal Merger Guidelines) (Section 9.2.1). In particular, following the Reply to the SO, the Commission has reviewed its preliminary conclusions concerning combined market shares of the Parties with the result that, following the Transaction, the Merged Entity will have moderate combined purchasing shares for CSSR in the EEA (below 30%).
- (408) Accordingly, the Commission notes that given this finding, the premise of the theory of harm concerning large purchasing shares will not be met. Accordingly, the Commission cannot establish, on the basis of the facts of the present case, that the Transaction would result in a significant increase in buyer power.
- (409) **Second**, in line with paragraphs 28-30 of the Horizontal Merger Guidelines applied *mutatis mutandis*, the Commission will assess the market position of the merging Parties, their technological and metal valorisation capabilities and commercial focus concerning purchasing of copper scrap for refining, that is to say, whether the Transaction is likely to eliminate competition between two important and close competitors. Based on the overall assessment of evidence available, and in particular regarding the complementary capabilities and purchasing behaviour of the merging Parties, as well as their focus on different groups of suppliers, the Commission will establish that the Parties cannot be considered close competitors pre-Transaction (Section 9.2.2).
- (410) **Third**, the Commission will assess, in line with paragraph 31 of the Horizontal Merger Guidelines *mutatis mutandis*, the availability of alternative outlets for suppliers. In particular, the Commission will assess whether suppliers would be in a position to switch to other EEA copper refiners, ingot makers, semi-manufacturers, and non-copper refiners, to defeat any likely increase in refining charges following the Transaction. The Commission will also assess the viability of exports to non-EEA refiners and other outlets outside the EEA, as well as the option for suppliers to upgrade copper scrap materials or engage in stocking and de-stocking as an effective competitive constraint. In this regard and on the basis of available evidence, the Commission will establish that, on balance, suppliers of CSSR would likely have sufficient effective alternatives to the Merged Entity to which they can sell CSSR (Section 9.2.3).

- (411) **Fourth**, the Commission will assess whether the reaction of competitors to the merger is likely to defeat any likely increase in refining charges through entry and expansion (see paragraphs 32 to 35 of the Horizontal Merger Guidelines applied *mutatis mutandis*). In this regard and on the basis of an overall assessment of the available evidence, the Commission will establish that, on balance, barriers to entry, and in particular barriers to expansion would likely not prevent actual or potential competitors from constraining the buying power of the Merged Entity in the market for CSSR in the EEA post-Transaction (Section 9.2.4).
- (412) **Fifth**, the Commission will also assess in line with paragraph 38 of the Horizontal Merger Guidelines whether the Transaction will have any effects on the Merged Entity's incentives to invest in smelting and refining capabilities. In light of the overall assessment of available evidence, the Commission will establish that the Transaction would likely not reduce the incentives of the Merged Entity to invest and innovate, in particular given the larger gains of successful innovation post-Transaction due to larger volumes of CSSR processed, the pressure of innovation competition from other refiners, as well as increasing regulatory requirements. (Section 9.2.5).
- (413) **Sixth**, the Commission will carry out a balancing of positive and negative effects of the Transaction. In this regard, the Commission will establish that, on balance on the basis of evidence available to it, the Transaction is unlikely to lead to a significant price effect, and that any price effect would possibly be counteracted, at least in part, by technological synergies between the Parties (Section 9.2.6).

9.2. Horizontal non-coordinated effects: CSSR

9.2.1. *Market structure: the Transaction leads to a moderate combined purchasing share for CSSR*

9.2.1.1. Introduction

- (414) In the SO, the Commission presented the results of its market reconstruction and concluded, on a preliminary basis, that the Transaction would have led to a high degree of concentration with a large combined purchasing share and large combined refining and capacity shares for the Merged Entity⁴³⁴. In particular, the Parties' combined EEA purchasing share was estimated at [40-50]%, the combined EEA refining share at [60-70]%, and the combined EEA capacity share at [50-60]%.
- (415) However, after reviewing the Notifying Party's claims made in its Reply to the SO, the Commission considers that the preliminary conclusions presented in the SO need to be reconsidered. Consequently, the present section demonstrates that, after a careful review of the market reconstruction, the Commission concludes that the Transaction leads to a moderate combined purchasing share for CSSR.
- (416) The present section is organised as follows: Section 9.2.1.2 summaries the Notifying Party's claims presented in its Reply to the SO; Section 9.2.1.3 presents the results of the market reconstruction and in particular, first it explains the methodology used for collecting and elaborating the market data, then it explains the modifications made to the purchasing and refining shares following an analysis of the Notifying Party's claims, and finally it presents the revisited purchasing, refining and capacity shares.

⁴³⁴

SO, section 8.2.

9.2.1.2. The Notifying Party's view in its Reply to the SO

- (417) In its Reply to the SO, the Notifying Party did not agree with the Commission's preliminary market reconstruction presented in the SO, and submitted its proposed corrections of the 2018 purchasing shares in the EEA. In essence, the Notifying Party recalculated the purchasing shares in the data room, based on two sets of corrections: leading to a reduction of the Parties' CSSR purchases, and leading to an increased CSSR market size⁴³⁵.
- (418) With respect to the proposed corrections leading to a reduction of the Parties' CSSR purchases⁴³⁶, the Notifying Party considers that the Commission's preliminary market reconstruction needs to be adjusted on account of: (i) some clerical errors; (ii) the reply to RFI 36, and in particular Metallo's updated volumes of IBA; (iii) a correction of Aurubis' purchases, due to Aurubis' erroneous inclusion of the scrap purchased for direct melt (and therefore not part of the CSSR market); (iv) certain double counting of Aurubis' purchases of industrial residues containing copper; (v) some of Aurubis' purchases to be classified as e-scrap (and therefore not considered as CSSR), and (vi) some of the tin-bearing scraps purchased by both the Parties to be re-classified as copper scrap no.2 (and therefore not considered as CSSR); and (vii) the so-called 'auxiliary materials' such as copper-containing sand, which were considered as CSSR in the Parties' purchased volumes, should be removed from the Parties volumes to ensure consistency with the calculation of CSSR volumes purchased by the Parties' competitors.
- (419) With respect to the proposed corrections leading to an increased CSSR market size⁴³⁷, the Notifying Party considers that the Commission's preliminary market reconstruction underestimates the CSSR market size because: (i) it did not sufficiently take into account CSSR purchased by market participants that are not copper refiners (as for example, non-copper refiners, ingot makers, manufacturers of semi-finished products, etc.); and (ii) the exports are underestimated, mainly because the set of data against which the Commission compared its estimates of the exports does not include all the CSSR exports reported by Eurostat.
- (420) After implementing the claimed changes, the Notifying Party estimates that the Parties' purchasing shares in the EEA for the year 2018 would be [5-10]% for Aurubis, and [10-20]% for Metallo, which would lead to a [20-30]% combined purchasing share. The next competitors to the Merged Entity would be Brixlegg and Boliden, both with a purchasing share in the range of 5 to 10%⁴³⁸.

9.2.1.3. The Commission's market reconstruction finds that the Transaction would lead to a moderate combined purchasing share for CSSR.

- (421) After analysing the Notifying Party's claims, the Commission concluded that, on balance, some of these claims should be accepted, while other claims should be rejected. On the basis of the revised calculations of the market shares, as explained in recitals (430) to (460), the Commission concludes that the Transaction would lead to a moderate combined EEA purchasing share for CSSR.
- (422) This section is organised as follows: first it explains the methodology used for the market reconstruction. Then it analyses the claims of the Notifying Party in the

⁴³⁵ Reply to the SO, Annex 4.

⁴³⁶ Reply to the SO, Annex 4, section 3.

⁴³⁷ Reply to the SO, Annex 4, section 4.

⁴³⁸ Reply to the SO, Annex 4, Table 19.

Reply to the SO, and explains which ones, on balance, are accepted, and which ones are rejected. Finally, the resulting purchasing shares, refining shares and capacity shares are presented and discussed.

(A) Market reconstruction methodology

- (423) The Notifying Party submits that the ‘assessment of purchasing markets mirrors that of conventional selling markets’⁴³⁹. When calculating purchasing shares for an EEA-wide market, ‘the computation [...] must take into account the purchase of all buyers of copper scrap originating from within the EEA, regardless of their downstream application or their location’⁴⁴⁰. According to the Notifying Party, this implies ‘to include any buyers active in downstream markets other than copper smelting or refining, include any exports made by EEA-based suppliers to non-EEA based buyers, and exclude any imports made by EEA-based buyers’⁴⁴¹.
- (424) The Commission considers that purchasing shares aim at identifying, *inter alia*, the competing sources of demand for the suppliers on the relevant market. Therefore, and in agreement with the Notifying Party’s claim, the Commission takes into account demand from non-EEA purchasers and from purchasers that are not copper refiners insofar as such demand is met by supply of CSSR in the EEA. The Commission also agrees with the Notifying Party’s claim that purchasing shares should consider only CSSR sold by suppliers located in the EEA.
- (425) For the market reconstruction, the Commission requested information to market participants on both the supply and the demand side of the EEA market for CSSR.
- (426) On the supply side, the Commission included information from a wide variety of industrial suppliers, collectors and pre-processors, as well as traders. Information for these companies is only available for the year 2018. However, as explained in Section 1.2 of the Annex, due to the fragmented nature of the supply-side, a market reconstruction relying solely on supply-side sources is not feasible. Each year, each of the Parties, for example, purchases copper scrap for refining from more than [...] suppliers (see also Section 9.2.2.3). Each of these suppliers is responsible only for a small part of the total demand by the Parties.
- (427) A pure demand-side approach to market reconstruction is not feasible either. While the Commission was able to identify and obtain information from all the EEA refiners of CSSR and from the majority of non-copper refiners in the EEA, for all the other purchasers of CSSR, neither the Commission, nor the Notifying Party were able to identify a satisfactory number of the various purchasers based in the EEA.
- (428) Therefore, the Commission’s market reconstruction relied on a combination of demand data and supply data.
- (429) With respect to exports to outside the EEA, although in the SO the Commission attempted to estimate CSSR exports through demand and supply data (and attempted to compare them with certain trade data from Eurostat), as explained in Section 1.5 of the Annex, the Commission ultimately decided to only rely on trade data from

⁴³⁹ ‘On the calculation of buying shares in purchasing markets’, page 1, submitted by the Notifying Party on 19.12.2019.

⁴⁴⁰ ‘On the calculation of buying shares in purchasing markets’, page 6, submitted by the Notifying Party on 19.12.2019).

⁴⁴¹ ‘On the calculation of buying shares in purchasing markets’, page 6, submitted by the Notifying Party on 19.12.2019).

Eurostat. This decision was taken in view of the Notifying Party's claims demonstrating that the preliminary export estimate in the SO was understated.

(B) Modification of the market shares, versus those presented in the SO

- (430) In recitals (431) to (447), the individual claims of the Notifying Party mentioned in Section 9.2.1.2 are addressed and the actions taken by the Commission in finalising the market reconstruction are briefly explained. More details of the revised calculation are discussed in Section 1.5 of the Annex.
- (431) **First**, regarding the Notifying Party's claim concerning some clerical errors (claim/point (i) in recital (418)), the Commission corrected some typographical errors made when collecting the raw data for the market reconstruction. However, after verification, other indications by the Notifying Party of alleged clerical errors did not reveal any actual error.
- (432) **Second**, with respect to the Notifying Party's claim/point (ii) in recital (418) regarding the reply to RFI 36, and in particular Metallo's updated volumes of IBA, the revisited figure for the Metallo's IBA as suggested by the Notifying Party was used for the market reconstruction because the figures used in the SO were indeed based on an outdated version of that RFI.
- (433) **Third**, with respect to the Notifying Party's claim (iii) in recital (418) regarding the erroneous inclusion of the scrap purchased for direct melt in its CSSR purchases, the Notifying Party provided sufficient evidence of such an erroneous inclusion. Direct melt is not part of the CSSR product market because, as explained in Section 7.1.3.2, it is used directly for manufacturing semi-finished products without any refining or smelting process. These volumes have been removed from the Notifying Party's CSSR purchases.
- (434) **Fourth**, with respect to the Notifying Party's claim (iv) in recital (418) regarding double counting of its volumes of industrial residues, the Notifying Party provided sufficient evidence of such erroneous double counting⁴⁴² and, therefore, the volume in the CSSR segment "other CSSR" has been reduced by the volume which was added to the segment "industrial residues containing copper".
- (435) **Fifth**, regarding the Notifying Party's claim (v) in recital (418) that some of Aurubis' purchases should be classified as e-scrap (and therefore not considered as CSSR), after analysing the claim and the evidence provided by the Notifying Party, on balance, the Commission decided to remove these quantities from Aurubis' CSSR purchases.
- (436) Due to a mismatch between Aurubis and some of its competitors with respect to the definition of e-scrap, Aurubis erroneously reported some e-scrap volumes as CSSR. According to the definition provided to the market participants responding to the market reconstruction enquiries⁴⁴³, e-scrap is defined as "*(mostly) printed circuit boards*" (PCBs).
- (437) Aurubis included waste electrical and electronic equipment shredder fractions or scrap from electronic parts which are not PCBs in the CSSR category "other". However, this classification does not seem to be consistent with those of third parties, which classify as e-scrap certain waste electrical and electronic equipment

⁴⁴² Reply to the SO, Annex 4 "Data Room Report on Purchasing Share Calculation", section 3.1.4.

⁴⁴³ Request for information 30; request for information 31, and requests for information to third parties, sent on 18 October 2019.

shredder that is not PCBs. Therefore, based on the argumentation of the non-confidential data room report (see recital (418)), the Commission considered appropriate to exclude waste electrical and electronic equipment shredder from the CSSR market.

- (438) **Sixth**, the Commission does not agree with the line of argumentation concerning the Notifying Party's claim (vi) in recital (418) regarding some of the tin-bearing scraps purchased by both the Parties that should allegedly be re-classified as copper scrap no.2.
- (439) The Notifying Party claims that certain companies purchase copper scrap no.2 and therefore are likely to also purchase some copper scrap no.2 with tin contents. According to the Notifying Party, when reporting data for the Commission's market reconstruction, those companies did not include copper scrap no.2 containing tin in the tin-bearing copper scrap volumes. The Notifying Party claims that this incorrect reporting is due to the fact that most companies do not track tin-bearing copper scrap separately. This claim is highly speculative and no evidence of inconsistency between the Parties' and third parties' data is provided. In particular, no evidence is provided that any of the copper scrap no.2 purchased by these companies should instead be classified as tin-bearing copper scrap according to the definition provided by the Commission to the respondents to the market reconstruction⁴⁴⁴.
- (440) With respect to the claim that the wrong reporting of competitors is due to the fact that they do not track tin-bearing copper scrap separately, the Notifying Party itself, which also does not track tin-bearing copper scrap, has correctly classified certain quantities of copper scrap no.2 containing tin as copper scrap no.2 in response to the Commission's market reconstruction request. The Notifying Party was therefore able to distinguish between the material to be classified in the copper scrap no.2 category and the tin-bearing copper scrap category.
- (441) The claim that other copper refiners would have been unable to do so, supported simply by the statement that some copper scrap no.2 contains tin, is therefore not supported by evidence and is not consistent with the Notifying Party's own response to the Commission's market reconstruction.
- (442) **Seventh**, the Notifying Party also claims that, some of the Parties' competitors responding to the market reconstruction did not include the so-called 'auxiliary materials' such as copper-containing sand, which instead are considered as CSSR in the Parties' purchased volumes (see claim/point (vii) in recital (418)). For this reason, according to the Notifying Party, the purchases of auxiliary materials should also be removed from the Parties' purchases.
- (443) The Notifying Party's line of argumentation is based on the discrepancy between volumes stated in a public report of one competitor and this competitor's purchases reported to the Commission for the market reconstruction.
- (444) However, the Commission considers that in this case the purchased volumes reported by that competitor to the Commission in response to a request for information should be considered more reliable than information made available to the general public. This is because the request for information is specifically tailored to the product market at hand (which, in this case, concerns CSSR and other markets), whereas

⁴⁴⁴ The definition for tin-bearing copper scrap is copper scrap 'including tinned copper scrap, copper-tin alloy scrap, tin-containing residues, etc',

volumes reported in publicly available reports do not necessarily classify products according to the market definitions established by the Commission.

- (445) Therefore, the line of argumentation of the Notifying Party is deemed as too speculative and, for the purpose of calculating purchasing and refining shares, the Commission maintained the volumes reported by third parties in response to the requests for information.
- (446) With respect to the proposed corrections leading to an increased CSSR market size, in the first place, the Commission does not accept the Notifying Party's proposed correction for considering alleged additional purchases from non-copper smelters. The proposed correction appears to be too speculative and assumes that all the market participants are capable to purchase and process equally the same types of CSSR⁴⁴⁵. That assumption is unfounded for the CSSR market, which is highly differentiated and characterised by different capabilities of the various market participants.
- (447) In the second place, with respect to the Notifying Party's claim that the data considered by the Commission underestimates CSSR exports, the Commission analysed the various Eurostat data indicated by the Notifying Party, and, upon review it considers on balance that this claim is overall correct and the export values are therefore reviewed. Accordingly, the Commission adopts all additional Eurostat export volumes brought forward by the Notifying Party except of Eurostat data concerning exports of waste and scrap of other metals (namely, nickel, lead, zinc, tin and precious metals).

(C) Purchasing shares, refining shares and capacity shares

- (448) Table 2 reports the purchasing shares resulting from the market reconstruction and shows that Aurubis and Metallo have, respectively, a share of [10-20]% and [10-20]% of the market for the purchase of CSSR in the EEA, which lead to a combined share of [20-30]%. The same table also shows that a large part of CSSR, that is 43%, is exported to outside the EEA, while other copper refineries such as Brixlegg and Boliden have purchasing shares that are each in the range of 5-10%, and KGHM and Umicore, have shares in the range of 0-5%. Other market participants such as ingot makers, manufacturers of semi-finished products, and non-copper refiners (collectively referred to as 'Others'), have a cumulative purchasing share of 10-20%.

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In the Reply to the SO, Annex 4, section 4.1, the Notifying Party claims that it deals with non-copper smelters which allegedly purchase about 10.5 ktonnes of CSSR. This estimate is based on the amount of some copper scraps derived from the processing of these CSSR quantities and sold to Aurubis. By dividing this CSSR estimate by Aurubis' purchasing shares, the resulting value of 100 000 tonnes is assumed to be the yearly purchases of all non-copper smelters. However, only a minor number of CSSR purchasers can buy from non-copper refineries their by-products originated from CSSR, and therefore the proposed calculation of the Notifying Party appears to largely overestimate the consumption of non-copper smelters.

Table 2: Purchasing shares in 2018 of EEA-supplied CSSR

	'000 tonnes	Purchasing share
Aurubis	[...]	[10-20]%
Metallo	[...]	[10-20]%
Parties Combined	[...]	[20-30]%
Brixlegg	[...]	[5-10]%
Boliden	[...]	[5-10]%
KGHM	[...]	[0-5]%
Umicore	[...]	[0-5]%
Others	[...]	[10-20]%
Exports	425.9	43%
Total	990.5	100%

Source: Commission's market reconstruction.

- (449) It should be noted that the Parties' combined purchasing share of [20-30]% is very close to, but nevertheless above, the threshold of 25%, below which *'by reason of the limited market share of the undertakings concerned, [concentrations] [...] may be presumed to be compatible with the common market'*⁴⁴⁶.
- (450) It should be recalled that in other similar cases, the Commission considered that a merger with purchasing shares above, and sometimes significantly above 25% did not lead to a significant impediment to effective competition.
- (451) For example, in case *M.7930 ABP Group/ Fane Valley Group /Slaney Foods*, although the combined shares of the parties for purchasing certain types of live cattle for slaughter was as high as [40-50]%⁴⁴⁷, the Commission concluded that the merger does not raise serious doubts as to its compatibility with the internal market with respect to non-coordinated effects. This conclusion is based on a number of factors analysed in the competitive assessment⁴⁴⁸, which include the lack of closeness of competition between the merging parties, the possibility for the suppliers (that is to say, the farmers) to switch purchasers, and the existence of competitors' spare capacity. In that case the Commission also considered that the merger would likely be beneficial for competition in the downstream market⁴⁴⁹.
- (452) In terms of market concentration, uncertainties due to the real number of exports do not allow to reliably calculate HHI values. As explained in Section 2 of the Annex to this Decision, the Commission calculated HHI values, based on two assumptions, which lead to a range of the HHI value post-Transaction between [900-1000] and [2000-25000], and in both cases with a delta of [300-400].
- (453) In addition to purchasing shares, the Commission also calculated refining shares. While purchasing shares are indicative of purchasers' market power *vis-à-vis* EEA

⁴⁴⁶ Merger Regulation, recital 32; and Horizontal Merger Guidelines, paragraph 18.

⁴⁴⁷ Case M.7930 *ABP Group/Fane Valley Group/Slaney Foods*, table 4.

⁴⁴⁸ Case M.7930 – *ABP Group/Fane Valley Group/Slaney Foods*, section 5.2.3.3.

⁴⁴⁹ Case M.7930 – *ABP Group/Fane Valley Group/Slaney Foods*, paragraphs 361-364.

CSSR suppliers – because they represent the relative volume of CSSR that each purchaser buys from EEA CSSR suppliers, refining shares are indicative only of the relative strength of a certain EEA purchaser *vis-à-vis* its EEA competitors, without considering the constraints that non-EEA purchasers exert on it.

- (454) This is the case because, while purchasing shares include also CSSR volumes exported to outside the EEA, refining shares are only based on the purchases made by EEA purchasers. For completeness, it should be noticed that refining shares also include CSSR imported into the EEA, while purchasing shares do not because they are meant to be indicative of the market power of EEA purchasers *vis-à-vis* their EEA suppliers and therefore purchases from outside the EEA are excluded.
- (455) As a complement to refining shares, capacity shares indicate how refining capacity is split among EEA market participants. As such, similarly to refining shares, capacity shares do not consider market participants located outside the EEA.
- (456) It should be noticed that for several CSSR purchasers it is not possible to distinguish between the capacity used for CSSR from that used for other copper scraps for refining. Therefore, for the purpose of the Decision, capacity shares refer to the capacity for refining.
- (457) Table 3 and Table 4 show the results of the market reconstruction concerning, respectively, refining shares and capacity shares. As the tables indicate, the combined refining shares and capacity shares of the Parties are relatively large, indicating their strength *vis-à-vis* other EEA purchasers, which have much less refining capacity and therefore purchase and refine much less CSSR.
- (458) However, in the present case, for the reasons explained in recitals (449) to (455), large refining shares and large capacity shares alone are not indicative of market power, due to the high volume of exports representing an important competitive constraint on the EEA purchasers, and therefore on the Merged Entity. Further, EEA non-refiners, as for example ingot makers and manufacturers of semi-finished products, have non-negligible purchases of EEA-supplied CSSR and therefore they also constrain the Merged Entity.

Table 3: EEA CSSR refining shares in 2018

	'000 tonnes	Refining share
Aurubis	[...]	[20-30]%
Metallo	[...]	[30-40]%
Parties Combined	[...]	[60-70]%
Brixlegg	[...]	[10-20]%
Boliden	[...]	[5-10]%
Umicore	[...]	[5-10]%
KGHM	[...]	[0-5]%
Other	[...]	[0-5]%
Total	720.9	100%

Source: Commission's market reconstruction.

Table 4: EEA copper scrap for refining capacity shares in 2018

	'000 tonnes	CSSR capacity share
Aurubis	[...]	[30-40]%
Metallo	[...]	[20-30]%
Parties Combined	[...]	[50-60]%
Boliden	[...]	[10-20]%
Brixlegg	[...]	[10-20]%
Umicore	[...]	[5-10]%
KGHM	[...]	[5-10]%
Other	[...]	[0-5]%
Total actual input capacity	1 307.6	100%

Source: Commission's market reconstruction.

(459) As a final remark, it should be noted that, due to the complexity of the market reconstruction in this case (which collected data from more than 110 market participants), purchasing shares, refining shares and capacity shares refer only to the year 2018 because some sets of data of certain market participants were available only for that year.

(460) Therefore, based on the evidence presented in the present section, the Commission on balance concludes that the Transaction leads to a moderate combined purchasing share for CSSR. The Transaction also leads to large combined refining shares and to large combined capacity shares, which by themselves however are not indicative of market power in the present case.

9.2.2. Pre-Transaction the Parties do not compete closely

9.2.2.1. Introduction

(461) In a highly differentiated market, like the market for CSSR, closeness of competition between the Parties and with their rivals is of high importance.

(462) According to the Horizontal Merger Guidelines⁴⁵⁰, in the case of differentiated products 'some products are closer substitutes than other [and] [t]he higher the degree of substitutability between the merging firms' products, the more likely it is that the merging firms will raise prices significantly'. With respect to the Parties' rivals, and the importance of their closeness of competition, the same paragraph of the Horizontal Merger Guidelines explains that '[t]he merging firms' incentive to raise prices is more likely to be constrained when rival firms produce close substitutes to the products of the merging firms than when they offer less close substitutes'.

(463) While the constraints exerted by the Parties' competitors are analysed and demonstrated in Section 9.2.3 and in particular in 9.2.3.1 with respect to other copper refiners, the present section analyses to what extent pre-Transaction the Parties compete closely with each other for purchasing CSSR.

(464) Contrary to what the Commission found on a preliminary basis in the SO, the analysis demonstrates that pre-Transaction, a certain level of complementarity

⁴⁵⁰ Horizontal Merger Guidelines, paragraph 28.

between the Parties exists, and therefore on balance the Parties cannot be regarded as close competitors.

9.2.2.2. Technological capabilities and purchasing behaviour of the Parties show a certain degree of complementarity.

- (465) The market investigation indicated that, although a certain rivalry between the Parties exists, their technological capabilities and purchasing behaviour show a certain degree of complementarity.
- (466) In its market reconstruction, the Commission calculated the Parties' and their rivals' shares in certain segments of the CSSR market, such as industrial residues containing copper, tin-bearing copper scrap, IBA, and copper-iron scraps⁴⁵¹.
- (467) Although after the corrections of the market reconstruction explained in Section 9.2.1.3 and in the Annex, the Parties' combined shares are relatively smaller than those set out in the SO, for some of those market segments the Parties' combined shares remain relatively large. Typically, large segment shares would *prima facie* indicate that the Parties compete closely in these segments. However, as explained in the following, a deeper analysis of these market segments reveals that the Parties' activities are, to a large degree, complementary to another, and therefore the Parties do not compete closely.
- (468) As explained in Section 2 of the Annex, for IBA, for example, the Parties combined EEA segment share is [50-60]%, for tin-bearing copper scrap is [40-50]%, and for industrial residues containing copper is [40-50]%.
- (469) Notwithstanding the Parties' large combined shares in those segments, a detailed analysis does not support that the Parties pre-Transaction compete closely in the CSSR market.
- (470) **First**, when the individual market segments are analysed, the capabilities of the Parties, and consequently their purchasing behaviour appear to be somehow complementary, as explained in Aurubis' internal documents produced during the due diligence process on Metallo.
- (471) For example, a document produced by Aurubis' vice president of the business division of Recycling Raw Materials analyses in details the various CSSR materials purchased by Metallo and compare them with Aurubis' purchases⁴⁵². The conclusion of this analysis is that a large degree of complementarity exists and therefore there is very limited competition between the Parties.
- (472) With respect to residues, the document explains that there is [...].
- (473) With respect to another type of CSSR, the heavy metal shredder, which includes, among others, IBA, the document explains that [...].
- (474) With respect to tin-bearing (and lead-bearing) copper scraps, the document explains that [...].
- (475) With respect to copper-iron scraps, the document explains that [...].
- (476) **Second**, the complementary purchasing behaviour of the Parties appears also when the CSSR market is analysed under different criteria of segmentation. In one of its

⁴⁵¹ SO, Table 4.

⁴⁵² 'White paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', Annex 9, submitted by the Notifying Party on 16 March 2020.

submissions to the Commission⁴⁵³, the Notifying Party analyses purchasing overlaps of the Parties when different material groups of the CSSR market are considered⁴⁵⁴.

- (477) In that submission, the Notifying Party identifies material categories based on Metallo's purchases and matches them as precisely as possible with Aurubis' purchases. As a result, the Notifying Party identifies: (i) [...] material categories where the Parties do not overlap because Aurubis does not purchase these categories; (ii) [...] categories for which overlaps are limited because the Parties purchase significant different quantities of these categories or both purchase limited quantities; and (iii) [...] categories where overlaps between the Parties are appreciable. When the [...] categories with significant overlaps are individually analysed, the Parties do not appear to compete closely because either the actual materials purchased are different, or the Parties' supplier-base is different⁴⁵⁵.
- (478) **Third**, while both the Parties purchase CSSR primarily for recovering copper, the actual copper content in the scrap as well as the presence of other metals are important factors with respect to their ability to compete for purchasing different types of CSSR. The Parties have different capabilities in terms of processing CSSR with different copper content and in terms of recovering other metals. Therefore they are also able to remunerate CSSR suppliers in a different way depending on copper content and on the presence of other metals.
- (479) As Figure 31 shows, with respect to the copper content, Metallo focuses on scraps with low copper content (namely low grade scrap), and has limited interest in copper scraps with high copper content (namely high grade scrap). For Aurubis the situation is the opposite because the main focus is on high grade scrap, while low grade scrap has a reduced focus. The same figure also shows that this purchasing focus is mirrored by the Parties' technology capabilities. [Details on Metallo's and Aurubis' abilities].

Figure 31 – [...]

[...]

Source: Form CO, Annex 5.4-X, slide 97.

- (480) Figure 31 also shows the Parties' complementarity with respect to other technology aspects. [Details on Metallo's and Aurubis' abilities].
- (481) The complementarity of the Parties' technical capabilities and the related different ability in recovering metals from CSSR is confirmed by a due diligence report produced by Aurubis on Metallo⁴⁵⁶. As explained in Section 9.2.6.4 the complementarity of the Parties' flowsheets⁴⁵⁷ allows for a better recovery of certain metals contained in CSSR, noticeably nickel, lead and tin.

⁴⁵³ 'White Paper 9: Analysis of potential overlaps and details on selected Categories of Copper Scrap', submitted by the Notifying Party on 7 November 2019.

⁴⁵⁴ The material groups reflect Metallo's internal classification of copper scrap, and include, for example, Brass residues and slags, Bronze mixed, Cu Cement, Copper Ferrous (CuFe), Copper Residues and slags, and Heavy metal shredder.

⁴⁵⁵ 'White Paper 9: Analysis of potential overlaps and details on selected Categories of Copper Scrap', submitted by the Notifying Party on 7 November 2019 Sections 1-6.

⁴⁵⁶ Form CO, Annex 5.4-Q.

⁴⁵⁷ The word 'flowsheet' is commonly used in this industry to indicate the specific smelting and refining process of a certain plant.

- (482) **Fourth**, following a closer analysis of the various market segments, it appears that competition dynamics apply differently to the Parties.
- (483) For example, for tin-bearing copper scrap, while both the Parties, to different extents, are able to recover and valorise tin, it appears that the Parties have different business models which ultimately make their competitiveness in purchasing CSSR different. While Metallo sells tin to the market in the form of A-grade ingots with purity above 99.97%, Aurubis sells it in the form of intermediate products (tin composite) with purity below 45%, which are subject to further refining⁴⁵⁸.
- (484) The same applies to the main metal for which CSSR is purchased, that is copper. Aurubis is a vertically integrated undertaking which produces LME-quality copper cathodes and either sells them to the market or uses them captively for manufacturing other semi-finished products⁴⁵⁹. Metallo's largest output is instead represented by copper anodes, blisters and blister ingots, which account for about [...] % in weight and in value of its production output.
- (485) Regarding nickel, which is another metal that both the Parties recover from CSSR, [...], whereas Aurubis mainly [...]⁴⁶⁰.
- (486) As a consequence of the different business models of the Parties in recovering and valorising different metals from CSSR, Aurubis' competitiveness in purchasing CSSR is different from that of Metallo. Such a different level of competitiveness can also partially explain the reason for the different focus of the Parties in purchasing CSSR materials, which is explained in recitals (470) to (475).
- (487) Another example of different competition dynamics at the level of market segment is provided by IBA. As the Notifying Party explains⁴⁶¹, this CSSR material is relatively novel and therefore in continuous evolution in terms of technologies for recovering it, and, more importantly, in terms of market entry and expansion of suppliers and purchasers.
- (488) The recovery of copper from IBA started to be economically viable since the years 2014/2015, when a new technology allowed for a cost-effective separation of heavy metals (including copper) from incinerator bottom ashes. Since then, the market has been evolving at a relatively fast pace and different market participants have entered the market. Therefore, considering the evolving nature of this market, the segment shares of the Parties are not fully indicative of their purchasing power.
- (489) For example, historically, Aurubis was one of the first companies that started purchasing this type of CSSR, and therefore its purchasing share was initially very high, with very limited competitive purchasers on the market. However, due to the increased number of incinerators offering IBA, and due to the increased number of purchasers of this CSSR, Aurubis' purchasing shares decreased⁴⁶², and the overall market segment dynamics are in still evolution.
- (490) Also, the availability of IBA on the market has been increasing, thus reducing Aurubis' purchasing power. The increased number of copper refiners interested in purchasing IBA provided increased incentives to incinerator operators and to third

⁴⁵⁸ Form CO, paragraphs 89 and 242.

⁴⁵⁹ Form CO, paragraph 85.

⁴⁶⁰ Form CO, paragraph 88.

⁴⁶¹ Reply to request for information 36, question 5.

⁴⁶² Reply to request for information 28, question 11.

parties in investing in technologies for separating the heavy metal part from the incineration bottom ashes in order to sell IBA.

- (491) **Fifth**, as the Notifying Party recalls in the Reply to the SO⁴⁶³, one of the rationales for Aurubis to acquire Metallo is to expand its technological capabilities, and in particular to increase the volume and the types of metals, apart from copper, that Aurubis would be able to recover⁴⁶⁴.
- (492) With respect to a possible evolution of the Parties' closeness of competition, in the SO, the Commission preliminarily considered that absent the Transaction, the Parties would have in the future competed closer, mainly due to Aurubis' plan to recover more metals from CSSR (that is the Aurubis so-called multi-metal strategy), thus increasing its areas of overlaps with Metallo⁴⁶⁵.
- (493) However, as explained in recitals (470) to (486), in the CSSR market, overlapping in the recovery of some metals does not necessarily mean closeness of competition. This would equally apply to the metals, such as nickel, tin and zinc, for which Aurubis plans to increase its recovery as part of its multi-metal strategy. The evidence on the file does not appear to indicate that Aurubis' multi-metal strategy would have been implemented by adopting metallurgical processes, technologies, strategies, and other industrial processes that are similar to those of Metallo. Therefore, the evidence does not show that Aurubis' multi-metal strategy would have caused it to focus on the same types of CSSR and thus that it would have made Aurubis a closer competitor to Metallo.
- (494) Therefore, based on all the evidence discussed in recitals (470) to (493), the Commission concludes that technological capabilities and purchasing behaviour of the Parties show a certain degree of complementarity.

9.2.2.3. The Parties focus on different groups of suppliers

- (495) The present section demonstrates that although the Parties have some purchasing overlaps in terms of CSSR market segments, they focus on different groups of suppliers.
- (496) **First**, according to the data provided by the Notifying Party, Aurubis' active suppliers of copper scraps are [...] ⁴⁶⁶, and Metallo's are more than [...] ⁴⁶⁷. By analysing these suppliers, it appears that only [...] of them are common to the Parties⁴⁶⁸.
- (497) For Aurubis this means that out of [...] active suppliers, only [...] % also supplies copper scraps to Metallo. For Metallo the corresponding percentage is even lower, that is to say, only about [...] % of its suppliers.
- (498) These relatively small percentages are already by themselves indicators that the Parties do not compete closely. Moreover, closeness of competition is even lower than indicated by these numbers.

⁴⁶³ Reply to the SO, paragraph 175.

⁴⁶⁴ See for example "DocID1519-024940 "SID17703_00029890.pdf – Aurubis AG Metal Progress", slides 35-36.

⁴⁶⁵ SO, section 8.3.3.7.

⁴⁶⁶ Form CO, Annex 8.2-G.

⁴⁶⁷ Form CO, Annex 8.2-H.

⁴⁶⁸ Form CO, Annex 8.2-I.

- (499) Due to the highly differentiated nature of the CSSR market, purchasing from the same suppliers does not imply that the same type of CSSR is purchased and, therefore, even when the Parties purchase CSSR from a common supplier, this does not immediately imply that the Parties compete closely. Whereas, such inference could be made, for example, as regards industrial suppliers which typically sell only one type of CSSR (which is a by-product of its manufacturing process), this is not possible as regards other suppliers such as traders and most collectors, which supply a variety of copper scraps and, as such, of CSSR.
- (500) Further, if the top five largest suppliers of the Parties are considered, it appears that none of them is a common supplier of the Parties⁴⁶⁹.
- (501) **Second**, it appears that Aurubis' presence in certain downstream markets provides access to CSSR suppliers from which Metallo has difficulties in purchasing CSSR. This is the case for Aurubis' so-called closed-loop customers.
- (502) As Aurubis explains in its annual report for the fiscal year 2016/ 2017⁴⁷⁰, the closing loop approach *'[...] involves, for example, selling copper products to customers and, at the same time, taking back their resulting production scrap for our recycling, closing the materials cycle in doing so'*. In other words, Aurubis is capable of using its presence in the downstream markets for semi-finished products, as for example, copper rods and rolled copper products, to obtain CSSR in the upstream market.
- (503) Typically these customers of semi-finished products, which are also suppliers of CSSR, have an incentive to conclude long-term closed-loop contracts with Aurubis because they can benefit of a continuous offtake of their copper scraps (which is a by-product of their manufacturing process), while at the same time they receive from Aurubis, under the payment of certain fees, semi-finished products.
- (504) These customers/suppliers are hardly contestable by Metallo, which is not active in any of these downstream markets and therefore cannot provide these suppliers with these closed loop contract arrangements. An example of this type of supplier is [...] ⁴⁷¹, which is a leading manufacturer of copper rolled products, is Aurubis' [...] supplier⁴⁷², and does not supply any CSSR or other types of copper scrap to Metallo.
- (505) Remarkably, in its 2016/2017 annual report, Aurubis explains its ambition to *'continue to pursue the closing-the-loop approach in fiscal year 2017/18'*⁴⁷³, thus confirming its ambition to continue to rely and perhaps to rely even more in the future on these customers that most likely cannot be accessed by Metallo.
- (506) In conclusion, based on the evidence presented in the present section, the Commission on balance concludes that the Parties focus on different groups of suppliers.

9.2.2.4. Conclusion

- (507) Based on the evidence presented in the present section, and more specifically on the evidence presented in Section 9.2.2.2 regarding their complementary capabilities and purchasing behaviour, and in Section 9.2.2.3 regarding the Parties' focus on different

⁴⁶⁹ Form CO, table 42.

⁴⁷⁰ DocID1575-024785, "BAK17702_00035086, *Many become one*, Aurubis Annual Report 2016/2017", page 106.

⁴⁷¹ Form CO, table 42.

⁴⁷² Form CO, table 42.

⁴⁷³ DocID1575-024785, "BAK17702_00035086, *Many become one*, Aurubis Annual Report 2016/2017", page 106.

groups of suppliers, the Commission on balance concludes that the Parties cannot be regarded as close competitors pre-Transaction.

9.2.3. *Post-Transaction, suppliers will have several effective alternatives to the Merged Entity*

9.2.3.1. Other EEA copper refiners exert significant competitive pressure

(508) The Notifying Party submits that other EEA copper refiners exert a significant competitive pressure on the Parties, and will do so post-Transaction on the Merged Entity. Suppliers would therefore have sufficient viable and effective alternatives to resort to in case the Merged Entity were to attempt to increase its refining charges following the Transaction⁴⁷⁴.

(509) While the Commission in the SO preliminarily concluded that other EEA copper refiners are not effective alternatives to the Parties, the Commission upon review of further evidence and new arguments submitted by the Notifying Party, finds that other copper refiners in the EEA likely exert a significant competitive constraint on the Parties and would do so post-Transaction also on the Merged Entity. This is mainly because (i) a number of other EEA refiners will remain active in the EEA post-Transaction; (ii) those EEA refiners compete for CSSR materials despite operating at full capacity; (iii) the other EEA refiners have technological capabilities to refine even low-grade and complex CSSR materials; (iv) suppliers consider those other EEA refiners to be effective alternatives to the Parties; and (v) evidence shows that other EEA refiners have demand for CSSR materials.

(A) A number of established secondary copper refining competitors to the Parties will remain active in the EEA post-Transaction

(510) Post-Transaction the Parties will continue to compete with a number of established secondary copper refiners in the EEA.

(511) Brixlegg, a pure secondary copper refiner located in Austria (with a second site in Slovakia) has a 2018 EEA purchasing share of [5-10]%.

(512) Boliden, a copper refiner located in Sweden has a 2018 EEA purchasing share of [5-10]%.

(513) Umicore, a multi-metal refiner with advanced technological capabilities for the extraction of copper from complex materials is located in Belgium and has a 2018 EEA purchasing share of [0-5]%.

(514) KGHM, a copper refiner with a focus on copper concentrates and current capabilities mainly for higher grade copper scrap (including CSSR) is located in Poland and has a 2018 EEA purchasing share of [0-5]%.

(515) Furthermore, other copper refiners in the EEA, such as Atlantic Copper (Spain) and Simar (Italy) purchase and refine CSSR materials.

⁴⁷⁴ See for example ‘White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 (“SO”)’, submitted by the Notifying Party on 16.03.2020, paragraph 41.

- (B) Despite operating at full capacity, copper refiners are in competition for CSSR materials with each other
- (516) In the SO, the Commission preliminarily assessed that the competitive constraint exerted by rival copper refiners in the EEA is limited due to their limited available capacity⁴⁷⁵.
- (517) However, as laid out in this Section 9.2.3.1 (B), the Commission finds that while the EEA market for CSSR is likely characterised by a degree of oversupply, the market for CSSR consists of differentiated segments, some of which are more valuable to refiners than others. Therefore, there is competition for specific CSSR material types.
- (518) In 2018 the capacity utilisation (with respect to copper scrap for refining overall)⁴⁷⁶ of EEA copper refiners was 98.6%. This high utilisation rate is a constitutive feature of the industry, as the laws of metallurgy require the smelting and refining operations by the Parties and their competitors to be run at (or close to) full capacity in order to be economically viable.
- (519) While this indeed means that copper refiners in the EEA are not in aggressive competition to fill any underutilised capacity (because they are generally fully utilised), it does not follow that EEA copper refiners do not compete for input materials. In particular, they do compete for their input mix. Higher margin materials, or materials more attractive due to other considerations (such as them being essential to maintaining a smoothly operating flowsheet) are particularly sought after by copper refiners and competition between them is therefore most intense for such materials.
- (520) While suppliers perceive a lack of refining capacity for certain CSSR materials in the EEA⁴⁷⁷, this is already the case pre-Transaction and will also be the case post-Transaction. In other words, the supply-demand balance for CSSR is, according to suppliers, already characterised by oversupply. The Transaction will not directly impact this (see Section 9.2.6.4 for an information on why the Parties are unlikely to reduce their CSSR intake post-Transaction).
- (521) Pre-Transaction, suppliers may perceive overall competition for CSSR materials to be limited among copper scrap refiners, because they want to supply more CSSR than capacities are available at EEA refiners. However, because demand by copper refiners overlaps also for the most attractive and higher margin materials within the CSSR market, refiners are in active competition with each other for certain specific input materials.
- (522) The fact that copper refiners may shift their demand between different CSSR material categories relatively quickly in order to both react to new developments in the generation of scrap and to achieve the most attractive input mix (and therefore margin recovery) is, for example, evidenced by Aurubis' change in input mix with respect to industrial residues containing copper and shredder materials (which include IBA containing copper). In particular, since these IBA materials have increasingly become available in recent years (due to technological recovery

⁴⁷⁵ SO, paragraphs 820-831.

⁴⁷⁶ While the maximum intake of certain copper scrap materials may be limited due to flowsheet requirements, there is no fixed maximum capacity for CSSR materials as such, but rather just one overall capacity for copper scrap for refining.

⁴⁷⁷ Replies to questions E.10.1, F.10.1 and G.10.1 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

improvements), Aurubis has moved to replace lower grade residue materials with IBA materials.⁴⁷⁸ This is in part due to these IBA materials carrying also other valuable and recoverable metals, such as zinc. Similar shifts in inputs have likely been made by other copper refiners. In relation to IBA containing copper for example, rivals of Aurubis that purchase these (such as Boliden, Metallo or Umicore) also reacted positively to this material becoming available a few years ago.

- (523) Copper refiners are thus able and willing to shift their demand between different categories of CSSR materials in order to achieve an optimal input mix and the best possible margins. They therefore also compete on how to exactly fill their capacity and which CSSR materials to purchase.
- (524) Therefore, despite operating at an overall full capacity, EEA refining competitors do compete, and will continue to compete, with the Parties and the Merged Entity for CSSR materials.
- (C) The Parties are constrained by EEA copper refiners that are technologically capable to refine low-grade and complex CSSR materials
- (525) In the SO, the Commission preliminarily found that other copper refiners in the EEA are limited in their technical capabilities. In particular, the SO preliminarily found that refining competitors to the Parties either focus mostly on higher grade copper scrap or cannot process copper scrap with impurities such as tin. Furthermore, suppliers were said to perceive a clear difference in technical capabilities of Aurubis and Metallo on the one side and other EEA copper refiners on the other side.
- (526) The Notifying Party submits that the Commission's preliminarily assessment is not supported by the outcome of its market investigation⁴⁷⁹ and that copper refining rivals of the Parties have the capability to refine all types of complex and lower grade materials that the Parties purchase⁴⁸⁰.
- (527) An analysis of flowsheets of refining competitors to the Parties shows that most of these players are indeed capable of refining low grade and complex CSSR materials and are able to recover also non-copper metals from these.
- (528) The Notifying Party submits a detailed description of the flowsheets of its EEA refining competitors. The summary captioned in Figure 32 shows that the Notifying Party considers in particular its main EEA refining competitors to have either full or partial capabilities to treat a wide range of CSSR materials.

⁴⁷⁸ 'White Paper 8: Input Mix of Aurubis', submitted by the Notifying Party on 6.11.2019.

⁴⁷⁹ 'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, page 1.

⁴⁸⁰ See 'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, paragraphs 41-44; and 'White Paper 5: Low grade copper scrap II', submitted by the Notifying Party on 3.11.2019.

Figure 32 – Refining capabilities of other copper refiners

	SnCu-Scrap*	Indust. Residues	Incinerator Ash	CuFe-Scrap
Montanwerke Brixlegg				
Umicore				
Boliden				
Sigfried Jacob (SJM) / NHA				
Berzelius Stolberg				
KGHM				
Glencore Horne Smelter				
LS Nikko				
JX Nippon				
DOWA				
Korea Zinc				
Glencore Kazzinc				

	Cannot be treated in the current flowsheet
	Can be fully treated with adjustments
	Can be fully treated

Source: White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO"), submitted by the Notifying Party on 16.03.2020, Annex 2.

- (529) Considering in particular the main EEA refining competitors of the Parties, namely Brixlegg, Boliden, Umicore and KGHM, the following is evidenced by analysing their respective flowsheets:
- (530) **First**, with regard to Brixlegg, a Due Diligence report prepared for Metallo states that [...] ⁴⁸¹. [...].
- (531) However, Brixlegg's flowsheet capabilities include the ability to treat even complex CSSR materials like industrial residues, tin-bearing copper scrap and IBA containing copper. For example, as can be seen from the purchasing department of Brixlegg's Slovakian plant, it is active in the purchase of materials such as copper slag, copper drosses, and bronze scrap (which contains tin) ⁴⁸². The Notifying Party therefore submits that Brixlegg is capable of treating materials from complex CSSR segments ⁴⁸³.
- (532) Brixlegg itself submits that while most of its copper scrap input material has a copper content of at least 85%, it is also using residues ⁴⁸⁴. Furthermore, with respect to its capabilities, Brixlegg explains that it is capable to refine any type of high-, mid- and low-grade copper scrap, as well as some types of copper-tin alloy scrap and tinned copper scrap ⁴⁸⁵. With respect to its mid-grade capabilities, Brixlegg refers to its convertor furnaces (in Austria and Slovakia), with respect to its low-grade

⁴⁸¹ DocID1521-16570 (The Parties' reply to the Commission's request for information RFI 17, M.9409_SID17703_00428576.pptx), slide 72.

⁴⁸² Brixlegg Kovohuty website, accessed 16.3.2020, DocID3671.

⁴⁸³ 'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, Annex 2, page 3.

⁴⁸⁴ Reply to question 1 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

⁴⁸⁵ Reply to question 32 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

capabilities to its shaft furnaces (also in Austria and Slovakia)⁴⁸⁶. With respect to tinned copper scrap it states that it *'can only blend small tonnages in the Anode furnace together with the High Grade scrap'*⁴⁸⁷ and with respect to copper-tin alloy scrap it states that it *'can only blend small tonnages in the Convertor furnace together with other scraps'*⁴⁸⁸.

- (533) Generally by describing its own purchasing portfolio, Brixlegg indicates a wide range of copper scrap (and incidentally CSSR) materials it is technologically able of treating: *'Brixlegg procures the so-called "long term End-of-Life scrap", which comes from materials at least 50 years lifetime, such as infrastructures (buildings, machines), and which has a high content of copper and appr. 5-6% of impurities. This kind of scrap is also known as high-grade scrap (with a copper content above 80%. Brixlegg also procures the so-called "short term End-of-Life scrap", coming from materials with a lifetime of up to appr. 10 years, which typically comes from electronic scrap. Some of it has lower copper content (15% - 60%) some of it higher content (60-90%) in case of copper granules coming from cable recycling. Further copper alloys scrap such as brass and bronze, coming from industrial processes (50%-90%) are consumed as well'*⁴⁸⁹.
- (534) Furthermore, according to Brixlegg, if after the Transaction the Merged Entity were to pay significantly less for copper scrap for refining, suppliers would have the option to sell to other copper refiners in the EEA. This is a further indication that Brixlegg also perceives that other refiners could take over suppliers from Aurubis and Metallo – and refine their materials.
- (535) Suppliers of copper scrap also regard Brixlegg as a player with technological capabilities for different segments of CSSR. While these differ, Brixlegg is deemed to at least have some capabilities across the board.
- (536) With respect to copper-iron scrap, a majority of suppliers expressing their opinion indicate that Brixlegg is at least capable to handle and process it⁴⁹⁰. A majority of suppliers expressing their opinion indicate that Brixlegg is at least efficient in extracting the maximum value from copper-iron scrap⁴⁹¹.
- (537) With respect to tin-bearing copper scrap, a majority of suppliers expressing their opinion indicate that Brixlegg is at least somewhat capable to handle and process it⁴⁹². A majority of suppliers expressing their opinion indicate that Brixlegg is at least somewhat efficient in extracting the maximum value from tin-bearing copper scrap⁴⁹³.
- (538) With respect to industrial residues containing copper, a majority of suppliers expressing their opinion indicate that Brixlegg is at least capable to handle and process it⁴⁹⁴. A majority of suppliers expressing their opinion indicate that Brixlegg

⁴⁸⁶ Reply to question 32.1 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

⁴⁸⁷ Reply to question 32.5 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

⁴⁸⁸ Reply to question 32.6 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

⁴⁸⁹ Minutes of a call with a competitor on 11.07.2019, DocID3337.

⁴⁹⁰ Replies to question D.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁴⁹¹ Replies to question D.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁴⁹² Replies to question E.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁴⁹³ Replies to question E.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁴⁹⁴ Replies to question F.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

is efficient in extracting the maximum value from industrial residues containing copper⁴⁹⁵.

- (539) With respect to IBA containing copper, a majority of suppliers expressing their opinion indicate that Brixlegg is at least capable to handle and process it⁴⁹⁶. A majority of suppliers expressing their opinion indicate that Brixlegg is efficient in extracting the maximum value from IBA containing copper⁴⁹⁷.
- (540) Therefore, the Commission considers that Brixlegg is a EEA copper refiner with the technological capability to refine a wide range of CSSR materials, including complex and low-grade materials.
- (541) **Second**, with regard to Boliden, a Due Diligence report prepared for Metallo states that [...] ⁴⁹⁸ [...] ⁴⁹⁹ [...].
- (542) However, Boliden's flowsheet capabilities point to it having the technological capability to refine a broad range of CSSR materials, including low-grade and complex materials. The Notifying Party submits with respect to Boliden's technical capabilities that it can treat copper-iron scrap, industrial residues containing copper, IBA containing copper, and tin-bearing copper scrap⁵⁰⁰.
- (543) Submissions by Boliden also indicate that it has advanced technical capabilities for the processing of CSSR materials. It describes itself as active in the '*[m]ining and smelting of concentrates and recycled materials mainly in Cu, Zn, Pb, Ni and precious metals*'⁵⁰¹. In addition, Boliden states it '*mainly offers zinc, copper, nickel, lead, gold, and silver*'⁵⁰². This means that aside from its capabilities for the recovery of copper, Boliden also focuses on and has capabilities to extract other metals such as zinc, lead, nickel and precious metals from CSSR.
- (544) Furthermore, suppliers of copper scrap regard Boliden as a player with significant technical capabilities to treat a range of CSSR materials and to extract the value from them.
- (545) With respect to copper-iron scrap, a majority of suppliers expressing their opinion indicate that Boliden is at least capable to handle and process it⁵⁰³. A majority of suppliers expressing their opinion indicate that Boliden is at least efficient in extracting the maximum value from copper-iron scrap⁵⁰⁴.
- (546) With respect to tin-bearing copper scrap, a majority of suppliers expressing their opinion indicate that Boliden is at least capable to handle and process it⁵⁰⁵. Half of suppliers expressing their opinion indicate that Boliden is at least efficient in extracting the maximum value from tin-bearing copper scrap⁵⁰⁶.

⁴⁹⁵ Replies to question F.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁴⁹⁶ Replies to question G.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁴⁹⁷ Replies to question G.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁴⁹⁸ MC = Metallo Chimique (former name of Metallo)

⁴⁹⁹ DocID1521-16570 (The Parties' reply to the Commission's request for information RFI 17, M.9409_SID17703_00428576.pptx), slide 71.

⁵⁰⁰ 'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, Annex 2, page 8.

⁵⁰¹ Reply to question 1 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

⁵⁰² Minutes of a call with a competitor on 8.7.2019, DocID3295.

⁵⁰³ Replies to question D.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵⁰⁴ Replies to question D.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵⁰⁵ Replies to question E.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵⁰⁶ Replies to question E.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

- (547) With respect to industrial residues containing copper, a majority of suppliers expressing their opinion indicate that Boliden is at least capable to handle and process it⁵⁰⁷. A majority of suppliers expressing their opinion indicate that Boliden is at least efficient in extracting the maximum value from industrial residues containing copper⁵⁰⁸.
- (548) With respect to IBA containing copper, a majority of suppliers expressing their opinion indicate that Boliden is very capable to handle and process it⁵⁰⁹. A majority of suppliers expressing their opinion indicate that Boliden is very efficient in extracting the maximum value from IBA containing copper⁵¹⁰.
- (549) Therefore, the Commission considers that Boliden is a EEA copper refiner with the technical capability to refine a broad range of CSSR materials.
- (550) **Third**, with regard to Umicore, a Due Diligence report prepared for Metallo and shown in Figure 33 analyses that [...].

Figure 33 – [...]

[...]

Source: Reply to request for information 36, Annex 2, [...], page 77.

- (551) While Umicore does not have a specific or exclusive focus on copper recovery (and therefore also not on copper scrap treatment), it does have a highly capable flowsheet and is able to treat a very wide range of highly complex and low-grade secondary materials, including CSSR materials.
- (552) The Notifying Party submits that Umicore's '*flowsheet, with high flexibility in treatment of different feeds, makes Umicore the largest recycler of complex secondary raw materials*'⁵¹¹. It further submits that Umicore is capable to treat a number of particular and complex CSSR segments, such as tin-bearing copper scrap, industrial residues containing copper and IBA containing copper⁵¹².
- (553) An internal document of the Notifying Party, shown in Figure 34, demonstrates that Aurubis perceives Umicore to have a '*[c]omplex feed with highest degree of flexibility*'. With respect to base metals such as copper it is noted that '*[t]hey are high in volume, but less important for direct value creation (Cu and Pb are mainly sold to the market)*'. Further, aside of the good capabilities to deal with impurities, the document points to the '*[k]nowledge based process (Feed forward steering, predictability is high, being able to cope with a new feed mix every day)*'.

Figure 34 – Aurubis' view on Umicore flowsheet strength

[...]

Source: DocID1573-3521 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00553751.docx).

⁵⁰⁷ Replies to question F.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵⁰⁸ Replies to question F.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵⁰⁹ Replies to question G.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵¹⁰ Replies to question G.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵¹¹ 'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, Annex 2, page 5.

⁵¹² 'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, Annex 2, page 5.

- (554) The document shown in Figure 34 goes on to state at another point with respect to Umicore's capabilities that it has [...] and further that it has [...] ⁵¹³.
- (555) This shows that Aurubis perceives Umicore to be a highly technologically advanced player that not only possesses these technological capabilities but also operationalises them. While it does not have a pure focus on copper, it is very capable to treat copper scrap and copper is one of the main base metals recovered.
- (556) The fact that within copper scrap Umicore focuses on more complex materials is further shown by the Aurubis internal document excerpted in Figure 35. This shows Aurubis' perception that Umicore is not active in copper scrap no.2, but rather in complex copper, lead and precious metal material, and therefore has the technological capabilities to treat complex CSSR materials.

Figure 35 – Aurubis view that Umicore treats complex copper, lead and precious metal material



Source: DocID1570-76937 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00863962.pptx).

- (557) Submissions by Umicore itself also suggest that it has advanced technological capabilities for the treatment of complex CSSR materials. For example, Umicore notes that it is 'able to recover 17 different metals, including Cu and Sn, through [its] complex Hoboken flowsheet' ⁵¹⁴. It further describes itself to 'mainly focus on the processing of complex types of scraps, including complex residues' ⁵¹⁵. Further, the business model is described as 'mainly focus[sing] on the processing of complex types of scrap, waste and industrial by-products since its complex metallurgical flowsheet has the technical capacity to do so and can return the most value from complex types' ⁵¹⁶.
- (558) Suppliers of copper scrap view Umicore as a player with technological capabilities to process a range of different complex CSSR materials. While the assessment of suppliers differs depending on the CSSR material in question, they generally regard Umicore to have capabilities across the board.
- (559) With respect to copper-iron scrap, half of suppliers expressing their opinion indicate that Umicore is at least capable to handle and process it ⁵¹⁷. A majority of suppliers expressing their opinion indicate that Umicore is at least efficient in extracting the maximum value from copper-iron scrap ⁵¹⁸.
- (560) With respect to tin-bearing copper scrap, a majority of suppliers expressing their opinion indicate that Umicore is at least somewhat capable to handle and process

⁵¹³ DocID1573-3521 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00553751.docx).

⁵¹⁴ Reply to question 32.1 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

⁵¹⁵ Minutes of a call with a competitor on 6.1.2020, DocID2909.

⁵¹⁶ Minutes of a call with a competitor on 5.12.2019, DocID2014.

⁵¹⁷ Replies to question D.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵¹⁸ Replies to question D.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

- it⁵¹⁹. Half of suppliers expressing their opinion indicate that Umicore is at least efficient in extracting the maximum value from tin-bearing copper scrap⁵²⁰.
- (561) With respect to industrial residues containing copper, a majority of suppliers expressing their opinion indicate that Umicore is at least somewhat capable to handle and process it⁵²¹. A majority of suppliers expressing their opinion indicate that Umicore is at least efficient in extracting the maximum value from industrial residues containing copper⁵²².
- (562) With respect to IBA containing copper, a majority of suppliers expressing their opinion indicate that Umicore is very capable to handle and process it⁵²³. A majority of suppliers expressing their opinion indicate that Umicore is very efficient in extracting the maximum value from IBA containing copper⁵²⁴.
- (563) Therefore, the Commission considers that Umicore is an EEA copper refiner with very advanced technological capabilities. While it does not have an exclusive focus on copper scrap and copper recovery, it is technologically able to treat even highly complex CSSR materials.
- (564) **Fourth**, with regard to KGHM, an internal Aurubis document analyses it to have no capabilities for 'low Cu quality' or for 'Complex Input (Sn/Ni/etc.) – no organic material'⁵²⁵.
- (565) However, the Notifying Party also submits with respect to KGHM that its '*network of primary copper, primary lead and a precious metals line [...] allows them to use synergies of different metal processing routes, which means that they can handle more complex feed materials containing Cu, Pb, Zn, Ni, Sn*'⁵²⁶. It further states that KGHM while not being able to currently treat IBA containing copper, has the capability to treat complex CSSR materials such as tin-bearing copper scrap and industrial residues containing copper⁵²⁷.
- (566) KGHM itself states that it is able to refine any type of high-grade copper scrap and copper scrap no.2, and some types of mid-grade copper scrap. It states that it is not able to refine low-grade copper scrap⁵²⁸.
- (567) Suppliers of copper scrap attribute some capabilities to KGHM for the processing of a range of complex CSSR materials. These are however distinctly more limited than those of Brixlegg, Boliden and Umicore described above in this Section 9.2.3.1 (C).
- (568) With respect to copper-iron scrap, a majority of suppliers expressing their opinion indicate that KGHM is at least somewhat capable to handle and process it.⁵²⁹ A

⁵¹⁹ Replies to question E.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵²⁰ Replies to question E.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵²¹ Replies to question F.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵²² Replies to question F.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵²³ Replies to question G.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵²⁴ Replies to question G.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵²⁵ DocID1570-95862 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00882924.msg).

⁵²⁶ 'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, Annex 2, page 16.

⁵²⁷ 'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, Annex 2, page 16.

⁵²⁸ Reply to question 32 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

⁵²⁹ Replies to question D.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

majority of suppliers expressing their opinion indicate that KGHM is at least somewhat efficient in extracting the maximum value from copper-iron scrap⁵³⁰.

- (569) With respect to tin-bearing copper scrap, a majority of suppliers expressing their opinion indicate that KGHM is not capable to handle and process it⁵³¹. A majority of suppliers expressing their opinion indicate that KGHM is not efficient in extracting the maximum value from tin-bearing copper scrap⁵³².
- (570) With respect to industrial residues containing copper, a majority of suppliers expressing their opinion indicate that KGHM is at least somewhat capable to handle and process it⁵³³. A majority of suppliers expressing their opinion indicate that KGHM is at least efficient in extracting the maximum value from industrial residues containing copper⁵³⁴.
- (571) With respect to IBA containing copper, a majority of suppliers expressing their opinion indicate that KGHM is not capable to handle and process it⁵³⁵.
- (572) Therefore, the Commission considers that KGHM is a EEA copper refiner that has some technological capabilities for the refining of CSSR materials. These however do appear to be limited, as KGHM is generally focused on processing high-grade copper scrap for refining.
- (573) **Fifth**, with regard to further EEA copper refiners (such as Atlantic Copper or Simar), suppliers of copper scrap attribute them with at least some capabilities for treating also complex CSSR materials.
- (574) With respect to copper-iron scrap, a majority of suppliers expressing their opinion indicate that other EEA copper refiners/smelters are at least somewhat capable to handle and process it⁵³⁶. A majority of suppliers expressing their opinion indicate that other EEA copper refiners/smelters are at least somewhat efficient in extracting the maximum value from copper-iron scrap⁵³⁷.
- (575) With respect to tin-bearing copper scrap, a majority of suppliers expressing their opinion indicate that other EEA copper refiners/smelters are at least somewhat capable to handle and process it⁵³⁸. A majority of suppliers expressing their opinion indicate that other EEA copper refiners/smelters is at least somewhat efficient in extracting the maximum value from tin-bearing copper scrap⁵³⁹.
- (576) With respect to industrial residues containing copper, a majority of suppliers expressing their opinion indicate that other EEA copper refiners/smelters are at least somewhat capable to handle and process it⁵⁴⁰. A majority of suppliers expressing their opinion indicate that other EEA copper refiners/smelters are at least somewhat efficient in extracting the maximum value from industrial residues containing copper⁵⁴¹.

530 Replies to question D.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.
531 Replies to question E.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.
532 Replies to question E.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.
533 Replies to question F.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.
534 Replies to question F.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.
535 Replies to question G.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.
536 Replies to question D.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.
537 Replies to question D.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.
538 Replies to question E.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.
539 Replies to question E.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.
540 Replies to question F.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.
541 Replies to question F.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

- (577) With respect to IBA containing copper, a majority of suppliers expressing their opinion indicate that other EEA copper refiners/smelters are at least capable to handle and process it⁵⁴².
- (578) Therefore, the Commission considers that other EEA copper refiners are at least to some extent technologically capable to process CSSR materials.
- (579) The analysis in this Section 9.2.3.1 (C) has shown that EEA copper refining rivals of the Parties have the technological capabilities to refine also complex CSSR materials – while these capabilities differ and not every player has capabilities for all types of materials, this nevertheless enables the group of EEA copper refining rivals to be an alternative to the Parties. Sections 9.2.3.1 (D) and 9.2.3.1 (F) will show that also in practice these refiners apply their technological capabilities to exert an actual competitive constraint on the Parties.
- (D) Suppliers consider certain other EEA copper refiners to be effective alternatives to the Parties for some CSSR materials
- (580) In the SO, the Commission preliminarily found that suppliers of copper scrap do not consider that they could re-allocate their sales to other copper refiners in the EEA in case of increases of the refining charges by Aurubis and Metallo.
- (581) The Notifying Party however submits that the market investigation conducted by the Commission does not allow for the conclusion that suppliers are not able to re-allocate their sales to competitors of the Parties. This is mainly because the sample size of those replying to certain market questionnaire questions is small and that for all CSSR materials specifically mentioned in the questionnaire, certain suppliers indicate that they would be able to re-allocate sales to the main EEA rivals of Aurubis and Metallo⁵⁴³.
- (582) Despite this submission by the Notifying Party, a majority of suppliers expressing their opinion states that they currently supply a type of copper scrap for refining, for which Aurubis and Metallo are the only two viable purchasers in the EEA⁵⁴⁴. In describing the materials in question, suppliers list different CSSR materials: *‘Mid-grade and Low grade copper scrap from waste incineration ashes’, ‘mixed metals which container (sic) brass, copper, ebony, zinc and lead’, ‘slag/dross [... with] a cu content of 20 – 40 % and tin content of 2-6%’, ‘[a]lloyed copper tinned scrap. The copper content is mainly >95% (high grade)’, ‘high (runouts), mid (mixed gunmetal-scrap/turnings, mixed al-brz-scrap247/-turnings, brass scrap), low grade (slags / drosses / fines / copper irony material)’, ‘Mid grade and zinc containing low grade’, ‘copper scrap tinned 95-99% Cu, copper tin alloys 95-99% Cu’, ‘[l]ow grade mostly with some mid grade’, ‘[a]luminium bronze (sic), Mid grade scrap 70-80% Cu’ and ‘[c]opper and brass dross (mid/low), Copper mud/floor sweeps (mid/low)’⁵⁴⁵.*

⁵⁴² Replies to question G.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵⁴³ *‘White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 (“SO”)*, submitted by the Notifying Party on 16.03.2020, paragraphs 36-40.

⁵⁴⁴ Replies to question 41 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁵⁴⁵ Replies to question 41.2 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

- (583) However, as also referred to by the Notifying Party in its submissions after the SO⁵⁴⁶, suppliers gave a more nuanced and complete response to the Commission's market investigation, indicating their ability to resort to other EEA copper refiners. In particular:
- (584) **First**, the Notifying Party argues that the market investigation result does not allow for the conclusion that suppliers are not able to shift sales to other EEA copper refiners. This is, in particular, because only few suppliers answered the respective questions in the market questionnaire⁵⁴⁷. The Commission notes that the fact that not all suppliers responding to the questionnaire as a whole answered the specific questions on shifting sales to rivals of the Parties does not mean that the answers to these questions ought to be disregarded entirely. The reasons why certain suppliers do not answer certain questions can be perfectly rational (for example, they do not supply the material in question or have no knowledge of the refiner in question).
- (585) Nevertheless, the answers of suppliers indeed show that at least for part of their sales, suppliers consider certain EEA rivals of the Parties as effective alternatives. In particular, with respect to specific CSSR materials, suppliers regard shifting sales to the following EEA copper refiners as possible in the event of a 5-10% increase in the refining charge by Aurubis and Metallo:
- (1) With regard to copper-iron scrap, a majority of suppliers expressing their opinion state that they could re-allocate some of their sales to Brixlegg and to other EEA copper refiners/smelters.⁵⁴⁸
 - (2) With regard to tin-bearing copper scrap, a majority of suppliers expressing their opinion state that they could re-allocate some of their sales to Brixlegg and a majority of suppliers expressing their opinion state that they could re-allocate at least some of their sales to other EEA copper refiners/smelters⁵⁴⁹.
 - (3) With regard to industrial residues containing copper, a majority of suppliers expressing their opinion state that they could re-allocate at least some of their sales to Brixlegg and other EEA copper refiners/smelters, and half of suppliers expressing their opinion state that they could re-allocate at least some of their sales to Umicore⁵⁵⁰.
 - (4) With regard to IBA containing copper, a majority of suppliers expressing their opinion state that they could re-allocate at least some of their sales to Boliden and Brixlegg⁵⁵¹.
- (586) Therefore, for the considered segments of the CSSR market, suppliers consider by majority to have at least two other EEA copper refiners to which they can effectively re-allocate their sales.
- (587) The Commission notes that it is likely sufficient for suppliers to be able to viably shift only a part of their supplies to rivals in order to defeat a price increase by the Merged Entity. This is because, as explained in Section 9.2.3.1 (B), competition

⁵⁴⁶ 'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, Section 1.3.

⁵⁴⁷ 'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, paragraph 31.

⁵⁴⁸ Replies to question D.12 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵⁴⁹ Replies to question E.12 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵⁵⁰ Replies to question F.12 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵⁵¹ Replies to question G.12 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

between copper refiners also occurs despite overall full capacity utilisation – and it occurs mostly for the most attractive and higher margin materials (which include, for example, the above referred to tin-bearing copper scrap and IBA containing copper). A shift away from the Merged Entity of a part of the supply volume of a certain type of CSSR could therefore already diminish the Merged Entity's achievable margin.

- (588) **Second**, a majority of suppliers expressing their view, when asked what they would do if after the Transaction Aurubis and Metallo started paying significantly less for mid-grade and low-grade copper scrap for refining (which fall into the CSSR market), stated that they do not regard selling to other EEA copper refiners as a readily available alternative they could resort to without incurring significant cost. However, selling to other EEA copper refiners in such a circumstance is nevertheless an alternative considered by a sizeable number of suppliers expressing their views and, therefore constitutes an effective option for certain suppliers⁵⁵².
- (589) **Third**, when considering the five main competing purchasers in the EEA, suppliers also name copper refining rivals of the Parties.
- (1) With regard to mid- and low-grade copper scrap for refining, while Aurubis and Metallo are mentioned most frequently by suppliers expressing their opinion, suppliers also name Umicore, Boliden and in particular Brixlegg as among the main competing purchasers in the EEA⁵⁵³.
 - (2) With regard to copper-iron scrap, a majority of suppliers expressing their opinion name Brixlegg as among the main competing purchasers in the EEA. Some respondents also name Boliden, Umicore and KGHM⁵⁵⁴.
 - (3) With regard to tin-bearing copper scrap, some respondents name Brixlegg as among the main competing purchasers in the EEA⁵⁵⁵.
 - (4) With regard to industrial residues containing copper, some suppliers name Brixlegg, Boliden and Umicore as among the main competing purchasers in the EEA⁵⁵⁶.
 - (5) With regard to IBA containing copper, a majority of suppliers expressing their opinion name Boliden and Umicore. Some respondents also name Brixlegg as among the main competing purchasers in the EEA⁵⁵⁷.
- (590) Whereas KGHM is only to a limited extent considered to be an effective alternative, Umicore, Boliden and in particular Brixlegg are considered by a larger number of suppliers and for a wider range of materials to be effective alternatives. This further suggests that these players are able to exert a competitive constraint on the Parties. Therefore, overall, suppliers consider certain EEA refiners to be effective alternatives to the Parties.
- (E) Evidence shows that other EEA copper refiners have demand for CSSR materials
- (591) In the SO, the Commission preliminarily considered that other EEA copper refiners only have a limited demand for CSSR. This preliminary assessment was based on the

⁵⁵² Replies to question 44 and 45 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁵⁵³ Replies to question 39 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁵⁵⁴ Replies to question D.8 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵⁵⁵ Replies to question E.8 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵⁵⁶ Replies to question F.8 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵⁵⁷ Replies to question G.8 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

low market shares of EEA competitors and an internal document of Aurubis suggesting little CSSR purchases by its EEA rivals.

- (592) The Notifying Party however submits that *'the Parties experience significant competitive pressure for purchasing of various types of CSSR from EEA refiners'*⁵⁵⁸.
- (593) The Commission, upon consideration of the new evidence brought forward by the Notifying Party and the lower combined market shares of the Parties, considers that other EEA copper refiners have considerable demand for CSSR and regularly compete with the Parties for these materials.
- (594) **First**, the difference in purchasing shares between the Parties and their main EEA rivals is moderate. As shown in Section 9.2.1.3, Aurubis has a 2018 purchasing share of [10-20]% and Metallo of [10-20]%. While these shares make them the number 1 and number 2 purchasers of EEA-supplied CSSR, two rivals in particular also have considerable purchasing shares, namely Brixlegg with [5-10]% and Boliden with [5-10]%.
- (595) In the SO, the Commission further presented the Aurubis internal document shown in Figure 36 as evidence for its preliminary assessment that the purchasing share of the Parties' rivals is low. However, the Notifying Party explains that the document in question was merely a draft document and therefore is not a reliable source for conclusions. While the Commission maintains that also draft documents can be indications for how a market participant views its own position in the market, the document shown in Figure 36 indeed appears to be incomplete. In particular, the information presented in the document does not appear to relate closely to CSSR demand. While in the SO, the Commission preliminarily assessed that the category 'Other secondary' likely reflects CSSR materials, it now finds that the presented figures for 'Other secondary' for both Aurubis and Metallo are significantly higher than those that result from the Commission's market reconstruction for CSSR for both Parties respectively. It is therefore likely that the category of 'Other secondary' refers to both CSSR and non-CSSR materials and in fact even certain non-copper scrap materials. These can, for example, be lead or tin scrap materials or auxiliary materials such as used sand, which is purchased and used by refiners to control their flowsheet processes.
- (596) Furthermore, the document in Figure 36 is incomplete because, for example, KGHM is indicated to have no purchases of 'Other secondary' at all. However, from the Commission's market reconstruction it is evident that KGHM has at least some CSSR purchases.

Figure 36 – Aurubis' estimation of competitor demand of secondary raw materials

[...]

Source: DocID1570-41657 (*The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00007736.pptx*), slide 24.

- (597) **Second**, internal documents of Aurubis and Metallo, submitted by the Notifying Party in its Reply to the SO, show that both Parties experience competition from other EEA copper refiners for CSSR materials.

⁵⁵⁸

'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, paragraph 47.

- (598) **In the first instance**, the Notifying Party submits an overview of internal Metallo documents evidencing competition from other purchasers in the EEA, in particular also from other EEA copper refiners⁵⁵⁹. [Metallo's experience with competition].
- (599) For example, in a Metallo internal document, [...] ⁵⁶⁰. This shows that in the ordinary course of business, Metallo staff perceives strong competition from other competing purchasers, including EEA copper refiners [...].
- (600) Further, in a Metallo internal presentation prepared by the account manager for Belgium, France and Italy, competition from other purchasers of CSSR and in particular also from other EEA copper refiners is reported for each of these countries.⁵⁶¹ As can be seen for example for Italy, shown in Figure 37, the competition Metallo perceives there includes [...]. This shows that Metallo in its ordinary course of business perceives significant competition for purchases in Italy. While some of the competitors are intermediaries or may compete with Metallo for copper scrap materials that fall outside of the CSSR market (for example, copper scrap for direct melt by certain foundries), the list of competitors crucially also includes EEA copper refiners. It shows that post-Transaction other EEA copper refiners such as [...] would exert a competitive constraint on the Merged Entity.

Figure 37 – Metallo competition in Italy

[...]

Source: DocID1517-25342 (The Parties' reply to the Commission's request for information RFI17, M.9409_SID17703_00146358.pptx).

- (601) A further internal Metallo document evidences an exchange between a CSSR supplier and a Metallo account manager and shows how Brixlegg is a competitive constraint pre-Transaction on Metallo. [Quote of prospective supplier]⁵⁶². This shows that even for tin-bearing copper scrap, Metallo pre-Transaction experiences competition from players other than Aurubis. Interestingly, while Brixlegg does not pay for tin content, it is able to nevertheless make attractive offers to suppliers of this material, by offering an attractive refining charge instead. It appears likely that a similar strategy would also be successful post-Transaction vis-à-vis the Merged Entity and in particular should the Merged Entity attempt to increase its refining charges.
- (602) **In the second instance**, the Notifying Party submits an overview of internal Aurubis documents evidencing competition from other purchasers in the EEA, in particular also from other EEA copper refiners⁵⁶³. [...].
- (603) For example, in an internal Aurubis document it is reported that [...]. As a reaction to this, an Aurubis staff member poses the following question to a colleague: [...]?⁵⁶⁴

⁵⁵⁹ 'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, Annex 6.

⁵⁶⁰ DocID1516-20827 (The Parties' reply to the Commission's request for information RFI17, M.9409_SID17703_00170364.msg). Courtesy translation. The original Dutch text reads: [...].

⁵⁶¹ DocID1517-25342 (The Parties' reply to the Commission's request for information RFI17, M.9409_SID17703_00146358.pptx).

⁵⁶² DocID1516-39264 (The Parties' reply to the Commission's request for information RFI17, M.9409_SID17703_00189915.msg).

⁵⁶³ 'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, Annex 7.

⁵⁶⁴ DocID1574-49023 (The Parties' reply to the Commission's request for information RFI16, M.9409_BAK17702_00638753.msg).

This shows that Aurubis perceives Boliden to have a demand for material that is attractive also to Aurubis itself (due to precious metal content) and that it is ready to re-consider its own purchasing choices as a reaction to the purchasing behaviour exhibited by the rival Boliden.

- (604) In another Aurubis internal document, [...] ⁵⁶⁵. This further shows that Aurubis is in direct competition with EEA copper refiners like Boliden and Umicore, and that suppliers are capable of taking advantage of the competing demand of these refiners.
- (605) In yet another Aurubis internal document a prospective supplier is exploring the option of starting to supply Aurubis [...] ⁵⁶⁶. This ordinary course of business exchange further shows that Aurubis is also in competition with EEA refiners like Boliden and Umicore.
- (606) **Third**, further internal documents of the Parties, upon further examination, also show that the Parties experience competition for CSSR materials by other EEA copper refiners.
- (607) A Metallo document [...] ⁵⁶⁷ shows that Metallo also perceives competition for material from EEA copper refiners other than Aurubis. [...] ⁵⁶⁸ [...].
- (608) A review of the actors named in these columns shows that while Aurubis is mentioned most often ([...]), other EEA copper refiners are also mentioned, namely Brixlegg ([...]), Umicore ([...]), KGHM and Boliden ([...]). This shows that while Aurubis is clearly a significant player and referred to often as a rival, other EEA copper refiners, [...], are mentioned also frequently.
- (609) **Fourth**, EEA refining competitors to the Parties themselves submit that they have demand for CSSR material and perceive to be in competition with the Parties for those materials.
- (610) At the outset, it is important to note that when asked what options suppliers would have readily available without incurring significant cost if after the Transaction the Merged Entity were to start paying significantly less for copper scrap for refining, all competitors of the Parties expressing their opinion submit that suppliers could sell to other copper refiners in the EEA ⁵⁶⁹. This shows that other EEA copper refiners perceive themselves to be in competition with the Parties and to be generally able to take advantage from supplies that shift away from the Parties.
- (611) With regard to specific EEA refining competitors of the Parties, the following can be noted with respect to their demand for CSSR materials and perception of competition with the Parties with it:
- (612) Brixlegg states that it '*competes with the Parties in the procurement of scrap, in particular in the procurement of long-term end of life/high grade scrap*' ⁵⁷⁰. Furthermore, Brixlegg perceives itself to be in competition with both Aurubis and

⁵⁶⁵ 'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, Annex 8, Gestriges Telefonat mit Herr [...].pdf. Courtesy translation. The original German text reads: [...].

⁵⁶⁶ DocID1574-93101 (The Parties' reply to the Commission's request for information RFI16, M.9409_BAK17702_00684395.msg).

⁵⁶⁷ Reply to request for information 27, question 1b.

⁵⁶⁸ Reply to request for information 35, Annex 1.

⁵⁶⁹ Replies to question 37 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

⁵⁷⁰ Minutes of a call with a competitor on 11.7.2019, DocID3337.

Metallo for wastes from metallurgical processes such as '*slags or drosses from the melting processes of fabricators of Copper and Copper alloys*'⁵⁷¹.

- (613) Boliden states that it buys '*small quantities of copper (alloys) scrap*'⁵⁷². Boliden further explains that it purchases CSSR materials such as alloys, copper materials and copper-zinc residues⁵⁷³. Overall '*Boliden procures a mix of high and low grade of scrap*'⁵⁷⁴.
- (614) Umicore processes mainly complex CSSR materials. It specifically mentions with respect to IBA containing copper that it '*competes with Aurubis and Metallo for the purchase of this material*' and further that '*[a]lternative buyers to Aurubis, Metallo and the Company could potentially be any copper smelter, such as those from Poland and Sweden, who could technically process incineration bottom ashes*'.⁵⁷⁵ Further, Umicore also is active in the procurement of residues, either directly from industry or through traders⁵⁷⁶. As it has a strong focus on precious metals, Umicore perceives itself to compete more strongly with Aurubis than with Metallo for CSSR materials⁵⁷⁷.
- (615) KGHM submits that for example it purchases CSSR materials like mixed copper scrap, copper granulate and bronze alloy scrap⁵⁷⁸. Further, KGHM mentions that for '*Low grade Cu materials*' Brixlegg and Boliden are the two main competing purchasers to the Parties in the EEA⁵⁷⁹. It further names Aurubis, Boliden, Brixlegg and Metallo as the main purchasers of mid-grade copper scrap for refining in the EEA, and Aurubis, Metallo, Boliden and Brixlegg as the main purchasers of low-grade copper scrap for refining⁵⁸⁰.

(F) Conclusion

- (616) The Commission therefore, on balance, finds that other copper refiners in the EEA likely exert a significant competitive constraint on the Parties pre-Transaction and would do so post-Transaction also on the Merged Entity. This is mainly due to (i) the continued presence of competing refiners in the EEA, (ii) those competitors having demand for CSSR materials despite operating at full capacity, (iii) those competitors' technological capabilities to refine even low-grade and complex CSSR materials, (iv) suppliers considering other EEA copper refiners to be effective alternatives to the Parties, and (v) evidence that shows that other EEA copper refiners have demand for CSSR materials.
- (617) While Aurubis and Metallo are leading EEA copper refiners, both in terms of their capabilities as well as in terms of the CSSR volume they purchase, they are, and will continue to be, constrained by a number of important EEA rivals. The assessment in this Section 9.2.3.1 shows that in particular Brixlegg is a strong competitor to the Parties, as it has technological capabilities, significant demand and is perceived as a viable alternative by suppliers. Furthermore, Boliden and Umicore are also significant competitors with technological capabilities and demand for CSSR

⁵⁷¹ Submission from a competitor, DocID3338.

⁵⁷² Minutes of a call with a competitor on 8.7.2019, DocID3295.

⁵⁷³ Reply to question 4 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

⁵⁷⁴ Minutes of a call with a competitor on 8.7.2019, DocID3295.

⁵⁷⁵ Minutes of a call with a competitor on 5.12.2019, DocID2014.

⁵⁷⁶ Minutes of a call with a competitor on 6.1.2020, DocID2909.

⁵⁷⁷ Minutes of a call with a competitor on 6.1.2020, DocID2909.

⁵⁷⁸ Reply to question 4 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

⁵⁷⁹ Reply to question 59 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

⁵⁸⁰ Replies to question 34 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

(Boliden with a greater demand than Umicore, but Umicore with a focus on highly complex material). KGHM is likely more limited in its capabilities, but nevertheless also competes with the Parties for CSSR. Finally there are further, smaller copper refiners in the EEA that also compete for CSSR.

- (618) Overall, these EEA copper refiners will therefore likely continue to compete with and constrain the Merged Entity post-Transaction.

9.2.3.2. Exports to non-EEA copper refiners and other outlets outside the EEA are a viable alternative

- (619) The Notifying Party submits that significant volumes of CSSR are exported from the EEA to non-EEA countries⁵⁸¹. It further submits that non-EEA copper refiners are capable to process all types of CSSR materials⁵⁸².

- (620) While in the SO, the Commission preliminarily concluded that copper refiners outside the EEA are not an effective alternative to the Parties for suppliers and that exports are unlikely to defeat an increase in refining charges in the EEA, the Commission upon review of further evidence and new arguments submitted by the Notifying Party, finds that exports to non-EEA copper refiners and other outlets outside the EEA are likely a viable alternative. The ability of suppliers to resort to exports, while not equally pronounced for all types of CSSR materials, is therefore a constraint on the pricing abilities of the Parties, and post-Transaction the Merged Entity.

(A) Significant volumes of CSSR are exported from the EEA to non-EEA purchasers

- (621) The Commission's market reconstruction shows that significant volumes of CSSR are exported from the EEA to non-EEA destinations. Overall, 43% CSSR generated in the EEA is exported from the EEA.

- (622) This significant level of exports suggests that exporting is an option that is already pre-Transaction relatively readily available to EEA suppliers of CSSR. It further suggests that these exports exert a competitive constraint on the Parties, since suppliers could attempt to resort to some form of export in case terms offered by purchasers in the EEA are not sufficiently attractive.

- (623) While for many suppliers export itself is not a viable alternative (as they are too small, have no prior experience with exporting, face significant business risks related to exporting), they can consider supplying their CSSR to other, larger international trading intermediaries that are in a position to export materials from the EEA to non-EEA countries.

(B) Certain non-EEA copper refiners are technologically capable to refine low-grade and complex CSSR materials

- (624) A large number of copper refiners are active outside the EEA. Most are active in primary copper refining but also use copper scrap as an additional input material. Most of these copper refiners are technologically significantly more limited than the Parties and their main EEA rivals.

⁵⁸¹ See for example Reply to the SO, Annex 4, Section 4.2.2.

⁵⁸² See for example 'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, Section 2.1.

- (625) While such copper refiners have the general ability to use a wide range of CSSR materials in their process, the lower technological capabilities of most of these non-EEA refiners results in a lower metal recovery. This in turn influences the price such refiners are able to pay for the scrap they receive. These lower capabilities therefore significantly limit the competitive constraint exerted by such players on EEA copper refiners. One non-EEA copper refiner, based also outside of Canada, Japan and Korea, in this context explains that at its site in South East Asia, *‘the Company operates 4 black furnaces, each 4 meters in size. They are relatively inexpensive and not very complicated from a technological perspective. In its smelting operation, the Company does not produce any other metals aside from copper. The Company mostly pays for the copper content and not for other contained metals, precious metals or impurities, with the exception of gold and silver for which the Company does need to pay’*⁵⁸³. The company goes on to explain that it *‘for example does not pay for any tin contents of copper scrap/waste since it does not produce any tin materials’*. It therefore states that *‘it would not make a lot of economic sense for a supplier of copper scrap/waste to supply tin-containing materials to the Company’*.
- (626) However, such technological limitations do not apply, or apply less so, to a group of Japanese and Korean copper refiners, as well as to the Glencore refinery in Canada.
- (627) The Notifying Party submits, for example, with respect to JX Nippon, Dowa, Korea Zinc and Glencore, that they have either full current or potential capabilities to treat also complex CSSR materials⁵⁸⁴. Furthermore, Mitsubishi is another non-EEA (Japanese) player with advanced technical capabilities.
- (628) Japanese and Korean refiners are considered by a majority of suppliers expressing their opinion to be at least somewhat capable in handling and processing copper-iron scrap, tin-bearing copper-scrap and industrial residues containing copper, and at least capable in handling and processing IBA containing copper⁵⁸⁵.
- (629) Furthermore, Japanese and Korean refiners are considered by a majority of suppliers expressing their opinion to be at least somewhat efficient in extracting the maximum value from copper-iron scrap, tin-bearing copper scrap and IBA containing copper, and efficient in extracting the maximum value from industrial residues containing copper⁵⁸⁶.
- (630) Glencore is considered by a majority of suppliers expressing their opinion to be at least somewhat capable in handling and processing copper-iron scrap, and at least capable in handling and processing industrial residues containing copper and IBA containing copper⁵⁸⁷.
- (631) Further, Glencore is considered by a majority of suppliers expressing their opinion to be at least somewhat efficient in extracting the maximum value from copper-iron scrap, tin-bearing copper scrap and IBA containing copper, and at least efficient in extracting the maximum value from industrial residues containing copper⁵⁸⁸.

⁵⁸³ Minutes of a call with a competitor on 10.12.2019, DocID2981.

⁵⁸⁴ *‘White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 (“SO”)*, submitted by the Notifying Party on 16.03.2020, Annex 2, page 1.

⁵⁸⁵ Replies to question D.3, E.3, F.3 and G.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵⁸⁶ Replies to question D.4, E.4, F.4 and G.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵⁸⁷ Replies to question D.3, E.3, F.3 and G.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁵⁸⁸ Replies to question D.4, E.4, F.4 and G.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

- (632) This feedback from suppliers suggests that Japanese and Korean copper refiners as well as Glencore are generally regarded as technologically capable to refine CSSR materials – and to do so efficiently. This enables these players in principle to be a credible alternative to EEA copper refiners.
- (C) Certain non-EEA copper refiners have demand for CSSR materials
- (633) While certain non-EEA copper refiners have the technological capabilities to process even complex CSSR materials, as described in Section 9.2.3.2 (B), not all of them appear to have a current demand for CSSR materials from the EEA.
- (634) As a non-EEA copper refiner states, it ‘*estimates that most of the copper scrap material that is exported from the EEA is e-scrap*’. The company further explains that it ‘*does not perceive itself to be in competition with Metallo for the purchasing of copper scrap. The Company perceives itself to be in competition with Aurubis for the purchasing of e-scrap*’. In addition, it also states that ‘*JX is another Japanese company that might buy or import copper scrap from European countries, likely also mainly in the form of e-scrap*’⁵⁸⁹.
- (635) It therefore appears that currently at least some non-EEA copper refiners procure their CSSR materials mainly from their own local markets or from other, non-EEA world regions.
- (636) However, some non-EEA copper refiners do currently purchase CSSR materials from the EEA and compete with the Parties for CSSR materials, either in the EEA or in other world regions. Further, given that the Japanese and Korean copper refiners as well as Glencore are large and sophisticated companies, they are likely in a position to commence sourcing CSSR from the EEA should it become commercially more attractive to do so.
- (637) **First**, already pre-Transaction, there are instances of competition between non-EEA copper refiners and EEA-copper refiners for EEA-supplied CSSR.
- (638) Metallo's document regarding lost leads with new suppliers also records instances of competition with non-EEA copper refiners such as [...]. This is an indication that already pre-Transaction these players exert at least some level of competitive constraint on the Parties.
- (639) Further, while a non-EEA refiner explains that it ‘*mainly purchases electronic copper scrap (‘e-scrap’) from Europe*’⁵⁹⁰, this means that it also purchases some quantities of other copper scrap for refining from the EEA, likely CSSR materials.
- (640) In addition, it is to be noted that not all purchases of EEA-generated CSSR materials by non-EEA copper refiners are purchased by these players directly in the EEA. A significant volume is likely also purchased in the EEA by intermediate actors, such as internationally active traders of copper scrap, which then re-sell the materials also outside the EEA, in particular also to copper refiners.
- (641) **Second**, Japanese and Korean copper refiners like Ls Nikko, JX Nippon, Korea Zinc, Mitsubishi and Dowa, as well as Glencore are large and sophisticated companies.
- (642) While these companies currently likely primarily purchase CSSR materials from their own local markets, or also from other non-EEA markets (such as the US), it can

⁵⁸⁹ Minutes of a call with a competitor on 14.1.2020, DocID3057.

⁵⁹⁰ Minutes of a call with a competitor on 6.12.2019, DocID2731.

be assumed that they are able to overcome current barriers to import CSSR materials from the EEA.

- (643) This is for example evidenced by Mitsubishi's ability to do so with respect to e-scrap. Mitsubishi has set up a collection facility for e-scrap in the EEA, as shown in the Aurubis internal document captioned in Figure 38. Mitsubishi undertakes sampling, weighing and inspection of e-scrap materials purchased in the EEA at its joint venture facility in the Netherlands. The analysis and processing steps are then undertaken at its refining sites in Japan.
- (644) This shows that if a material is sufficiently attractive, non-EEA copper refiners are willing and able to purchase these materials from the EEA. Indeed they are even ready to invest significant resources to enable this step (Aurubis estimates about EUR [...] million for the e-scrap collection facility). Therefore, should refining charges in the EEA increase significantly, similar uptakes of direct purchasing activities by non-EEA copper refiners would be possible and likely.

Figure 38 – Mitsubishi establishing a collection facility for e-scrap in the EEA

[...]

Source: Reply to request for information 18, Annex Q1.c.2, slide 43.

- (D) Some suppliers consider exporting to non-EEA copper refiners and other outlets to be a viable alternative for certain CSSR materials
- (645) In responding to the Commission's market investigation, suppliers have expressed a differentiated view on to what extent exporting of copper scrap for refining, and CSSR in particular, is an effective alternative for them when faced with a refining charge increase.
- (646) Suppliers when asked if in case of 5-10% increase in refining charges in the EEA, they could quickly and without incurring significant costs re-allocate their sales to any other country outside the EEA indicate by large majorities of those expressing their view that they would not be able to do so for CSSR segments such as mid- and low-grade copper scrap for refining or copper-tin alloy scrap and tinned copper scrap⁵⁹¹.
- (647) As reasons for why they reply in the negative, suppliers for example mention that they do '*not have the knowledge and capacity to engage in worldwide high-priced metals trading*'. Others refer to transport costs or insurance costs as barriers to exporting their materials on short notice and without incurring extra costs⁵⁹².
- (648) However, when asked which options they would have readily available without incurring significant costs, if Aurubis and Metallo started paying significantly less for mid- and low-grade copper scrap for refining post-Transaction, suppliers expressing their opinion also name 'export outside the EEA' as an option (among those indicating that they could engage in any alternative, this is the second most prominent option, after 'sell to other copper refiners in the EEA')⁵⁹³. This suggests that suppliers are at least in part able to resort to exporting in order to avoid a price effect post-Transaction.

⁵⁹¹ Replies to question 25 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁵⁹² Replies to question 25.3 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁵⁹³ Replies to questions 44 and 45 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

- (649) Some suppliers generally describe their perceived inability to resort to exports by for example stating that *'Aurubis and Metallo are the only refiners within reasonable distance. To have to sent (sic!) scrap further would be economic and environmental nonsense'*⁵⁹⁴. Another supplier states that *'[a]s a small/medium sized company [it] would not be able to establish new business contacts outside the EEA easily within reasonable time. [It] would then be forced to sell through middlemen'*⁵⁹⁵. This suggests that while the supplier itself would not be able to resort to exports, it could do so via an intermediary like a larger trader.
- (650) Further, other suppliers report of a general ability to resort to exports. With respect to a CSSR material, one major supplier for example describes that *'in principle the majority of heavy metals shredder can go anywhere in the world as metals have a positive value. However the Company itself export at the moment some MT of heavy metals shredder from the EEA and also sells it to EEA-based copper refiners. Depending on the markets we are able to choose the best commercial way'*⁵⁹⁶. Another large supplier states that while for *'residues, export limitations are high (notification requirements etc.)'*⁵⁹⁷, it also states that it has in the past five years in reaction to a refining charge increase in the EEA for copper scrap for refining reallocated sales to customers outside the EEA⁵⁹⁸. It explains this in further detail by submitting that it *'can shift material flows quite readily as market conditions and regulations change; this is happening all the time and is nothing extremely rare for our company'*⁵⁹⁹. Similarly, another supplier states that *'[t]he EEA is by far not the exclusive buyer for copper scrap. We direct our sales to established trade relationships all over the world'*⁶⁰⁰. Yet another supplier explains that *'[s]crap can easily flow to the best markets. This is not difficult nor are there any major obstacles in doing so'*⁶⁰¹.
- (651) Therefore, suppliers are split as to whether they could resort to exports when faced with refining charge increases in the EEA. While certain suppliers state that it would not be possible for them, others clearly explain that it would be an option. It appears that it is in particular larger suppliers, which also function as aggregators of copper scrap materials from smaller suppliers, that are in a position to export from the EEA to non-EEA copper refiners and other non-EEA outlets. This speaks for an overall greater ability of suppliers to use exports than is reported by the suppliers responding to the market investigation (as the smaller ones will in many cases feel unable to export, but instead can resort to selling to larger intermediaries which in turn have export capabilities).
- (E) Other outlets outside the EEA are viable alternatives for certain CSSR materials
- (652) Aside of non-EEA copper refiners, other outlets outside the EEA are also viable alternatives for certain CSSR materials.
- (653) This applies in particular to certain CSSR segments, for example to copper-iron scrap and to tin-bearing copper scrap.

⁵⁹⁴ Reply to question 45.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁵⁹⁵ Reply to question 25.3 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁵⁹⁶ Minutes of a call with a supplier on 2.12.2019, DocID1557.

⁵⁹⁷ Reply to question 17.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁵⁹⁸ Reply to question 26 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁵⁹⁹ Reply to question 26.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶⁰⁰ Reply to question 26.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶⁰¹ Reply to question 26.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

- (654) With respect to copper-iron scrap, purchasers such as shredder operators or companies engaging in manual dismantling are active outside the EEA and purchase copper-iron scrap generated in the EEA. This appears to apply in particular to electro-motors. Such copper-iron scrap materials are for example exported to South East Asian countries like Malaysia, where they are manually dismantled⁶⁰² (i.e. the copper and iron are separated mechanically or by hand). The same supplier also explains in an email to the CEO of Aurubis that one of the main purchasers of copper-iron scrap from the EEA are '*dismantlers in Asia*' that then melt the copper and ship it to China⁶⁰³. Therefore, there are other outlets at least for certain materials in the copper-iron scrap segment.
- (655) With respect to tin-bearing copper scrap, bronze ingot makers outside the EEA are likely viable alternatives to sales inside the EEA, at least for copper-tin alloy scrap. Such purchasers are for example located in India, and recognised by some suppliers as purchasers of tin-bearing copper scrap⁶⁰⁴. Why these ingot makers are generally a viable alternative to copper refiners is further explained in Section 9.2.3.3 (A).
- (656) Further, it appears that also for some forms of IBA containing copper, non-refining outlets outside the EEA are viable purchasers. As one suppliers of IBA containing copper explains, it was exporting '*heavy metal fractions [of incinerator bottom ashes] to China in 2018, which can be put in the furnaces of copper refiners – theoretically all of them can be put in a furnace if sorting by hand or machine is not economically feasible*'⁶⁰⁵. It further explains that those IBA containing copper materials that it exports to China are generally larger in diameter than the fractions it sells in Europe. However, both can be put into the furnaces of copper refiners. Therefore, the ability to export the larger diameter fractions of IBA containing copper materials – either for pre-treatment and cleaning or directly for refining – to non-EEA purchasers, enables it to avoid refining charge increases in the EEA.

(F) Conclusion

- (657) Overall, and on balance, it appears that exports to non-EEA copper refiners and other outlets outside the EEA are a viable alternative for CSSR suppliers in the EEA to sales to copper refiners based in the EEA. While this alternative is not directly available to all EEA suppliers of CSSR – and is not equally pronounced for all CSSR materials – it nevertheless contributes to constraining EEA copper refiners including the Parties and, post-Transaction, the Merged Entity.
- (658) The Commission has not been able to reconstruct in detail the majority of exports of CSSR from the EEA, however, as shown in the Commission's market reconstruction (Section 9.2.1.3), it is likely that exports out of the EEA are significant. Therefore, even where individual suppliers are unable to resort to exports (due to a lack of knowledge, scale or the associated business risks), they are likely able to resort to selling to larger intermediaries who in turn are able to export to non-EEA copper refiners or other non-EEA outlets.

⁶⁰² Minutes of a call with a supplier on 30.10.2019, DocID1184.

⁶⁰³ DocID1571-9062 (The Parties' reply to the Commission's request for information RFI16, M.9409_BAK17702_00081130.msg). Courtesy translation. The original German text reads: '*Zerleger in Asien*'.

⁶⁰⁴ Replies to question E.8 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁶⁰⁵ Minutes of a call with a supplier on 15.1.2020, DocID3321.

9.2.3.3. Ingot makers, semi-manufacturers and non-copper smelters in the EEA are viable alternatives for certain CSSR materials

(659) The Notifying Party submits that ingot makers, semi-manufacturers and non-copper smelters purchase CSSR materials and are therefore viable alternatives to the Parties and to copper refiners in general.

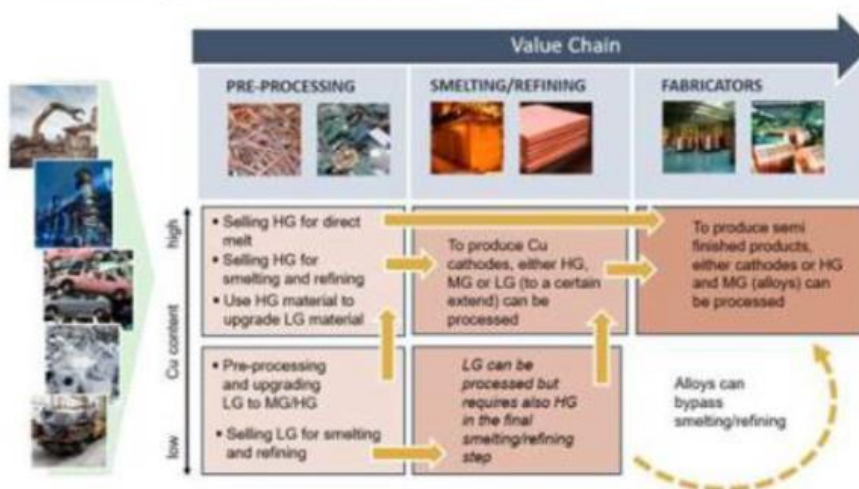
(660) While in the SO, the Commission preliminarily concluded that such players are not effective alternatives to the Parties, the Commission upon review of further evidence and new arguments submitted by the Notifying Party, finds that at least with respect to certain types of CSSR materials these companies do have capabilities for and purchases of them. They therefore exert a competitive constraint on the Parties.

(661) The visualisation of the value chain for copper scrap, submitted by the Notifying Party as part of a slide deck and captioned in Figure 39, shows that for most types of copper scrap, smelting and refining is a necessary treatment step. As the slide however also explains, certain high-grade scrap as well as alloy scraps can bypass the smelting and refining stage. Higher-grade scrap can be used directly by fabricators by re-melting it. Alloy scrap can be used in particular also by bronze or brass ingot makers.

Figure 39 – Value chain for copper scrap

Market characteristics

All types of scrap compete with each other



Source: Presentation by the Notifying Party 'State of Play Meeting, 3 December 2019', presented during the State of Play meeting on 3.12.2019, slide 8.

(A) Bronze and brass ingot makers are viable alternatives for certain CSSR materials containing tin or zinc

(662) Bronze and brass ingot makers have a demand for CSSR materials that contain either tin or zinc.

(663) In particular bronze ingot makers appear to exert a competitive constraint on copper refiners for tin-bearing copper scrap. While they are likely not able to process any type of tin-bearing copper scrap (in particular if it contains certain harmful

impurities), they can process tin-bearing copper scrap that is reasonably clean (i.e. does not contain harmful impurities other than tin and copper)⁶⁰⁶.

- (664) The fact that the Parties compete with ingot makers is for example documented in Metallo's document regarding lost leads with new suppliers. [...] ⁶⁰⁷.
- (665) Another Metallo internal document shows that Metallo considers ingot makers to be important competitors. [...] ⁶⁰⁸. [...].
- (666) An Aurubis internal document mentions that '*[d]epending on quality and metal content as well as overall material value, several „outlets“ are competing for different material streams (not only Cu smelters, but also pre-processors, other smelters and refiners, copper fabricators, ingot makers etc.)*'⁶⁰⁹. Therefore, depending on the material characteristics of the CSSR material in question, Aurubis perceives ingot makers to be a competitor for such material.
- (667) The fact that these ingot makers are in particular viable purchasers for tin-bearing copper scrap is further evidenced by suppliers submitting a positive opinion with respect to the capabilities of these players for this material.
- (668) In particular, half of suppliers expressing their opinion state that they consider EEA brass/bronze ingot makers or semi-manufacturers to be at least capable in handling and processing tin-bearing copper scrap⁶¹⁰. Further, a majority of suppliers expressing their opinion state that they consider EEA brass/bronze ingot makers or semi-manufacturers to be at least efficient in extracting the maximum value from tin-bearing copper scrap⁶¹¹.
- (669) Furthermore, a number of suppliers also takes bronze ingot makers into account when tracking the demand conditions, in particular for mid-grade copper scrap for refining (which falls within the CSSR market).⁶¹²
- (670) Finally, when asked to indicate the five main competing purchasers of tin-bearing copper scrap in the EEA, numerous suppliers also name ingot makers, such Grillo, Casa Del Bronzo, Hempel or KS Gleitlager⁶¹³.
- (671) Therefore, bronze and brass ingot makers are a viable alternative at least for certain types of CSSR materials, in particular for tin-bearing copper scrap materials and for certain zinc-containing CSSR materials.

(B) Semi-manufacturers are viable alternatives for certain CSSR materials

- (672) Manufacturers of semi-finished products containing copper are also an alternative for certain types of CSSR materials – in particular for higher grade materials or materials that have certain other metals contained.
- (673) As can be seen in Figure 39, fabricators such as semi-manufactures also have a demand for certain high-grade copper scrap materials. To a large extent, this is

⁶⁰⁶ See for example Replies to questions 36.1, 52 and 52.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶⁰⁷ Reply to request for information 27, question 1b.

⁶⁰⁸ DocID1517-25342 (The Parties' reply to the Commission's request for information RFI17, M.9409_SID17703_00146358.pptx), slide 18.

⁶⁰⁹ DocID1876-2085 (The Parties' reply to the Commission's request for information RFI16, M.9409_BAK17702_00056451.pptx), slide 6.

⁶¹⁰ Replies to question E.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁶¹¹ Replies to question E.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁶¹² Replies to question 36 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶¹³ Replies to question E.8 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

copper scrap for direct melt or copper scrap no.2, but can also include certain types of higher grade CSSR materials.

- (674) CSSR materials can be of interest to semi-manufacturers mainly for two reasons, either because they contain relatively little impurities (or the impurities are easy to remove by non-metallurgical means) or they contain other metals that are desired by the semi-manufacturer. This is the case, for example, when the semi-finished product produced by the semi-manufacturer in question also contains mainly copper and a certain other metal (for example nickel or zinc or similar).
- (675) A producer of semi-finished products for example in this context states that it *'acquires, directly from its customers, small quantities of granules and bronze or other alloys'*⁶¹⁴.
- (676) The Parties themselves also appear to perceive semi-manufacturers as competitors. For example, a strategic purchasing presentation by Metallo names [...] as a competitor for purchasing in [...] ⁶¹⁵. An Aurubis internal document also refers to fabricators as competitors⁶¹⁶.
- (677) Some supplier generally also appear to consider certain semi-manufacturers as viable purchasers. Wieland, for example, gets named as a purchaser for tin-bearing copper scrap⁶¹⁷. Furthermore, Wieland and KME also get named by some suppliers as among the main purchasers of high- and mid-grade copper scrap in the EEA⁶¹⁸.
- (678) Therefore, it appears that semi-manufacturers are viable alternatives to copper refiners, in particular for certain high-grade CSSR materials or CSSR materials that meet specific requirements in terms of contained other metals.
 - (C) Non-copper smelters are viable alternatives for certain CSSR materials containing pre-dominantly non-copper metals
- (679) Non-copper smelters likely do not have a particularly strong demand for CSSR materials that contain mainly copper. If one is focused on the recovery of other metals, such as tin, nickel, lead or zinc, it would likely not be efficient to purchase significant volumes of materials that have a high copper content but only contain a small quantity of the metal one is interested.
- (680) Aside of this business consideration, there is also a technical/flowsheet consideration that makes it impossible for non-copper smelters to process CSSR materials with a considerable copper content. As can be seen on the basis of the example of tin-containing scrap materials, [...]. This underlines the point that CSSR materials that contain significant amounts of copper are likely not of interest to non-copper refiners.

Figure 40 – [...]

[...]

Source: DocID1519-17380 (The Parties' reply to the Commission's request for information RFI 17, M.9409_SID17703_00457970.pptx), slide 12.

⁶¹⁴ Minutes of a call with a supplier on 16.12.2019, DocID3029.

⁶¹⁵ DocID1517-25342 (The Parties' reply to the Commission's request for information RFI17, M.9409_SID17703_00146358.pptx).

⁶¹⁶ DocID1876-2085 (The Parties' reply to the Commission's request for information RFI16, M.9409_BAK17702_00056451.pptx), slide 6.

⁶¹⁷ Reply to question E.8 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁶¹⁸ Replies to question 39 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

- (681) However, this also implies that where CSSR material has low copper content, a relatively low content of other metals (and possibly a relatively high content of other attractive recoverables such as precious metals), non-copper refiners do exert a competitive constraint on copper refiners purchasing CSSR materials.
- (682) Some suppliers, when asked what type of companies they take into account when tracking the demand conditions for copper scrap for refining, also indicate that they take into account other metal smelters and/or refiners (for example, tin, lead, zinc).⁶¹⁹ Overall, while a majority of suppliers expressing their opinion state that they currently are not selling copper scrap for refining to non-copper smelters or refiners, some suppliers indicate that they do so⁶²⁰. This further shows that at least for some CSSR materials non-copper refiners are a viable alternative.

(D) Conclusion

- (683) Overall, and on balance, it appears that ingot makers, semi-manufacturers and non-copper smelters each have some demand for certain CSSR materials. While not all (and often also not majorities of) suppliers consider them to be effective alternatives, some suppliers do. This is likely due to the different CSSR materials these suppliers supply to the market.
- (684) Ingot makers, semi-manufacturers and non-copper smelters are not capable to constrain copper refiners over the entire portfolio of CSSR materials the latter are purchasing. However, they exert a constraint with respect to those types of CSSR materials they are able to process and for which purchases make economic sense for them. These types of CSSR materials include high margin materials like tin-bearing copper scrap and are overall a significant part of the CSSR market.

9.2.3.4. Upgrading CSSR materials to other products is a viable alternative

- (685) The Notifying Party submits that recycling companies and pre-processors are able 'to mix, treat, and/or "upgrade" the scrap they collect or are provided with'⁶²¹. By doing so, suppliers are said to be able to add value to the scrap and to make it attractive to a different or wider group of potential purchasers.
- (686) While in the SO, the Commission preliminarily concluded that the upgrading of CSSR materials is not an effective alternative to the sale of CSSR to copper refiners, the Commission upon review of further evidence and new arguments submitted by the Notifying Party, finds that the upgrading and/or mixing of CSSR represents an alternative for some EEA-supplied CSSR.
- (687) **First**, some suppliers can engage in upgrading and re-mixing of CSSR materials so that they are attractive to a different or larger group of potential purchasers. While the material in question remains part of the CSSR market, it may become higher grade or contain fewer impurities after the upgrading or re-mixing process. This may then enable a different set of potential purchasers to process the material.
- (688) One example of such a transformation is CSSR material that contains organic material in the form of plastic (for example, cables). This organic material can be removed, for example, by means of incineration. Material without (or with only little) organic content can then be processed by a larger number of players.

⁶¹⁹ Replies to question 36 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶²⁰ Replies to question 37 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶²¹ Response to Article 6(1)(c) Decision, paragraph 21.

- (689) Another example is the physical transformation of material. Certain refiners may be particularly interested in material of a certain maximum diameter (which is also of importance for flowsheet considerations). Suppliers can engage in shredding processes to achieve smaller diameters of their CSSR materials.
- (690) Re-sorting or mixing of material batches is yet another strategy available in some cases. By mixing different materials together, a new batch of certain characteristics can be achieved that then may meet the quality requirements of the purchaser (for example, a refiner) in question. These requirements can relate to a maximum impurity content or a desired content of certain other metals in the batch.
- (691) Some suppliers confirmed that they regard upgrading and re-sorting to be viable alternatives for mid- and low-grade copper scrap for refining, should Aurubis and Metallo post-Transaction start to pay significantly less for these. While no majorities of suppliers expressing their opinion indicate that they could resort to these options, nevertheless some suppliers submit that they could resort to either of these two alternatives⁶²².
- (692) One supplier explains that '*creating higher grade granules, i.e. upgrading, is vital to be able to [...] conclude sales to refiners*'⁶²³. Another supplier explains it is mechanically recovering certain metallic material from residues, and is able to sell this to '*smaller casting companies in India that use it to produce brass*'⁶²⁴. Yet another supplier submits that with respect to copper-iron scrap such as electro-motors, shredding processes and further separation processes enable a sale to copper refiners as well as to non-refining processors in Asia⁶²⁵.
- (693) Therefore, while in all these described processes, the material in question remains part of the CSSR market, it becomes attractive to a different or larger group of potential purchasers. These steps therefore provide an alternative to sales to the Parties for certain suppliers as regards materials when faced with a refining charge increase.
- (694) **Second**, certain CSSR materials can also be upgraded into scrap products that are no longer part of the CSSR market, for example, into copper scrap no.2 or copper scrap for direct melt. While this is not possible for many types of CSSR materials, it can be a viable option for in particular certain higher grade CSSR materials. Such a transformation would then make these copper scrap materials attractive to a different and larger group of potential purchasers.
- (695) A supplier describes its ability to resort to such an alternative by explaining that '*[i]f refining terms are not favourable we look to sort, clean and upgrade lower refining grade material to a higher grade product accepted in Asia. However this is not always possible*'⁶²⁶.
- (696) One specific example where such a transformation is possible, is for certain tinned copper scrap materials (which, due to its tin content, is a high-margin material). By undergoing a de-tinning processes, tin and copper contained in tinned copper scrap can be separated – the resulting copper tends to be very clean, high-grade copper which can be used for direct remelt by, for example, semi-manufacturers.

⁶²² Replies to question 44 and 45 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶²³ Minutes of a call with a supplier on 2.12.2019, DocID3390.

⁶²⁴ Minutes of a call with a supplier on 9.1.2020, DocID3278.

⁶²⁵ Minutes of a call with a supplier on 30.10.2019, DocID1184.

⁶²⁶ Reply to question 26.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

- (697) The Notifying Party in this context submits that *'there are also de-tinning services available who remove the tin'* and that *'such de-tinning services have existed for decades'*. It further submits that material that is *'de-tinned [...] can [be] sold as scrap containing almost 99 % copper, i.e. almost cathode quality'*⁶²⁷.
- (698) As shown in Figure 41, excerpted from an Aurubis internal document, the de-tinning process results in a tin-containing sludge (which can be further treated to recover fully the contained tin) and de-tinned copper parts. Those copper parts generally have a very high copper content and can be used in re-melt processes. They are no longer part of the CSSR market, but become copper scrap no.2 or even copper scrap for direct melt.

Figure 41 – De-tinning process

[...]

Source: DocID1570-49183 (The Parties' reply to the Commission's request for information RFI16, M.9409_BAK17702_00054121.pptx), slide 17.

- (699) [Rationale and costs of de-tinning process]⁶²⁸.

Figure 42 – Aurubis de-tinning plant plans

[...]

Source: DocID1570-49183 (The Parties' reply to the Commission's request for information RFI16, M.9409_BAK17702_00054121.pptx), slide 25.

- (700) Resorting to de-tinning of CSSR materials, in particular of tinned copper scrap, is therefore an option for suppliers of those materials. They can either do so by taking up de-tinning services of third parties, or even by constructing a de-tinning plant themselves, should the Transaction result in a significant increase in refining charges for tinned copper scrap.
- (701) While suppliers when asked what options they would have readily available without incurring significant costs do not name de-tinning as an option for tinned copper scrap⁶²⁹, a number of suppliers submit that they can buy de-tinning services⁶³⁰. An undertaking which is mentioned numerous times as offering such de-tinning services in the EEA is Estanos Matiena in Spain⁶³¹. A supplier also submits that it *'heard from the market a German company is working on [establishing de-tinning capabilities] at the moment, but we have no details on hand'*⁶³².
- (702) Another supplier, which is active as a semi-manufacturer, mentions that it *'is currently implementing a process with which it is able to de-tin some of the material, but this process only has a small capacity. The tin-sludge which results from the de-tinning process would need to be sold, likely to Metallo or a company in Spain or Poland, i.e. tin refineries such as CRM Synergies/Fenix'*⁶³³. While the supplier mentions that the tin sludge from the de-tinning process would still need to be sold to

⁶²⁷ Response to Article 6(1)(c) Decision, paragraph 65.

⁶²⁸ DocID1570-49183 (The Parties' reply to the Commission's request for information RFI16, M.9409_BAK17702_00054121.pptx), slide 11.

⁶²⁹ Replies to question 60 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶³⁰ Replies to question 61 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶³¹ Replies to question 61.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶³² Reply to question 62.2.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶³³ Minutes of a call with a supplier on 16.12.2019, DocID3029.

either Metallo or in fact a dedicated tin refiner, it would be able to use the clean copper scrap in its own production processes.

- (703) Overall, the Commission considers that upgrading and/or re-mixing of CSSR materials is an alternative for some suppliers and with respect to certain CSSR materials.

9.2.3.5. Some suppliers are able to engage in stocking and de-stocking as a viable alternative

- (704) The Notifying Party submits that suppliers can engage in the hoarding (or withholding or stocking) of scrap, if prices are too low for them to make a profitable sale⁶³⁴.
- (705) While in the SO, the Commission preliminarily concluded that hoarding of CSSR is not a viable option, the Commission upon review of further evidence and new arguments submitted by the Notifying Party, finds that for some suppliers temporary stocking of CSSR materials is a viable practice to engage in, in order to countervail the purchasing power of copper refiners in particular.
- (706) Concretely, the Notifying Party submits that the Commission's market investigation reveals that various market participants either engage in stocking themselves or experience such behaviour in their suppliers⁶³⁵.
- (707) A majority of competitors to the Parties expressing their opinion submit that it is common for suppliers to stock as much scrap as possible and wait for an increase of the LME price (for copper)⁶³⁶. While this observation refers to a relationship between the supply of copper scrap and the LME price, it is likely that – to a lesser degree – a similar relationship exist between other price components of copper scrap, such as the refining charge, and the supply of copper scrap.
- (708) In this context a competitor submits that *'[s]upply in Europe can change (dealers can stock and hold on to material and wait for better market conditions)'*⁶³⁷. Another competitor states that *'[s]crap availability is also a factor of price. If price is low, scrap holder may choose to wait longer until [the] price recover[s] before [it] sell[s] the scrap'*⁶³⁸.
- (709) A supplier submits that *'for smaller traders it may be that they sometimes withhold supplies'*⁶³⁹.
- (710) While a majority of suppliers expressing their opinion do not state that if post-Transaction the Merged Entity started paying significantly less for mid- and low-grade copper scrap for refining, they are able to hold the scrap until the price for the copper scrap increases, some suppliers submit that they could engage in such a practice⁶⁴⁰.
- (711) Further, considering specific material segments of the CSSR market, a number of suppliers stated that they could hold the scrap to wait for better prices by the Merged

⁶³⁴ See for example Form CO, paragraph 489.

⁶³⁵ Reply to the SO, paragraph 147.

⁶³⁶ Replies to question 47 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

⁶³⁷ Reply to question 61 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

⁶³⁸ Reply to question 44.1 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098.

⁶³⁹ Reply to question 47.1 of Q2_Questionnaire to Refiners of Copper Scrap, DocID3098. Courtesy translation. The original Germany text reads: *'Für kleinere Händler mag es zutreffend sein, dass Ware auch mal zurückgehalten wird'*.

⁶⁴⁰ Replies to questions 44 and 45 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

Entity – in particular for copper-iron scrap and industrial residues containing copper⁶⁴¹.

- (712) Finally, the Parties' internal documents also evidence a relationship between the price of copper scrap and its availability, suggesting that suppliers engage in stocking and de-stocking in reaction to changes in the levels of the price components of copper scrap.
- (713) In a Due Diligence report prepared for Metallo, it is assessed that the price of copper has a significant impact on the availability of copper scrap.[...].

Figure 43 – [...]

[...]

Source: From CO, Annex 5.4-X, page 41.

- (714) While this analysis refers primarily to the LME copper price, it is likely that a similar relationship also exists for the other price components of copper scrap aside of the LME copper price. As the refining charge is a smaller price component of the overall scrap price, the relationship is however likely less pronounced.
- (715) Further, as the Notifying Party submits also ordinary course of business documents evidence that suppliers withhold scrap⁶⁴².
- (716) For example, market intelligence reports produced for Metallo mention for November 2018 that *'[i]n Europe, there has been a notable pick-up in scrap availability of both refinery grade and direct melting grade material. Much of the increase is due to higher copper prices'*⁶⁴³. Again, while this relationship between availability and prices is mostly reported to be linked to the LME copper price, it is observed in the ordinary business by the Parties.
- (717) Overall, while suppliers likely mostly engage in stocking and de-stocking practices in reaction to LME price movements, this means that those suppliers are likely also able to engage in such practice in reaction to refining charge movements. Suppliers that are most likely to be able to do so are collectors and other intermediaries. These companies' business model is in any case built on making a margin between the point of scrap generation and the point of scrap refining. Part of that margin also depends on identifying the optimal time to sell copper scrap, given the market conditions. Therefore, stocking CSSR when refining charges are too high is therefore a practice certain suppliers are likely able to engage in to some extent.
- (718) Given the Parties' (and any secondary copper refiners') need to utilise their refining capacity fully, such an ability to engage in stocking results in countervailing seller power for suppliers. Despite the general likely oversupply of CSSR, if sufficient suppliers are able to at least temporarily engage in stocking, this is likely to be a significant constraint of the Parties' pricing abilities.

9.2.3.6. Conclusion

- (719) Based on the analysis in this Section 9.2.3, the Commission therefore, on balance, finds that suppliers of CSSR have sufficient effective alternatives to selling CSSR to the Merged Entity. This is primarily due to the existence of a large number of alternative outlets for EEA-supplied CSSR as evidenced by the Merged Entity's

⁶⁴¹ Replies to questions D.13 and F.13 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁶⁴² Reply to the SO, footnote 96.

⁶⁴³ Form CO, Annex 6-VV.21.

moderate combined purchasing share. It is also due to a number of alternative strategies suppliers can engage in such as upgrading or stocking their CSSR. While many of these do not represent effective alternatives for all suppliers, they are nevertheless alternatives for a substantial sub-set of suppliers. Overall, a majority of suppliers expressing their opinion submit that they would have alternative options available if the Merged Entity started paying significantly less for CSSR post-Transaction⁶⁴⁴.

9.2.4. *Entry and expansion barriers do not prevent actual or potential competitors from constraining the Merged Entity*

(720) The Notifying Party submits that competing purchasers to the Parties are likely to defeat any post-Transaction increase in refining charges⁶⁴⁵.

(721) While in the SO, the Commission preliminarily concluded that competitors' reactions are unlikely to defeat an increase in refining charges, upon review of further evidence and new arguments submitted by the Notifying Party, the Commission finds that due to the dynamic nature of CSSR supply and competitors' ability to expand or to shift their purchasing towards CSSR, the competitors' reactions are likely to defeat a significant increase in refining charges by the Merged Entity.

9.2.4.1. The supply of CSSR is dynamic

(722) The Notifying Party submits that the mix of copper scrap supply, including in particular CSSR supply is changing⁶⁴⁶.

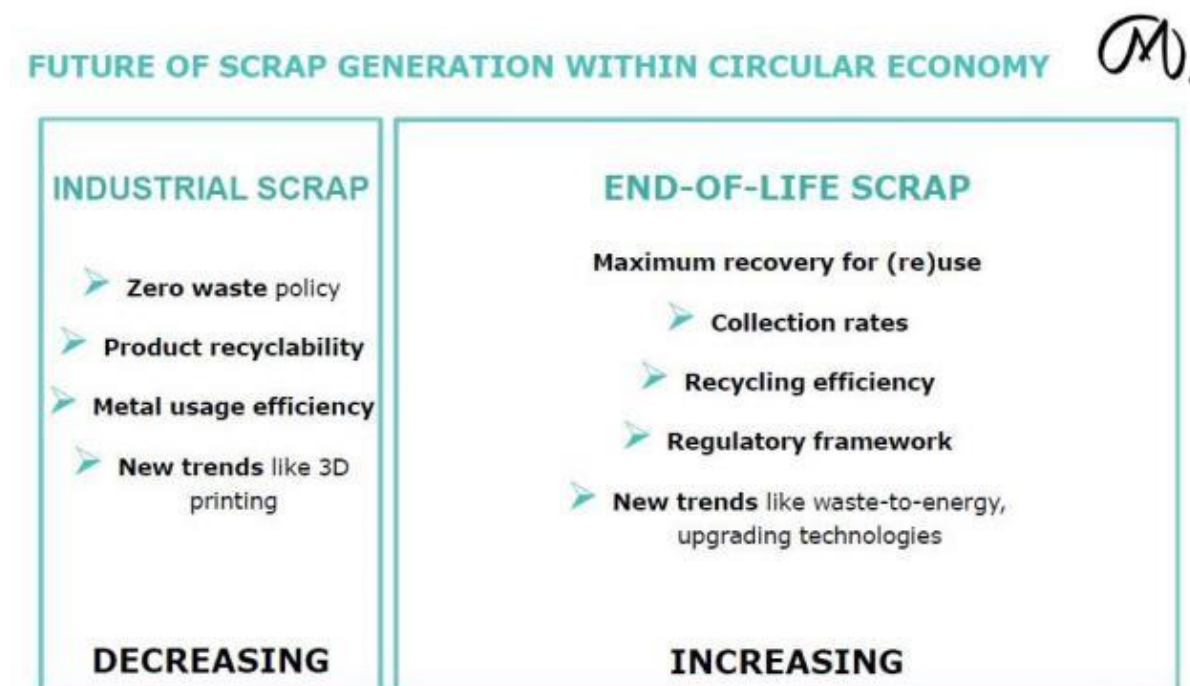
(723) As shown in Figure 44, the Parties expect a number of trends to contribute to a change in the overall scrap supply. Industrial scrap (or new scrap) is expected to decrease, due to for example new technologies such as 3D printing that minimise the scrap generation during production, or due to new regulatory measures. EoL scrap (or old scrap) is however predicted to increase, for example, due to higher collection rates and new technological trends.

⁶⁴⁴ Replies to question 44 and 45 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶⁴⁵ Response to Article 6(1)(c) Decision, paragraphs 157-159.

⁶⁴⁶ For example during the Parties' presentation held at the Oral Hearing.

Figure 44 – Changing landscape of scrap generation



Source: Presentation by the Parties, 2 March 2020, slide 30.

- (724) A Due Diligence report prepared for Metallo suggests however that in recent years new scrap generation has grown faster than old scrap generation, as can be seen in Figure 45. However, in any event, this shows that the scrap supply is dynamic and that different types of scrap grow, and are expected to grow, at different rates.

Figure 45 – [...]

[...]

Source: Form CO, Annex 5.4-X, slide 32.

- (725) It is evident from the Parties' own purchasing behaviour that changes in CSSR intake are being made in reaction to changes in the available CSSR materials. As explained in Section 9.2.3.1 (B), Aurubis has shifted a part of its intake in recent years from low-grade industrial residues containing copper to shredder materials (which include IBA containing copper). This happened in reaction to increased availability of IBA containing copper as a result of technological advances in the pre-processing thereof.
- (726) This shows that the composition of overall CSSR supply is dynamic and changing and that copper refiners react to this, thereby also changing the competitive landscape for CSSR overall.
- (727) Competitors are therefore able to react (both to changes in the composition of overall CSSR supply, or to refining charge increases by the Merged Entity) by changing their CSSR intake despite their capacities being (almost) fully utilised. Just as Aurubis did when it substituted industrial residues containing copper with IBA containing copper, other copper refiners can react by purchasing more of a certain CSSR material that due to higher refining charges by the Merged Entity becomes more profitable to purchase and refine. This in turn will constrain the Merged Entity's ability to increase its refining charges.

- (728) It is therefore likely that processing and refining activities geared towards what the CSSR supply looks like at present are not necessarily indicative of an ability to effectively capture the CSSR supply for the future.
- (729) This also implies that due to the dynamic nature of the market, the current purchasing shares of the Parties (and other market participants) are likely not a very robust indicator of the purchasing power of the Merged Entity in the long term, in particular if considered at segment level.
- 9.2.4.2. Capacity and capability expansions are possible in case of a refining charge increase
- (730) The Notifying Party submits that '*[e]ntry and expansion can and does take place within the EEA*' and that '*[t]here are no material barriers to entry and expansion*'⁶⁴⁷.
- (731) The Commission however finds that there are entry and expansion barriers, in particular for secondary copper refining in the EEA.
- (732) The costs associated with the construction of a secondary refining plant are considerable. [...] ⁶⁴⁸. [...].
- (733) Similarly, in an internal email the Metallo R&D director mentions a required CAPEX of EUR [...] million (for the replication of just one plant, not the Metallo network of two plants)⁶⁴⁹. A [...] construction and a [...] ramp-up time are also mentioned.
- (734) In addition to the issue of construction cost and time, there appear to be a number of commercial, operational and regulatory barriers, in particular for new entrants, as a slide from a Due Diligence report prepared for Metallo identifies (see Figure 46).
- (735) Commercial barriers are said to be [...]. This indicates that a new entrant would likely find it challenging to establish a supplier network that rivals that of established players.
- (736) Operational barriers are said to be [...].
- (737) Regulatory barriers are said to be [...].

Figure 46 – [...]

[...]

Source: Form CO, Annex 5.4-X, slide 83.

- (738) Therefore, in particular the barriers to new entry appear to be high. Nevertheless, expansion, both in terms of capabilities and of capacities is likely possible in the EEA for copper refiners.
- (739) **First**, instances in which competitors of the Parties and the Parties themselves planned for or implemented expansions evidence that doing so is possible.
- (740) A 2018 news article states that '*Boliden has decided to expand the Kevitsa copper-nickel mine and Harjavalta copper-nickel smelter*'⁶⁵⁰. It further states that '*Boliden invests EUR 45 m in Harjavalta and Pori in order to increase copper cathode*

⁶⁴⁷ Response to Article 6(1)(c) Decision, paragraph 158.

⁶⁴⁸ Form CO, Annex 5.4-J, page 30-31.

⁶⁴⁹ DocID1521-14720 (The Parties' reply to the Commission's request for information RFI 17, M.9409_SID17703_00039578.msg).

⁶⁵⁰ DocID1575-52570 (The Parties' reply to the Commission's request for information RFI16, M.9409_BAK17702_00323131.pdf).

production from 135,000 tonnes to 170,000 tonnes per year. The investments addresses bottlenecks at the Harjavalta smelter as well as an expansion of the Pori copper refinery. Boliden expects to achieve the new capacity in Q1 2020'.

- (741) Further, in an internal email from 2018, Aurubis staff speculates about a potential Boliden capacity expansion at the Rönnskär site and whether it is related to primary copper only or also to secondary materials⁶⁵¹.
- (742) With respect to Umicore, the Notifying Party submits that it 'has for the past couple of years been in expansion plans to increase the capacity of cathodes from secondary sources, driven by market dynamics such as the temporary increase in copper scrap available in the market presenting an opportunity for Umicore'⁶⁵². In fact, in an internal Aurubis email from January 2018 concerning Umicore's expansion plans, that 'after their big expansion project to increase the refining capacity end 2016 the cathode quality deteriorated sharply' and further that 'to solve this they made big investments in the leaching / tankhouse in December. [...]'⁶⁵³. Umicore was therefore able to expand both its capacity as well as its capabilities.
- (743) [...]⁶⁵⁴.
- (744) Therefore, given that EEA copper refiners have recent and on-going expansion projects, it is likely that such expansions can also occur in the future.
- (745) **Second**, while it is important to have advanced technical capabilities to effectively and efficiently process complex copper scrap materials, such capabilities are at least in part available for purchase.
- (746) Capabilities for complex copper scrap, and therefore for a significant part of the CSSR market, are based on process and flowsheet know-how. This is likely difficult to acquire for new entrants. However, companies already active in secondary copper scrap refining can build on their existing knowledge and expand it further.
- (747) Companies already active in secondary copper refining can turn to technologies that are available on the market for the refining of low grade and complex copper scrap materials. For example, providers such as Polymet offer the construction of smelting and refining technology, including the capability to recover non-copper metals when undertaking copper scrap refining. Crucially, the company also offers refining technologies for lead, tin and zinc (which are contained in a range of CSSR materials)⁶⁵⁵.
- (748) An expansion of capabilities by competitors (for example by means of acquiring technology solutions) would enable them to even more effectively compete in certain segments of CSSR, in case the Merged Entity were to increase refining charges post-Transaction in certain segments.
- (749) **Third**, market participants are divided on the question whether existing copper refiners would have the ability and incentive to expand their capabilities and capacities in reaction to a drop in prices for copper scrap.

⁶⁵¹ DocID1570-58626 (The Parties' reply to the Commission's request for information RFI16, M.9409_BAK17702_00840199.msg).

⁶⁵² Response to Article 6(1)(c) Decision, paragraph 158.

⁶⁵³ DocID1576-6 (The Parties' reply to the Commission's request for information RFI16, M.9409_BAK17702_00370578.msg).

⁶⁵⁴ Form CO, Annex 5.4-X, page 217.

⁶⁵⁵ Polymet Website, <https://www.polymet-solutions.com/solutions/metals-and-recycling/>; accessed 24.3.2020, DocID3777.

- (750) A large majority of suppliers expressing their opinion state that they do not expect that in case refining charges for copper scrap for refining increase in the EEA, copper scrap refiners will have the ability to expand their copper refining capabilities within 2-3 years' time.⁶⁵⁶ Similarly, a majority of suppliers expressing their opinion say they do not expect refiners to have the incentive to do so⁶⁵⁷.
- (751) Suppliers explain their scepticism by for example stating that '*[t]o increase the capacities the other refiner need more time and a lot of money*' or that '*[w]e believe that 2-3 years is too short a time to expand refining capacities for anybody*'⁶⁵⁸.
- (752) Refining competitors of the Parties expressing their opinion state that they would have the ability in 2-3 years' time to expand their copper refining capabilities and increase their refining capacities⁶⁵⁹. The competitors expressing their opinion are evenly divided on the question of whether they would have an incentive to do so (whereas an overall majority indicated 'I do not know')⁶⁶⁰. A competitor in this context explains that '*[b]etter terms on raw materials provide an incentive to expand marginal production*'⁶⁶¹.
- (753) Therefore, at least for certain market participants, and in particular for some copper refiners, it appears possible to react to an increase in refining charges by expanding refining capacity and capability.
- (754) Overall, it appears that while new entry into the refining of CSSR appears to be associated with a number of significant barriers, expansion of capacities and capabilities by existing players is achievable and has been achieved in the past. Therefore, the Commission considers that in case of an increase in the refining charges for CSSR in the EEA post-Transaction, incentives for a capacity and capability expansion would increase.
- 9.2.4.3. Copper refiners active in markets neighbouring CSSR such as e-scrap would likely increase their presence in CSSR in case of a refining charge increase
- (755) The Notifying Party submits that '*every refiner that can recycle e-scrap can recycle and replace all its purchasing volumes of e-scrap by other CSSR materials*'. This is because e-scrap '*is the most difficult material to refine due to its organic content and the complexity of contained elements*'⁶⁶².
- (756) From a technological perspective, copper refiners that predominantly or exclusively focus on e-scrap⁶⁶³ are capable to switch their intake (in part) to CSSR materials.
- (757) In case of a CSSR refining charge increase post-Transaction, such a shift in intake may become attractive for e-scrap refiners.
- (758) **First**, copper refiners active in e-scrap would not require particular investments for purchasing more CSSR.

⁶⁵⁶ Replies to question 47 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶⁵⁷ Replies to question 48 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶⁵⁸ Replies to question 47.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶⁵⁹ Replies to questions 40 of Q2-b_Questionnaire to Refiners of Copper Scrap, DocID3096.

⁶⁶⁰ Replies to questions 41 of Q2-b_Questionnaire to Refiners of Copper Scrap, DocID3096.

⁶⁶¹ Replies to questions 43.1 of Q2-b_Questionnaire to Refiners of Copper Scrap, DocID3096.

⁶⁶² '*White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")*', submitted by the Notifying Party on 16.03.2020, paragraph 55.

⁶⁶³ These are for instance WEEE Metallica, Mitsubishi (via its EEA collection facility in the Netherlands) or Boliden (Form CO, table 18).

- (759) As e-scrap is complex, low-grade copper scrap material, its refiners already have technological capabilities for refining also other complex scrap grades. This is because there are already high metallurgical requirements necessary to be met in order to be able to refine e-scrap⁶⁶⁴.
- (760) An internal Aurubis document shows (Figure 47) that PCBs⁶⁶⁵ (which make up the largest part of e-scrap) are materials that are considered to be of the highest complexity. This complexity is given due to the different metals and other materials that are contained within the PCBs.

Figure 47 – PCBs are considered as highest in complexity

[...]

Source: Form CO, Annex 5.4-T, page 8.

- (761) Therefore, if a copper refiner is capable of refining e-scrap, it is likely to be able to refine all or at least a large part of the CSSR materials.
- (762) **Second**, higher margins for CSSR following a refining charge increase would likely motivate copper refiners active in e-scrap to purchase more CSSR.
- (763) [Information on Aurubis' margins]⁶⁶⁶ [...].

Figure 48 – E-scrap (PCB) contribution margin

[...]

Source: Reply to request for information 18, Annex Q1.a.2, slide 4.

- (764) [Information on Aurubis' revenue].

Figure 49 – Aurubis' per tonne gross revenue per material

[...]

Source: Reply to request for information 18, Annex Q1.a.2, slide 3.

- (765) The higher margin achieved by e-scrap is likely to a large extent due to the precious metals contained to a high degree in this material⁶⁶⁷ (which form the large part of the rationale for purchasing and treating e-scrap).
- (766) **Third**, a refining charge increase in CSSR would likely result in a greater incentive for e-scrap refiners to increase their presence in the CSSR market.
- (767) The choice of certain copper refiners to exclusively or primarily focus on the refining of e-scrap is likely driven to a large degree by the higher margins achievable with this material. However, if post-Transaction the Merged Entity were to increase refining charges for CSSR, achievable margins for CSSR for copper refiners would likely increase. Therefore, the relative attractiveness of purchasing and refining CSSR materials would increase compared with the relative attractiveness of purchasing and refining e-scrap. This would likely influence the input mix of these refiners.

⁶⁶⁴ Form CO, paragraph 154.

⁶⁶⁵ PCBs = printed circuit boards (in the Figure 48 identified in German as 'Leiterplatten').

⁶⁶⁶ Form CO, paragraph 154.

⁶⁶⁷ See for example Form CO, Annex 5.4-X, page 36.

- (768) Generally, while they have a high incentive to maintain an overall full or near-full utilisation of their capacity, copper refiners can make changes to their input mix⁶⁶⁸. Therefore, they are also capable to react to such potential instances where the achievable margins of a certain material are changing.
- (769) Entry or expansion into CSSR purchasing and refining by players currently active exclusively or predominantly on a neighbouring market, in particular the e-scrap market, would thus both be technologically possible as well as likely in case of a significant increase in refining charges for CSSR.

9.2.4.4. Conclusion

- (770) The Commission therefore, on balance finds that barriers to entry, and in particular barriers to expansion do not prevent actual or potential competitors from constraining an increase in refining charges for CSSR by the Merged Entity in the EEA. Due to the dynamic character of the CSSR market, shifts in purchasing and refining focus by refiners is, in any case, a necessary feature of the market. Further, expansion of capabilities and capacities is likely possible for refining players already active in the CSSR market, or active in neighbouring markets such as the market for e-scrap.

9.2.5. *The Transaction is unlikely to result in a significant reduction in incentives to invest and innovate in the treatment and recovery of metals*

- (771) The Notifying Party submits that '*the whole Transaction is also about enabling innovation and fostering further development of solutions to treat more complex scrap more effectively and more efficiently*'⁶⁶⁹.
- (772) In the SO, the Commission however preliminarily assessed that the Transaction may lead to a reduced incentive to invest and innovate in the treatment and recovery of metals.
- (773) Upon review of further evidence and new arguments brought forward by the Notifying Party, the Commission finds that the evidence on its file is not sufficiently strong to support the conclusions set out in the SO and that the arguments brought forward by the Notifying Party cast further doubt onto whether such a reduction in incentives to invest and innovate would occur post-Transaction.
- (774) **First**, with respect to investments to increase one's capabilities for metal extraction or one's gross intake capacity, the Notifying Party submits that given the structure of the EEA CSSR market, any capacity expansions by the Merged Entity is unlikely to have an appreciable effect on prices paid by other copper refiners for CSSR materials⁶⁷⁰. Therefore, as prices would remain (largely) unaffected by a capacity increase, the Merged Entity's '*incentives to invest in capacity would remain unchanged post-merger*'.
- (775) The Commission finds that the concern that the larger a refining entity becomes (for example, through a merger), the lower its incentives to further expand its capacity, is not directly applicable to the market environment of CSSR in the EEA, which is generally characterised by oversupply. In particular, a capacity increase by a single market participant is unlikely to result in a significant change in the overall

⁶⁶⁸ 'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, paragraph 55.

⁶⁶⁹ Response to the Article 6(1)(c) Decision, paragraph 188.

⁶⁷⁰ Reply to the SO, Annex 5, footnote 5.

supply-demand balance in the market, and therefore is also unlikely to result in an appreciable effect on market prices.

- (776) The Notifying Party explains that [...] ⁶⁷¹. [...] ⁶⁷². Against this background, the Notifying Party's submission that *'the decision of a single market participant would hence not result in a significant change in the market demand for CSSR and hence not in a significant change of price'* therefore appears reasonable.
- (777) Consequently, a capacity increase [...] is unlikely to have a significant depreciative effect on market prices. Therefore, the Transaction will likely not result in a change of incentives to invest in capacity increases, as the Merged Entity would not face the risk of having to accept lower refining charges on its larger overall purchasing volumes.
- (778) Furthermore, and in any case, other factors than potential market price effects may likely drive decisions for capacity expansions ⁶⁷³. As can be seen in the Metallo internal document shown in Figure 50, [...].

Figure 50 – Metallo project Omega to increase capacity for complex scrap

[...]

Source: Form CO, Annex 5.4-X, page 217.

- (779) Therefore, on balance and in light of the new arguments brought forward by the Notifying Party, the Commission finds that the Transaction is unlikely to significantly reduce the Merged Entity's incentives to increase capacity.
- (780) **Second**, with respect to the potential loss of direct innovation competition between the Parties post-Transaction, the Notifying Party submits that the Merged Entity may in fact have the incentive to innovate more post-Transaction and that, in any event, innovation in the copper scrap refining industry is to a large extent driven not by competition between refiners but by the dynamic evolvement of the copper scrap supply and the changing regulatory landscape.
- (781) Specifically, **in the first instance**, the Notifying Party outlines that *'R&D investments typically entail fixed costs, and post-merger these could be spread over more volumes. Projects that were not pursued pre-merger because the Parties would not, individually, achieve the required minimum scale of scrap intake to compensate for the investment cost, could be pursued post-merger. Post-merger, if successful, the improvements could be applied to both Parties' operations'* ⁶⁷⁴. In other words, the gains of a successful innovation project would be greater post-Transaction, because, for example, an increased ability to recover certain metals could be applied over a larger CSSR intake volume. Therefore, the Merged Entity's incentives to innovate, at least with respect to initiatives aimed at increasing metal recovery, would not be smaller post-Transaction but may in fact be larger.
- (782) Furthermore, it is important not only to consider the Transaction's effect on innovation incentives for the Merged Entity, but also to consider likely reactions by refining competitors. These competitors may in fact have an increased incentive post-Transaction to invest in innovation. As the Notifying Party submits, this is because *'the removal of a competitor from the market would increase the gains from*

⁶⁷¹ Reply to the SO, Annex 2, page 11.

⁶⁷² Reply to the SO, Annex 2, page 11.

⁶⁷³ Reply to the SO, Annex 2, page 30.

⁶⁷⁴ Reply to the SO, Annex 5, page 4.

*innovating, as increased margins are less likely to be competed away through imitation*⁶⁷⁵. As post-Transaction there would be one competitor less than pre-Transaction, the risk of investing in innovation is lower – and therefore the readiness, at least by certain competitors of investing, for example, in increased metal recovery, may be larger than pre-Transaction.

- (783) **In the second instance**, the evolving nature of the CSSR supply and the likely increasing complexity of CSSR materials will both necessitate the adaption of current flowsheets by copper refiners and require further innovation in order to maintain a competitive and profitable input mix. Further, a certain level of innovation and investment will in any case not be affected by the Transaction, as it is already pre-Transaction not driven by competition between copper refiners, but rather by changing regulatory requirements, such as Regulation (EC) No 1907/2006 of the European Parliament and of the Council (the REACH regulation)^{676, 677}. These exogenous drivers for innovation will remain post-Transaction, as competitors will still compete as to who is best able to adapt to the changing supply mix of CSSR and to new regulatory requirements. Furthermore, also an increase in refining charges by the Merged Entity would likely incentivise other copper refiners to invest in capability expansions for the CSSR segments this refining charge increase relates to (see also Section 9.2.4.2).
- (784) **In the third instance**, suppliers largely do not expect the Transaction to result in lower incentives for the Merged Entity to invest in better capabilities to refine complex copper scrap. While a majority of responding suppliers indicated 'I do not know', among those suppliers expressing an opinion a majority says that they expect the Merged Entity to either have the same incentive or a greater incentive than pre-Transaction to invest in its capabilities to refine complex copper scrap⁶⁷⁸.
- (785) In that context, while one supplier states that post-Transaction the Merged Entity would *'probably not [have a] big incentive as they will be in a already very high position so no need'*, another supplier says that *'[t]he merger will allow to internalize profits along the value chain and thus make it more economical to invest'*. Yet another supplier even states that *'Aurubis and Metallo are competing in a global market with other global players. Ultimately it is also the market and its changes driving investments'*⁶⁷⁹.
- (786) Therefore, on balance, the new arguments brought forward by the Notifying Party and the further evidence from the case file raise doubts that the Transaction would reduce the incentives of the Merged Entity to invest and innovate. This is so because the Merged Entity's gains of a successful innovation would be greater post-Transaction given that it can be spread over higher volumes of CSSR and the Merged Entity will be challenged by the innovation efforts of its competitors. In

⁶⁷⁵ Reply to the SO, Annex 5, page 5.

⁶⁷⁶ Regulation (EC) No 1907/2006 of the European Parliament and of the Council of 18 December 2006 concerning the Registration, Evaluation, Authorisation and Restriction of Chemicals (REACH), establishing a European Chemicals Agency, amending Directive 1999/45/EC and repealing Council Regulation (EEC) No 793/93 and Commission Regulation (EC) No 1488/94 as well as Council Directive 76/769/EEC and Commission Directives 91/155/EEC, 93/67/EEC, 93/105/EC and 2000/21/EC. (OJ L 396, 30.12.2006, p. 1).

⁶⁷⁷ Reply to the SO, Annex 5, page 6.

⁶⁷⁸ Replies to question H.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁶⁷⁹ Replies to question H.4.1 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

addition, innovation is driven also by exogenous factors such as regulatory requirements.

9.2.6. *The Transaction is unlikely to lead to a significant price effect*

(787) The Notifying Party submits that the Transaction will not result in a refining charge increase⁶⁸⁰. This is due to an inability of the Merged Entity to profitably reduce purchasing prices (by moderately reducing its input volume) and due to a number of factors limiting the Merged Entity's purchasing power⁶⁸¹.

(788) The Commission investigated the likelihood that the Transaction leads to a significant price effect, namely to a significant increase in refining charges for CSSR in the EEA. While in the SO, the Commission preliminarily concluded that such a refining charge increase was likely, upon consideration of further evidence and arguments brought forward by the Notifying Party, and in light of all the considerations laid out in this Section 9.2, the Commission on balance concludes that such a price effect is not likely, and in any case would not be significant and would likely be counteracted by certain positive effects of the Transaction.

9.2.6.1. A majority of suppliers expects the Transaction to lead to an increase in refining charges

(789) During the course of the market investigation, some respondents, in particular suppliers, brought forward concerns that an increase in buyer power of the Merged Entity and a resulting increase in refining charges.

(790) **First**, active complainants have brought forward a number of concerns with respect to the Proposed Transaction.

(791) **In the first instance**, a supplier of the Parties considers itself to be '*directly affected by the Merger*'⁶⁸². The supplier explains that it considers '*until now Aurubis and Metallo stood in competition with each other for copper scrap for refining*'⁶⁸³. It goes on to explain that '*due to the merger, Aurubis has a dominant position for almost the whole portfolio of the treatment of copper containing scrap and alloy scrap. Because of that [it] fears negative consequences on the raw material trade and a large price disadvantage for suppliers and also other market participants*'⁶⁸⁴. It goes on to refer to certain tinned alloys as materials for which the Merged Entity would become particularly strong.

(792) At a later stage in the proceedings, the supplier also submitted that the Transaction would lead to very large combined refining and capacity shares, and to higher refining charges⁶⁸⁵. This would ultimately lead to less money for the generators of copper scrap⁶⁸⁶.

⁶⁸⁰ See for example Reply to the SO, Section 2.2.4.

⁶⁸¹ See for example Form CO, Section 10.

⁶⁸² Submission by a supplier on 12.7.2019, DocID1248. Courtesy translation. The original German text reads: '*von diesem Zusammenschluss direkt betroffen sind*'.

⁶⁸³ Courtesy translation. The original German text reads: '*Bisher standen Metallo und Aurubis als Abnehmer von Kupferraffinierschrotten im Wettbewerb*'.

⁶⁸⁴ Courtesy translation. The original German text reads: '*Durch den Zusammenschluss hat Aurubis nun eine Vormachtstellung für das nahezu gesamte Portfolio der Verwertung von kupferhaltigen Schrotten und Kupferlegierungsschrotten. Hierdurch befürchten wir negative Auswirkungen auf den Rohstoffhandel und einen großen Preisnachteil für die Lieferanten und auch alle anderen Marktteilnehmer*'.

⁶⁸⁵ Minutes of a call with a supplier on 23.7.2019, DocID3387.

⁶⁸⁶ Minutes of a call with a supplier on 3.12.2019, DocID3288.

- (793) **In the second instance**, another supplier is concerned because it *'believe[s] that Aurubis has proven that they can already control the market in Europe, and [it] furthermore believe[s] that the planned acquisition of Metallo would put [it], and the entire recycling community, in a stranglehold, as any reasonable competition would have been eliminated from the recycling market'*. It further states that Aurubis could lower its purchasing prices and that this could result in financial problems for other market participants.
- (794) At a later stage in the proceedings, the supplier reiterated that it expects refining charges to increase immediately after the Transaction⁶⁸⁷.
- (795) **In the third instance**, another supplier *'considers that the combination of Metallo and Aurubis will combine over 50% of the European smelter capacity, and therefore the merged entity will de facto set prices for most common, and more significantly for some special types of scrap metal (such as birch/cliff, low grade copper scrap, copper residues, copper tin scrap and mixed heavy metals)'*⁶⁸⁸. It further submits that while lower prices will first impact intermediaries such as collectors and pre-processors, they can ultimately also reach generators such as incineration plants.
- (796) **Second**, suppliers in the market investigation generally expect the Transaction to result in a strengthening of Aurubis' bargaining power and an increase in refining charges in the EEA.
- (797) **In the first instance**, suppliers of copper scrap expect that the purchasing power of Aurubis will increase with the Transaction.
- (798) With respect to mid-grade copper scrap for refining, low-grade copper scrap for refining, tinned copper scrap and copper-tin alloy scrap, majorities of suppliers expressing their opinion expect Aurubis' purchasing power to significantly increase due to the Transaction⁶⁸⁹.
- (799) A supplier explains that the effect of the Transaction could be different for different segments: *'Regarding copper with a content of greater 90% we believe that Aurubis today already has significant bargaining power. This will not be impacted to a great extent because - speaking only for us - Metallo is currently demanding lower grade qualities. Bargaining power for high and mid-grade copper scrap may increase slightly while tinned copper and copper-tin alloy may increase significantly, because the number of potential customers is much more limited'*. Another supplier says that *'Metallo and Aurubis Lünen are competitors on the mid-grade and especially on the low-grade. It was very important to have competition for this grades as they are not so flexible to go somewhere else. Metallo is not so much involved on the high-grade scraps. Here, we have the concentration already with Aurubis plants at Hamburg, Olen, Lünen and Bulgaria'*. Another pre-processor and supplier states the Transaction would be a *'massive decrease of marketing alternatives in a market w[h]ich is already limited in selling options'*⁶⁹⁰.
- (800) Considering certain segments of the CSSR market in particular, suppliers consider Aurubis' purchasing power to increase due to the Transaction. For copper-iron scrap, half of the suppliers expressing their opinion expect Aurubis' purchasing power to increase significantly. For tin-bearing copper scrap, a majority of suppliers

⁶⁸⁷ Minutes of a call with a supplier on 5.11.2019, DocID3361.

⁶⁸⁸ Minutes of a call with a supplier on 17.9.2019, DocID1230.

⁶⁸⁹ Replies to question 63 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶⁹⁰ Replies to question 63.1 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

expressing their opinion expects Aurubis' purchasing power to increase significantly. For industrial residues containing copper, a majority of suppliers expressing their opinion expects Aurubis' purchasing power to increase significantly. For IBA containing copper, a majority of suppliers expressing their opinion expects Aurubis' purchasing power to at least increase somewhat⁶⁹¹.

- (801) **In the second instance**, suppliers expect refining charges to increase as a result of the Transaction.
- (802) A large majority of suppliers expressing their opinion expect that the refining charges for copper scrap for refining in the EEA will increase due to the Transaction⁶⁹².
- (803) In particular, suppliers expect that refining charges will increase due to the Transaction for some segments of CSSR. Majorities expect the refining charges to increase for copper-iron scrap, tin-bearing copper scrap, industrial residues containing copper and IBA copper⁶⁹³.
- (804) Explaining what factors would lead to the increase in refining charges a supplier explains that *'once a merged Aurubis-Metallo will have the dominant market position, it will have the power to dictate prices and refining charges'*. Another supplier says that *'other consumers will follow Aurubis and Metallo refining charges increase'*⁶⁹⁴. Another supplier suggests that *'generally, the Parties may raise the refining charge post-transaction, leading to potential increase in processing cost'*⁶⁹⁵. Yet another supplier states that it *'does not know whether the Parties would increase the refining charges, but has concerns that they would be in a position to do so after the merger'*⁶⁹⁶. A further supplier submits that it *'expects Aurubis' refining or treatment charges to increase after the merger. The expected impact of the merger in terms of a possible increase of refining or treatment charges is impossible to quantify, as these charges are also dictated by the market. Since there is currently an oversupply of copper scrap, refiners are raising their refining or treatment charges'*⁶⁹⁷.
- (805) **Third**, also a majority of competitors to the Parties expressing their opinion consider that the Transaction will result in an increase of Aurubis' purchasing power for copper scrap for refining segments that fall into the CSSR market, namely for mid- and low-grade copper scrap for refining, tinned copper scrap and copper-tin alloy scrap⁶⁹⁸.
- (806) **Therefore**, market participants, and in particular suppliers, responding to the Commission's market investigation and also on their own initiative, expressed concerns as to the potential impact of the Transaction in terms of an increase in Aurubis' purchasing power and an increase in refining charges for CSSR.

⁶⁹¹ Replies to question H.6 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁶⁹² Replies to question 64 of Q1-b_ Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁶⁹³ Replies to question H.7 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁶⁹⁴ Replies to question H.7.1 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁶⁹⁵ Minutes of a call with a competitor on 6.12.2019, DocID2731.

⁶⁹⁶ Minutes of a call with a supplier on 9.12.2019, DocID3286.

⁶⁹⁷ Minutes of a call with a supplier on 5.12.2019, DocID2891.

⁶⁹⁸ Replies to question 48 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

- 9.2.6.2. A price effect of the Transaction is unlikely and in any case would not be significant
- (807) In light of the concerns brought forward by market participants, in particular with respect to a potential price effect in the form of an increase in refining charges, the Commission has analysed the likelihood of such an effect.
- (808) **First**, internal documents of the Parties do not support the conclusion that an increase in refining charges was part of the deal rationale.
- (809) A number of internal documents of Aurubis refer to potential gains from higher refining charges post-Transaction.
- (810) [Rationale of Metallo acquisition]⁶⁹⁹.
- (811) Furthermore, certain internal documents appear to include attempts at quantifying potential gains from higher refining charges in case of an acquisition of Metallo. In one draft internal working document, an Aurubis staff member appears to have prepared a quantification of potential 'sourcing synergies'⁷⁰⁰ (see Figure 51). The document shows an older calculation at the top, and what appears to be an updated calculation at the bottom. However, even the updated calculation appears inaccurate when considering the indicated purchasing volumes by Aurubis and Metallo of certain copper scrap materials. The quantities indicated in the document are not in line with the actual purchasing volumes of both Parties (as included in the Commission's market reconstruction). The reliability of this draft document is therefore doubtful.

Figure 51 – Draft Aurubis document on potential sourcing synergies

[...]

Source: DocID1571-44431 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00764994.xlsx).

- (812) Another internal document of Aurubis lists various potential upsides to a potential acquisition of Metallo. [...] ⁷⁰¹. [...].
- (813) The Notifying Party submits that an increase in refining charges was not part of Aurubis' rationale for acquiring Metallo. In this context, the Notifying Party submits that *'[u]nder German corporate law, there are strict legal requirements for employees with regard to their reporting obligations to the Management Board and above all to the Supervisory Board. These obligations require all essential aspects to be presented and explained to the Supervisory Board before it makes its decision. If the reduction of purchasing costs had been part of the transaction rationale, the Supervisory Board would have had to be informed accordingly prior to its approval of the transaction'*⁷⁰².
- (814) The documents presented to the Supervisory Board on the subject of the Proposed Transaction indeed do not report on any planned or envisaged refining charge

⁶⁹⁹ DocID1569-59641 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00939931.msg).

⁷⁰⁰ The term sourcing synergies is defined in another Aurubis internal document as 'Obtaining improved supply terms from suppliers'. DocID1577-54201 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_01059323.pdf).

⁷⁰¹ Reply to request for information 36, Annex 5, 20170725 Strategy workshop presentation.pptx, slide 98.

⁷⁰² 'White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")', submitted by the Notifying Party on 16.03.2020, paragraph 59.

increases⁷⁰³. While this does not constitute proof that no such communication to the Board took place, it indicates that no formal Board decision was taken on this basis.

- (815) The Notifying Party submits that '*Aurubis based its assessment on the assumption that procurement costs, in particular for copper scrap no.2 and mixed copper⁷⁰⁴, would increase, not decrease post-merger, because the Parties would be more dependent on their suppliers post-merger⁷⁰⁵*'.
- (816) In fact, in a presentation to the Supervisory Board in May 2019, '*Aurubis worked with an assumption of higher purchasing costs in its financial model for the valuation of Metallo. [...] ⁷⁰⁶*'.
- (817) [Details on purchasing costs].

Figure 52 – Refining charge scenarios by Aurubis

[...]

Source: Form CO, Annex 6-U.3, page 39.

- (818) Further, the presentation to the Supervisory Board identifies a number of synergies related to the acquisition of Metallo. As can be seen in Figure 53, these are in particular efficiency, flow sheet integration and know-how transfer synergies⁷⁰⁷. However, no commercial or sourcing synergies are listed and quantified. On another slide, the presentation states that the '*synergies go beyond the classic merging of administrative functions and mostly have a technical character⁷⁰⁸*'.

Figure 53 – Synergies related to the Transaction

[...]

Source: Form CO, Annex 6-U.3, page 28.

- (819) It thus appears that while certain Aurubis' staff members seem to have undertaken some calculations on possible refining charge increases after a potential acquisition of Metallo, such considerations appear not to have been part of the deal rationale. In particular, an increase in refining charges was not part of the documents presented to the Supervisory Boards as a basis for deciding on the Metallo acquisition.
- (820) Therefore, internal documents of the Parties do not support the conclusion that an increase in refining charges was part of the deal rationale.
- (821) Moreover, even the base case in the financial model for the valuation of Metallo assumed a decrease in refining charges from 2018 to 2020, followed by a stable level.

⁷⁰³ Documents submitted as Annex 5.4 to the Form CO, in particular Form CO, Annex 5.4-C-E and Annex 5.4-J-K.

⁷⁰⁴ Mixed copper is part of the CSSR market.

⁷⁰⁵ '*White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")*', submitted by the Notifying Party on 16.03.2020, paragraph 60.

⁷⁰⁶ '*White Paper 16: Supplementary Remarks to the Statement of Objections of 11 February 2020 ("SO")*', submitted by the Notifying Party on 16.03.2020, Annex 10.

⁷⁰⁷ Courtesy translation. The original German text reads: '*Effizienz*', '*Flow sheet Integration, Einsatzmix-optimierung*' and '*Technische / Know-How-Transfer*'.

⁷⁰⁸ Form CO, Annex 6-U.3, page 29. Courtesy translation. The original German text reads: '*Die Synergieeffekte gehen über die klassische Zusammenlegung von administrativen Bereichen hinaus und haben vor allem technischen Charakter*'.

- (822) **Second**, while a majority of suppliers expressing their opinion is concerned about the Transaction and expects an increase in refining charges, the evidence suggests that suppliers would be in a position to avoid higher refining charges by the Merged Entity.
- (823) **In the first instance**, the Merged Entity's moderate combined purchasing shares indicate that suppliers have significant alternatives to the Parties. Given that the Merged Entity's combined 2018 EEA purchasing share is only a moderate [20-30]%, there are sufficient alternative outlets for suppliers of CSSR in the EEA to which they already pre-Transaction sell substantial volumes and can continue to do so post-Transaction.
- (824) **In the second instance**, a majority of suppliers expressing their opinion submits that they would have alternative options available if the Merged Entity started paying significantly less for CSSR post-Transaction⁷⁰⁹. While these alternatives differ depending on the supplier (and also on the type(s) of CSSR material the supplier in question supplies), they are nevertheless likely sufficient to effectively constrain the Merged Entity (see also Section 9.2.3).
- (825) **In the third instance**, as explained in detail in Section 9.2.3, suppliers post-Transaction will have several effective alternatives to the Merged Entity. In particular other EEA copper refiners, non-EEA copper refiners and other non-EEA outlets for CSSR, ingot makers, semi-manufacturers and non-copper smelters. Further they can engage in practices such as upgrading CSSR materials to other products and engage in stocking and de-stocking. While not all alternatives are viable and effective for all suppliers, the fact that such a large group of alternatives exist, constrains the Parties' pricing abilities significantly.
- (826) Given that suppliers have the ability to avoid a refining charge increase due to the presence of numerous alternative outlets for EEA-supplied CSSR and other practices suppliers can engage in, it is unlikely that the Merged Entity would engage in a practice of increasing refining charges post-Transaction. This would likely result in it losing access to some supply of CSSR and therefore not be sustainable.
- (827) **Third**, in particular for traders, collectors and pre-processors of CSSR, other scrap price components aside of refining charges also play an important factor. These are in particular the LME copper price and valorisation of other metals⁷¹⁰ contained in CSSR material.
- (828) The LME copper price is an exogenous factor and not influenced by the Parties. It is however of significant importance for CSSR suppliers and their decision on whether to buy or sell scrap⁷¹¹. The valorisation of other metals contained in CSSR is in particular of importance for suppliers that supply complex types of CSSR. Such materials often contain significant quantities of other metals and the supplier has a strong interest in being remunerated for these. As is further explained in Section 9.2.6.3, if at all, the Transaction will likely result in an increase of recovery of such other metals and thereby open the possibility for increased remuneration for them.

⁷⁰⁹ Replies to question 44 and 45 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁷¹⁰ I.e. the question of whether suppliers are remunerated for other metals (and precious metals) that are contained in CSSR.

⁷¹¹ In particular when they are not hedged against LME price movements.

- (829) Therefore, the refining charge is only one price component of relevance for CSSR suppliers. The significance of any increase in refining charges would therefore be limited by the relative importance of the other CSSR price components.
- (830) **Finally**, on balance, it is therefore unlikely that the Merged Entity will be in a position to increase its refining charges. As an analysis of Aurubis' documents prepared for the Supervisory Board shows, increased refining charges were likely not part of the deal rationale. Furthermore, given that suppliers have access to a significant number of alternative outlets for CSSR, the Merged Entity would likely not be able to increase its refining charges. In any case, any increase in refining charges would likely not be significant for CSSR suppliers.
- 9.2.6.3. Any price effect would possibly be counteracted, at least in part, by technological synergies between the Parties
- (831) The Notifying Party submits that the Transaction would lead to two types of efficiencies. The first type would arise from a better valorisation of the copper scrap which the Merged Entity would be able to achieve, compared to the Parties considered individually (that is to say, pre-Transaction). The other type of efficiency would be related to a better valorisation of an Aurubis by-product, namely its copper slag, [...].
- (832) With respect to the better valorisation of scrap, the Notifying Party identifies four specific sources of efficiencies arising from the know-how and technology synergies of the Parties: [...].
- (833) Regarding the efficiencies concerning [...].
- (834) In the SO, the Commission preliminarily considered that it was doubtful whether the efficiencies associated with the Transaction were verifiable, transaction-specific, timely, and passed on to CSSR suppliers, downstream customers of the Merged Entity, or final metal consumers, and whether they were sufficient to counteract the adverse effects of the Transaction on CSSR suppliers.
- (835) Upon review of further evidence and new arguments brought forward by the Notifying Party, the Commission finds that regarding the **first type of efficiency, that is to say, the better valorisation of copper scrap** afforded by the combination of the Parties' know-how and complementary technologies, the new evidence suggests that there is at least a possibility that such improved metal extraction would lead to increased payments for certain metal components contained in copper scrap, which would at least partly offset any potential adverse effect of the Transaction on the refining charges paid by CSSR suppliers going forward.
- (836) **First**, the Notifying Party clarified that the internal documents estimating the earnings before interest, taxes, depreciation, and amortization (EBITDA) growth arising from the Transaction⁷¹² are '*compatible with CSSR prices remaining unchanged or even increasing [...] which would indicate that part of the benefit accrues to CSSR suppliers*'⁷¹³. The claimed improvements in metal valorisation '*would raise the merged entity's margin*', thus incentivising the Merged Entity to '*purchase additional volumes of scrap if (and as soon as) it has the spare capacity to accommodate such purchases.*' Such increased demand for CSSR would benefit suppliers through increased prices, and these benefits to third parties are not

⁷¹² Form CO, Annex 5.4-Q, slides 84 – 85.

⁷¹³ Reply to the SO, Annex 6, section 2.

accounted for in the internal estimates of the synergies accruing to the Merged Entity.

- (837) The Commission thus acknowledges that the documents referred to in recital (836) are not incompatible with such a possible pass-on. Such pass-on remains, however, a theoretical possibility, and the internal documents quoted in recital (836) do not provide any conclusive evidence as to the likelihood of such pass-on to actually occur.
- (838) **Second**, the Notifying Party explained that ‘*firms, even in the extreme case of a pure monopsony that is subject to no competitive pressure at all, have the incentive to pass on gains from changes in their valorisation processes to their suppliers*’, with such price effects being strongest when supply is inelastic.
- (839) Since the Transaction alters both the Notifying Party’s buyer power and its technology at the same time, it brings about two separate price effects for CSSR going in opposite directions. On the one hand, increased buyer power can be expected to lead to lower input prices; on the other hand, increased metal valorisation capabilities are likely to increase input prices, in particular for those types of CSSR containing metals that could not be efficiently extracted pre-Transaction. Which of the two effects will dominate is an empirical question, and while there is no conclusive evidence available on this question, the Commission considers it possible that, on balance, the price increases due to improved valorisation could outweigh the price reductions implied by the Merged Entity’s increased buyer power.
- (840) **Third**, the Notifying Party adduced new evidence illustrating that, in the past, for a particular technology adoption event at Metallo, [...], these improvements were partially passed on to suppliers⁷¹⁴. The Notifying Party provided an econometric analysis of Metallo’s purchasing prices for CSSR [...].
- (841) The analysis shows that for comparable CSSR batches, Metallo paid a higher price after the introduction of its [...] technology, and that this price increase corresponded on average to [...] ⁷¹⁵. It thus emerges from the econometric analysis that the observed price increases for CSSR were largely driven by [...], which speaks in favour of these price increases resulting from Metallo passing on part of its efficiency gains in [...] to its CSSR suppliers⁷¹⁶.
- (842) The Notifying Party submits that, by analogy to this historic event at Metallo, the Merged Entity would likewise be prompted to pass on at least part of the transaction-specific efficiency gains from their improved capabilities to extract lead, tin, nickel and copper (see recital (832)) to their CSSR suppliers post-Transaction.
- (843) While the Commission does not have any conclusive evidence on file on whether the pass-on mechanism observed for Metallo would also carry over to the Merged Entity,

⁷¹⁴ Regarding the choice of this particular event for the purpose of quantifying the pass-on, the Notifying Party explained that “[t]he only historical evidence where data were still available and which was a sufficient step-change available was the passing back of parts of the benefits to suppliers of scrap of the valorisation of zinc following the [...]”. The Parties’ reply to Question 7 of the Commission’s request for information RFI 48, DocID3579, p. 3.

⁷¹⁵ Reply to the SO, Annex 6, section 3.2 and Annex A. The figure of [...] % corresponds to the Commission’s preferred specification of the regression equation (namely including supplier fixed effects, see Table 1), and is robust to the inclusion of year fixed effects (as verified by the Commission).

⁷¹⁶ The evidence provided by the Notifying Party in its Reply to request for information 47, question 5 only showed that [...]. The econometric analysis provided in the Reply to the SO, Annex 6, section 3.2 and Annex A, remedies this shortcoming.

it seems at least possible that the Transaction-specific technology transfer could generate a similar pass-on of improved metal recovery through higher purchasing prices for CSSR.

- (844) Regarding the **second type of efficiency**, namely the application of [...] at Aurubis' plants resulting in additional metal recovery and environmental benefits, the new evidence brought forward by the Notifying Party is not sufficiently strong to dispel the Commission's fundamental doubts⁷¹⁷. Therefore, the Commission finds that regarding the second type of efficiencies, these claims cannot be accepted, because they are not verifiable, are unlikely to arise in a timely fashion, and may not be Transaction specific.
- (845) **First**, the Commission was unable to verify the assumptions underlying the Notifying Party's quantifications of the alleged efficiency gains associated with the application [...] at Aurubis' plants, as submitted by the Notifying Party⁷¹⁸. The supporting documentation submitted by the Notifying Party⁷¹⁹ only allows for the verification of the calculations based on these assumptions, but not of the assumptions themselves, in particular [...]. Given that Aurubis has only very limited knowledge about the exact operation of [...]⁷²⁰, and the Aurubis plants have very different technical characteristics from Metallo's Beerse plant⁷²¹, it is not obvious that the parameter values at Metallo's plants can be applied one-to-one also to Aurubis' plants⁷²².
- (846) **Second**, the Notifying Party has not provided any new evidence that would allow the Commission to dispel its doubts about the likelihood [...]. These doubts are based on internal documents from both Metallo and Aurubis [...]⁷²³. [...]⁷²⁴ [...]⁷²⁵. [...].
- (847) [Rationale for introduction of new product]⁷²⁶.
- (848) The Commission's insights into the efficiency gains potentially afforded by the [...] are similarly limited as the Notifying Party's insights into the future returns of this process, so that the Commission is unable to verify, and hence accept, these efficiency claims.
- (849) **Third**, the new evidence provided by the Notifying Party concerning [...].
- (850) These doubts are based on the following evidence: [...]⁷²⁷. [...]⁷²⁸, [...]⁷²⁹.

⁷¹⁷

[...].

⁷¹⁸

'Additional information on the efficiencies', submitted by the Notifying Party on 26 January 2020, Tables 4,6, and 9, and pages 9, 10, 14.

⁷¹⁹

Request for information RFI 48, question 6, Annex 6.1 (DocID3584). The analogous problem of unverifiable underlying assumptions is present in request for information 48, question 6, Annex 6.2 (DocID3585), with respect to the counterfactual revenues from Aurubis' slag sales absent the Transaction.

⁷²⁰

[...], Reply to request for information 47, question 4, page 4.

⁷²¹

[...], submitted by the Notifying Party on 26 January 2020, page 10.

⁷²²

'Additional information on the efficiencies', submitted by the Notifying Party on 26 January 2020, p. 12, Reply to request for information 47, questions 3.b, 4, and 5.

⁷²³

The Parties' reply to the Commission's request for information RFI 17, DocID1519-017559 (M.9409_SID17703_00458150.xlsx), slide 12, The Parties' reply to the Commission's request for information RFI 16, DocID1876-0000059 (M.9409_BAK17702_00232357), slide 11.

⁷²⁴

Reply to request for information 43, question 1.

⁷²⁵

The Parties' reply to the Commission's request for information RFI 17, DocID1519-017559 (M.9409_SID17703_00458150.xlsx), slide 12.

⁷²⁶

The Parties' reply to Question 9 of the Commission's request for information RFI 48, DocID3579, p. 4.

- (851) In light of the new evidence provided by the Notifying Party, the Commission maintains its doubts about the transaction-specificity of the technological synergy afforded by [...], because such technology transfer could have been achieved even absent the Transaction, through an appropriately designed licensing scheme for the necessary IP by Metallo, allowing Aurubis to implement the technology at its plants, and [...]. In particular, the Notifying Party confirmed that [...] ⁷³⁰. The existence of licensable IPR covering the different parts of the technology as well as the final product thus disproves the Notifying Party's claim that [...] ⁷³¹.
- (852) **Fourth**, the Notifying Party could not dispel the Commission's belief that Aurubis was in the process of developing a technology on its own [...], which would have yielded similar results as [...], thus casting further doubt on the transaction-specificity of the efficiencies associated with [...], as claimed by the Notifying Party. [...] ⁷³².
- (853) [...] ⁷³³. [...].
- (854) Therefore, on balance, the new arguments brought forward by the Notifying Party and the further evidence from the case file show that it is at least possible that the first type of efficiencies (improved metal extraction) will materialise and at least partly be passed-on to CSSR suppliers, thus potentially offsetting any adverse price effect stemming from the Transaction, were such effects to realise to a significant extent. However, the Commission also finds that the second type of efficiencies [...] have not been substantiated to the requisite standard, so that the Commission cannot accept any of the benefits claimed in relation to [...].
- 9.2.6.4. The Transaction is unlikely to have a significant effect on CSSR collection
- (855) As demonstrated in Sections 9.2.6.2 to 9.2.6.3, the Transaction is unlikely to result in significant price effects, which in any case would likely be counteracted, at least in part, by gains from technological synergies between the Parties.
- (856) In addition, it is unlikely that the Transaction will have a significant effect on CSSR collection.
- (857) **First**, with respect to industrial suppliers of CSSR, an effect on collection or generation of scrap as a result of the Transaction is unlikely.
- (858) Industrial suppliers generate new scrap as a by-product of their production processes. This generation is highly inelastic, the generation occurs in fixed-proportion to the production of the companies' main products. It is likely that already pre-Transaction the generation of scrap by industrial producers has been minimised as it is a

⁷²⁷ The Parties' reply to the Commission's request for information RFI 16, DocID1517-62280 (M.9409_SID17703_00099319), slide 4. It appears, however, that no such licenses have been granted by Metallo to Aurubis (or any other competitor) in the meanwhile, see the Parties' reply to Question 4 of the Commission's request for information RFI 48, DocID3579, p. 2.

⁷²⁸ World Intellectual Property Organization, WO 2016/156394 A1, DocID3373.

⁷²⁹ The Parties' reply to the Commission's request for information RFI 16, DocID1520-21560 (M.9409_SID17703_00429324 msg).

⁷³⁰ The Parties' reply to Questions 2 and 3 of the Commission's request for information RFI 48, DocID3579, p. 1-2.

⁷³¹ 'Efficiency considerations', submitted by the Notifying Party on 3 January 2020, page 14.

⁷³² Reply to request for information 43, question 2, and DocID1574-8443 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00704367.pptx).

⁷³³ The Parties' reply to Question 10 of the Commission's request for information RFI 48, DocID3579, p. 4.

cost-factor. Therefore, even if there were to be a refining charge increase as a result of the Transaction, it is unlikely that scrap generation by industrial players would decline. However even if it were to fall as a result of the Transaction, such a decline in scrap generation at industrial sources would not represent a negative consequence of the Transaction, but rather an increase in production efficiency.

- (859) Furthermore, it is unlikely that a increase in refining charges would result in industrial suppliers landfilling CSSR they generated in their production processes, instead of supplying it to the market. This is because as an industrial supplier explained it 'is obliged to recycle the copper scrap it generates and cannot landfill it'⁷³⁴. In addition, as long as the scrap overall still achieves a positive value for suppliers, industrial suppliers will likely continue to supply the scrap they generate as a by-product to the market, even if it achieves a lower price.
- (860) **Second**, with respect to traders, collectors and pre-processors of CSSR, an effect on collection of scrap as a result of the Transaction is unlikely.
- (861) **In the first instance**, even if the Transaction were to result in an increase of refining charges, collectors and other intermediaries are unlikely to be directly harmed. This is primarily because they are likely to be able to pass-on any price effect to their respective suppliers of scrap. Intermediaries such as collectors and pre-processors act in a competitive and fragmented market and are therefore likely to pass on price effects.
- (862) Further, for CSSR segments like copper-iron scrap and tin-bearing copper scrap a majority of suppliers expressing their view consider it possible to pass on the price effect to their suppliers in case of a refining charge increase by Aurubis and Metallo post-Transaction. For industrial residues containing copper and IBA containing copper, a plurality of suppliers expressing their view consider this to be possible⁷³⁵.
- (863) **In the second instance**, in any case, collectors and other intermediaries are unlikely to reduce their collection of CSSR as a result of the Transaction. With respect to CSSR segments like copper-iron scrap, tin-bearing copper scrap, industrial residues containing copper and IBA containing copper, majorities of suppliers expressing their opinion do not expect their incentives to collect the scrap change in case refining charges were to increase after the Transaction⁷³⁶. Furthermore, given that the elasticity of supply is likely greater in relation to LME price movements, than in relation to refining charge movements (as explained, for example, in Section 9.2.3.5), changes to collection incentives following a hypothetical refining charge increase would in any case likely not be significant.
- (864) **Third**, overall, collection (and generation) of CSSR is unlikely to decrease as a consequence of the Transaction, because the Merged Entity is unlikely to significantly reduce its purchases of CSSR materials. While there may be changes in the input mix of the Merged Entity (as also occur absent the Transaction), the overall purchasing volume of the Merged Entity will likely not change substantially.
- (865) This is primarily due to the Merged Entity's (and any copper refiners') need to operate at or close to full capacity (see Section 9.2.3.1 (B)).

⁷³⁴ Minutes of a call with a supplier on 16.12.2019, DocID3029.

⁷³⁵ Replies to questions D.13, E.13, F.13 and G.13 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁷³⁶ Replies to questions D.14, E.14, F.14 and G.14 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

- (866) In this context the Notifying Party submits that *'it is unlikely that purchasing volumes would be at all reduced post-merger'*⁷³⁷. It further states that *'any reduction in production would have the merged entity forego significant profit margins as it would lose sales of copper-based products'*⁷³⁸.
- (867) While it is possible that the Merged Entity would seek to marginally reduce its purchases of (certain segments of) CSSR post-Transaction⁷³⁹, it is unlikely that it would engage in a significant reduction of its purchases overall. This would result in an underutilisation of its refining capacity, which is ineffective, and at the same time result in a lack of copper units⁷⁴⁰ that are needed for its downstream production of copper cathodes and semi-finished products. It is unlikely that a reduction in CSSR input could be in an economical way substituted by an increase in primary copper intake – first and foremost because the vast majority of the Merged Entity's CSSR is currently being processed at plants that do not refine any primary copper at all (Metallo's two plants and Aurubis' Lünen plant).
- (868) Therefore, overall, it is unlikely that the Transaction will result in less CSSR being collected. The Transaction is therefore not likely to result in a reduction in output (of scrap).

9.2.6.5. Conclusion

- (869) While there are indications that point towards an increase in refining charges post-Transaction, on balance, and in light of all considerations presented in this Section 9.2.6, the Commission concludes that such a price effect is unlikely to materialise and that it in any case any price increase would likely not be significant and likely be counteracted by the positive effects of the Transaction.
- (870) It follows that competition on the market for the purchase of CSSR is not likely to be harmed significantly by the Transaction, as an increase in refining charges is unlikely. Further the Transaction would not lead to a reduction of output (of scrap), as suppliers will likely not generate or collect less CSSR.

9.2.7. Conclusion

- (871) For the reasons set out in Sections 9.2.1 to 9.2.6, the Commission concludes that the Transaction is unlikely to lead to negative effects in the relevant market for purchasing CSSR in the EEA via an increase in refining charges. The Commission in particular finds that any attempt by the Merged Entity to increase refining charges post-Transaction would be unsuccessful due to the Merged Entity's moderate purchasing share, lack of close competition between the Parties pre-Transaction, the existence of significant effective alternatives for suppliers of CSSR and the lack of significant barriers to expansion of existing refiners. Furthermore, any increase in refining charges would possibly be counteracted by the positive effect of technological synergies associated with the Transaction. The Transaction is also unlikely to have a negative effect on incentives to invest and innovate in the treatment of CSSR, nor result in a decrease of CSSR collection.

⁷³⁷ Reply to the SO, paragraph 42.

⁷³⁸ Reply to the SO, Annex 2, Section 4.2.1.

⁷³⁹ A marginal reduction of CSSR purchases would aim at achieving a better prices (higher refining charges) for CSSR. Given that the supply of CSSR is largely inelastic (in relation to its reaction to refining charge changes), such a marginal reduction would be sufficient to achieve a price effect. However, given the only moderate combined purchasing share of the Merged Entity and the access of suppliers to a range of effective alternatives to the Parties, such a strategy would likely be defeated.

⁷⁴⁰ Copper units is the cathode copper equivalent contained in copper scrap.

- (872) Therefore, on balance, the Commission considers that the Transaction will not result in a significant impediment to effective competition on the market for the purchase of CSSR in the EEA.

9.3. Horizontal non-coordinated effects: copper scrap no.2

- (873) In contrast to its assessment of CSSR in the SO (for which the Commission raised preliminary concerns), for a number of reasons, the Commission did not raise concerns in relation to the market for copper scrap no.2 in the SO. In particular, a large group of alternative outlets to the Parties and the possibility to export copper scrap no.2 from the EEA effectively constrain the Parties already pre-Transaction.

- (874) This section outlines also in light of further evidence, in particular a drop in the combined copper scrap no.2 purchasing shares of the Parties compared to the preliminary assessment in the SO, why the Transaction does not lead to a significant impediment to effective competition in relation to the market for copper scrap no.2.

9.3.1. Market structure

- (875) In the SO, the Commission preliminarily concluded that the Parties would have a combined 2018 purchasing share of EEA-supplied copper scrap no.2 of [40-50]%.
 (876) Taking into account further evidence, Table 5 reports the 2018 purchasing shares of EEA-supplied copper scrap no.2. Aurubis has a purchasing share of [30-40]% and Metallo of [5-10]% - the Merged Entity has a combined purchasing share of [30-40]%. The next largest rivals are Brixlegg and KGHM with [5-10]%, followed by Boliden and Umicore with [0-5]% each. A group of other purchasers has a combined share of [5-10]%. Finally, exports represent 39%.

Table 5: Purchasing shares for EEA-supplied copper scrap no.2, 2018

Copper scrap no.2 purchasing shares in 2018		
	'000 tonnes	Purchasing share
Aurubis	[...]	[30-40]%
Metallo	[...]	[5-10]%
Parties Combined	[...]	[30-40]%
Brixlegg	[...]	[5-10]%
Boliden	[...]	[0-5]%
KGHM	[...]	[5-10]%
Umicore	[...]	[0-5]%
Others	[...]	[5-10]%
Exports	215	39%
Total	552	100%

Source: Commission's market reconstruction.

- (877) Further, the Merged Entity would have a 2018 refining share of [60-70]% among EEA-based copper refiners.
 (878) Therefore, while the Merged Entity would have a very large refining share, its purchasing share would be moderate. This is in particular due to a significant level of exports. This high level of exports already points to significant available alternatives

for suppliers of EEA-supplied copper scrap no.2. Furthermore, refining rivals like Brixlegg and KGHM have appreciable purchasing shares in the EEA.

- (879) In addition, Metallo's pre-Transaction position in copper scrap no.2 is not particularly strong, while Aurubis purchases significant volumes of copper scrap no.2 in order to recover a large amount of copper units that is needed for the production of its downstream copper products (copper cathodes, semi-finished products and rolled products). Copper scrap no.2, which contains a large amount of copper units (due to it being high grade with generally a minimum copper content of 94%) is therefore essential to Aurubis' current business model.
- (880) Metallo however is focused [...] ⁷⁴¹. [...] ⁷⁴². [...].
- (881) In terms of market structure, the Transaction therefore brings together the market leader in terms of EEA copper scrap no.2 purchasing share, with a smaller EEA player that does not have a particular focus on copper scrap no.2 treatment.
- 9.3.2. *Suppliers have access to a significant number of effective alternatives*
- (882) Copper scrap no.2 is a largely commoditised copper scrap material. A wide array of users is capable to treat it, and many, both inside and outside the EEA do so in practice.
- (883) **First**, other EEA copper refiners are capable to effectively treat copper scrap no.2 and have demand for it.
- (884) The Notifying Party submits that copper scrap no.2 *'is procured by all refiners'* in Europe ⁷⁴³. It further submits that 6 copper refiners other than the Parties have capabilities to treat copper scrap no.2 in the EEA – in addition to one that has limited capabilities ⁷⁴⁴.
- (885) **In the first instance**, internal documents of Aurubis confirm that other refiners are considered as competitors for copper scrap no.2.
- (886) For example, in a regular course of business market monitoring document (from July 2019) it is stated that *'Aurubis's EU competitors KGHM, Brixlegg are active at refining charges [...], and further that 'our competitors may face shortage situation, which required them to reduce RCs, which will impact our revenues when we have to follow the market'* ⁷⁴⁵. Given that these market monitoring documents mostly track high grade/copper scrap no.2, this example shows that Aurubis competes with EEA rivals like KGHM and Brixlegg. In particular, Aurubis expects the aggressive pricing of its competitors to have an impact on its own revenues, because it will have to *'follow the market'*. This indicates that Aurubis is not in a position to act independently of its rivals in the market for copper scrap no.2.
- (887) Further, the Aurubis internal document captioned in Figure 54 shows that Aurubis considers an extensive list of companies to exert competition for *'different Cu recycling materials'*. In particular, the email states with respect to the listed smelters that *'[a]ll of those smelters do need copper scrap #2 to a larger or lesser degree'*. This underlines that copper scrap no.2 is a widely used copper scrap material for which a large number of copper refiners have demand.

⁷⁴¹ Form CO, paragraph 324.

⁷⁴² Form CO, paragraph 325.

⁷⁴³ Form CO, paragraph 333.

⁷⁴⁴ Form CO, table 18, and see paragraph 337.

⁷⁴⁵ Form CO, Annex 6-RR.50.

Figure 54 – Aurubis view on competitors

[...]

Source: DocID1570-12423 (The Parties' reply to the Commission's request for information RFI16, M.9409_BAK17702_00994230.msg).

- (888) Another internal document of Aurubis, shown in Figure 55, displays estimates of competitors' demand for copper scrap no.2. While Aurubis is shown to have the largest demand, Metallo is shown to be a rather minor player. [...] and [...] are the largest rivals to Aurubis in the EEA.

Figure 55 – Aurubis estimation of competitor scrap demand

[...]

Source: DocID1570-41657 (The Parties' reply to the Commission's request for information RFI16, M.9409_BAK17702_00007736.pptx).

- (889) **In the second instance**, EEA refining competitors to the Parties indicate in the Commission's market investigation that they have both capabilities and demand for copper scrap no.2. A majority of competitors expressing their opinion submit that they can refine any type of copper scrap no.2⁷⁴⁶.
- (890) **In the third instance**, suppliers consider that aside of the Parties other EEA copper refiners are capable to treat copper scrap no.2 and are competing for the purchase thereof.
- (891) For example, a majority of suppliers expressing their opinion considers Boliden, Brixlegg and KGHM to be very capable to handle and process copper scrap no.2⁷⁴⁷. A majority of suppliers expressing their opinion also considers these EEA refiners to be at least efficient in extracting the maximum value from copper scrap no.2⁷⁴⁸.
- (892) Brixlegg, KGHM and Boliden are further often mentioned as being among the five main competing purchasers of copper scrap no.2 in the EEA by suppliers⁷⁴⁹.
- (893) Considering in particular Brixlegg and KGHM, majorities of suppliers also consider it possible to, in the event of a 5-10% increase in the refining charge for copper scrap no.2 by Aurubis and Metallo, to reallocate some of their sales in a timely manner and without incurring significant costs to them⁷⁵⁰.
- (894) Suppliers therefore regard EEA copper refiners, and in particular Brixlegg and KGHM, and to a lesser extent also Boliden, as capable and effective alternatives to the Parties.
- (895) Overall, according to the analysis of Aurubis, competitors and suppliers, other EEA refiners are active in purchasing copper scrap no.2.
- (896) **Second**, non-refining companies also compete with the Parties for the purchase of copper scrap no.2. They therefore are also an alternative outlet suppliers can resort to.
- (897) Figure 55 shows that internally Aurubis estimates 'other European Fabricators' to have a demand for 250 kt of copper scrap no.2. That is a very significant demand

⁷⁴⁶ Replies to question 32 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

⁷⁴⁷ Replies to question B.3 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁷⁴⁸ Replies to question B.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁷⁴⁹ Replies to question B.8 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁷⁵⁰ Replies to question B.12 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

volume and significantly larger than the demand of any of Aurubis' refining rivals and close to the demand indicated in the document for Aurubis itself. While this demand is split over a number of different companies, it is nevertheless significant.

- (898) This is not surprising when considering that many suppliers consider non-refiners as important competitors for copper scrap no.2.
- (899) For example, when tracking demand conditions for copper scrap no.2, a majority of suppliers expressing their opinion take into consideration alloy makers (such as bronze ingot makers)⁷⁵¹. Furthermore, when asked about top five EEA competitors for copper scrap no.2, suppliers also mention, aside of copper refiners, a range of non-refiners, such as Wieland, Diehl or Gnutti – some also mention '*Italian Foundries*' or '*Italian and Spanish Mills*'⁷⁵².
- (900) Finally, majorities of suppliers expressing their opinion considers EEA brass/bronze ingot makers or semi-manufacturers to be at least capable to handle and process copper scrap no.2 and to be at least efficient in extracting the maximum value from copper scrap no.2⁷⁵³.
- (901) Therefore, non-refining EEA competitors to the Parties such as semi-manufacturers or ingot makers likely have both capabilities and demand for copper scrap no.2 and are therefore an effective alternative outlet for suppliers.
- (902) **Third**, exporting copper scrap no.2 out of the EEA is likely a viable and effective alternative to selling copper scrap no.2 in the EEA. This is in particular due to copper scrap no.2 being a commoditised scrap material (which makes it easier to trade than more complex scrap types) and there being a large number of companies worldwide with a demand for copper scrap no.2.
- (903) **In the first instance**, the large share of exports accounted for in the Commission's market reconstruction is in itself an indicator for significant non-EEA alternatives to the Parties (and to EEA outlets more generally). The market reconstruction shows that the export share for copper scrap no.2 with [30-40]% generally rivals the share of the Merged Entity.
- (904) **In the second instance**, a large number of companies across the world has a demand for copper scrap no.2. In the first instance, these are non-EEA primary and secondary copper refiners. As can be seen in the Aurubis internal email in Figure 54, Aurubis perceives a significant number of non-EEA refiners to have a demand for copper scrap no.2, [...].
- (905) The Notifying Party submitted a list of 94 non-EEA smelters capable to refine copper and sourcing scrap globally⁷⁵⁴. These include both primary and secondary copper smelters, as well as smelters focused on non-copper metals (which may however have some limited demand for certain type of copper scrap for refining materials). It is likely that the primary and secondary smelters have a demand for copper scrap no.2.
- (906) **In the third instance**, China has a particularly strong and growing demand for copper units. Due to certain import restrictions for copper scrap materials that

⁷⁵¹ Replies to question 36 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁷⁵² Replies to question B.8 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁷⁵³ Replies to question B.3 and B.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁷⁵⁴ 'White Paper 1: Correct approach for the market definition as well as calculation of volume and shares for the EEA segment of copper scrap purchasing and its potential sub segments', submitted by the Notifying Party on 16.09.2019, Annex 1-B.

contain a specific amount of impurities, lower grade and complex scrap grades are currently not exportable to China. However, higher grade materials such as copper scrap no.2 can be imported (and are likely even higher in demand given the need for copper units). The Notifying Party in this context submits that *'the Chinese companies still import copper scrap, in particular copper scrap no. 2'*⁷⁵⁵.

- (907) Internal documents of the Parties also reflect a strong demand for copper scrap no.2 by Chinese copper refiners. The internal Aurubis document shown in Figure 55 displays an estimate of the demand of Chinese refiners for copper scrap no.2 of 1 400 kt. This is a very significant amount and considerably more than the demand even of all EEA players combined. While a considerable share of this Chinese copper scrap no.2 demand is likely satisfied via domestic sourcing, a part of this likely also comes from non-Chinese destinations like the EEA⁷⁵⁶.
- (908) Figure 56, excerpting an Aurubis internal document, shows further that Aurubis perceives its Chinese competitors to have predominantly a demand for copper scrap no.2 as far as copper scrap is concerned. In addition, they are also sourcing anodes – another sign that these Chinese players likely have a preference for higher grade materials in general.

Figure 56 – Chinese demand for copper scrap is focused on copper scrap no.2

[...]

Source: DocID1570-76937 (Reply to the request for information 16, M.9409_BAK17702_00863962.pptx), slide 4.

- (909) Suppliers generally consider Chinese refiners to be an effective and viable outlet for copper scrap no.2. Majorities of suppliers expressing opinion consider Chinese refiners/smelters to be at least capable in handling and processing copper scrap no.2. and to be efficient in extracting the maximum value from copper scrap no.2⁷⁵⁷.
- (910) While a majority of suppliers expressing their opinion perceives there to be some risks associated to regulatory barriers when selling copper scrap no.2 to Chinese refiners/smelters⁷⁵⁸, a number of suppliers explicitly list 'China', 'Chinese smelters' or 'Chinese consumers' as among the top global competitors for copper scrap no.2⁷⁵⁹.
- (911) A majority of suppliers expressing their opinion further submits that in the event of a 5-10% increase in the refining charge for copper scrap no.2 by Aurubis and Metallo, they could reallocate at least some of their sales in a timely manner and without incurring significant costs to Chinese smelters/refiners⁷⁶⁰.
- (912) **In the fourth instance**, generally, suppliers list predominantly EEA, Chinese, Japanese and Korean copper refiners as among the top 5 competing global purchasers of copper scrap no.2⁷⁶¹.

⁷⁵⁵ Form CO, paragraph 403.

⁷⁵⁶ Some suppliers indicate sales to Chinese purchasers. See for example replies to question B.1 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁷⁵⁷ Replies to questions B.3 and B.4 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁷⁵⁸ Replies to question B.7 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁷⁵⁹ Replies to question B.8 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁷⁶⁰ Replies to question B.12 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁷⁶¹ Replies to question B.8 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

- (913) Overall, therefore, exporting copper scrap no.2 to non-EEA purchasers, and in particular to non-EEA copper refiners (either directly or through intermediaries) is likely a viable alternative to selling the material to EEA copper refiners.
- (914) **Fourth**, overall, suppliers have alternatives available to them for supplying copper scrap no.2, even if the Merged Entity were to increase its refining charges.
- (915) A large majority of suppliers expressing their opinion submit that they would have one or multiple alternative options readily available and that they could engage in without incurring significant cost, if after the Transaction Aurubis and Metallo started paying significantly less for copper scrap no.2⁷⁶². The options for suppliers range from selling to other copper refiners or non-EEA purchasers, to holding, re-sorting (namely mixing) or upgrading the copper scrap no.2.
- (916) Therefore, suppliers have sufficient alternative outlets for copper scrap no.2. This fact constrains the pricing ability of the Parties and, post-Transaction, of the Merged Entity.
- 9.3.3. *The Transaction is unlikely to lead to a significant price effect*
- (917) A large majority of suppliers expects refining charges for copper scrap no.2 to increase as a result of the Transaction⁷⁶³. However, such an increase in refining charges is unlikely to occur.
- (918) As evidenced in Section 9.3.2, suppliers have sufficient effective alternative outlets for copper scrap no.2, and therefore are likely in a position to avoid any attempt by the Merged Entity to increase refining charges. Suppliers respondent to the market investigation also confirm this finding⁷⁶⁴.
- (919) Given that suppliers have access to alternative outlets, the Merged Entity would likely be unable to profitably increase refining charges. As discussed also in Section 9.2.3.2 (B), copper refiners like the Parties need to operate their refining process at or close to full capacity. In such a context, the Merged Entity would not be able to afford suppliers withdrawing scrap supply from it and redirecting it to other outlets within or outside the EEA, if faced with higher refining charges.
- (920) It is noteworthy, that even internal Aurubis documents that considered price effects of a potential acquisition of Metallo (discussed in greater detail with respect to CSSR in Section 9.2.6.2) did not consider a refining charge increase for copper scrap no.2 possible. In particular, in an internal Aurubis document on an earlier takeover attempt of Metallo, it is assessed that '*[n]o synergy considered from scrap no2 sourcing as scrap no2 is a worldwide traded commodity without sufficient leverage effect for Aurubis and MC/Elmet*'⁷⁶⁵. This shows that even Aurubis does not consider itself to be in a position to have sufficient leverage, after an acquisition of Metallo, to raise refining charges.
- (921) In addition, and as explained in further detail in Section 9.2.6.2, an increase in refining charges was likely not part of the deal rationale for the Transaction presented to the Aurubis board. Rather, the base case even is build on a drop in refining charges from 2018 to 2020.

⁷⁶² Replies to question 42 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁷⁶³ Replies to question H.7 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁷⁶⁴ Replies to question 42 of Q1-b_Questionnaire to Suppliers of Copper Scrap, DocID3097.

⁷⁶⁵ DocID1570-82953 (The Parties' reply to the Commission's request for information RFI 16, M.9409_BAK17702_00869979.pptx).

- (922) Therefore, the Transaction is unlikely to lead to an increase in refining charges for copper scrap no.2.
- (923) In any event, and as explained in Section 9.2.6.3, even if the Transaction were to lead to an increase in refining charges for copper scrap no.2, such an increase would possibly be counteracted by gains from technological synergies associated with the Transaction.
- (924) Finally, suppliers of copper scrap no.2 are unlikely to be harmed, even in case an increase in refining charges would affect them. A majority of suppliers expressing their view submit that they could either fully avoid higher refining charges or could pass on the price effect to their suppliers⁷⁶⁶. Furthermore, a majority of suppliers expressing their view also submit that their incentive to collect copper scrap no.2 would not change, even in the event that after the Transaction refining charges were to increase⁷⁶⁷. Therefore it is unlikely that the Transaction would lead to an output reduction (of copper scrap no.2) as a result of the Transaction.
- (925) Overall, it is therefore unlikely that the Transaction leads to an increase in refining charges for copper scrap no.2. Even if a price effect were to occur, it would possibly be counteracted by gains from technological synergies – and in any case, the Transaction would not lead to a reduction in copper scrap no.2 output.
- 9.3.4. *Refining competitors would not be foreclosed of an important input*
- (926) Contrary to the consideration that the Transaction may lead to an increase in refining charges for copper scrap no.2, an EEA refining competitor to the Parties submits that the Merged Entity may engage in a lowering of refining charges, in particular for high-grade copper scrap for refining (and therefore copper scrap no.2)⁷⁶⁸.
- (927) In particular, the competitor states that *'the Transaction poses a threat to the raw materials market. With the acquisition of Metallo, Aurubis would be in a position to lower the discounts on the LME price for scrap, and thus pay a higher price for scrap. This would be detrimental for [the Company's] competitiveness'*. It explains in further detail that *'[a]fter the transaction Aurubis, could try to corner the market in Europe by pushing the discounts to levels at which [the Company] is not competitive anymore'*.⁷⁶⁹ Specifying the type of copper scrap its concern relates to, it submits that *'[f]or High grade/No. 2 Copper scrap we see a risk of decreasing refining charges. The buying power of Aurubis Metall[o] might force us to loose (sic!) market share and profitability because we are not big enough to have a similar cost structure'*⁷⁷⁰.
- (928) The concern expressed by the competitor would imply a possible harm to other refiners of copper scrap no.2 in the EEA, namely the foreclosure of an important input (by raising the prices of this input). It would further imply the possibility that copper refiners in the EEA may have to raise the prices of their downstream products (such as copper cathodes or other) because one of their main inputs (copper scrap) has become more expensive.
- (929) For the following reasons, this input foreclosure concern by a rival of the Parties is unlikely to materialise.

⁷⁶⁶ Replies to question B.13 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁷⁶⁷ Replies to question B.14 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

⁷⁶⁸ Reply to question 54 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

⁷⁶⁹ Minutes of a call with a competitor on 11.7.2019, DocID3337.

⁷⁷⁰ Reply to question 50.2 of Q2-b Questionnaire to Refiners of Copper Scrap, DocID3096.

- (930) **First**, the Parties operate at [...] (as explained in more detail in Section 9.2.3.1 (B)). As the Notifying Party submits, [...] ⁷⁷¹. A similar constraint also applies to Metallo. Therefore, it would not be possible for the Merged Entity to – by lowering its refining charges – attract higher volumes of copper scrap no.2. However, if it were to lower its refining charges without purchasing larger copper scrap no.2 volumes, such a practice is unlikely to be a profitable business practice to engage in.
- (931) An increase of copper scrap no.2 purchases by substituting, for example, CSSR intake for copper scrap no.2 is also unlikely. Such a practice would run counter to Aurubis' recently announced multi-metal strategy (see also Section 9.2.2.2) which focuses on the recovery of non-copper metals, of which there are relatively few in copper scrap no.2.
- (932) Therefore, as the Merged Entity would not purchase materially more copper scrap no.2 post-Transaction, refining rivals would not be foreclosed from purchasing the same amount of copper scrap no.2 as before as a result of the Transaction.
- (933) **Second**, there likely is sufficient supply of copper scrap no.2 in the EEA for rivals of the Merged Entity. For example, a majority of suppliers expressing their view submit that there currently is not sufficient refining capacity for copper scrap no.2 in the EEA. ⁷⁷² This suggests that pre-Transaction the EEA market for copper scrap no.2 is experiencing a degree of oversupply. In such a market environment, it is unlikely that the Merged Entity would be able to foreclose a rival refiner - given that the refiner likely has sufficient access to copper scrap no.2. sources.
- (934) Therefore, it is overall unlikely that the Transaction will lead to an input foreclosure of rival copper refiners of the Parties.

9.3.5. Conclusion

- (935) For the reasons set out in Sections 9.3.1 to 9.3.4 the Commission concludes that the Transaction is unlikely to lead to negative effects in the relevant market for purchasing copper scrap no.2 in the EEA via an increase in refining charges. The Commission in particular finds that suppliers have access to effective alternatives in the EEA and that exports act as a further competitive constraint on the Parties. Further, the Merged Entity would likely not be able to increase refining charges, as it would require a steady input flow. In any case, an increase of refining charges is likely not part of the deal rationale. Further, any purchasing price reduction would possibly be counteracted by the positive effect of technological synergies associated with the Transaction.
- (936) The Commission further concludes that the Transaction is unlikely to lead to negative effects in the relevant market for purchasing copper scrap no.2 in the EEA by input foreclosure (through an increase in purchasing prices). The Merged Entity is unlikely to be able to profitably decrease refining charges for copper scrap no.2 or to purchase materially more copper scrap no.2. Furthermore, rivals are in any case likely to continue to have sufficient access to copper scrap no.2 post-Transaction.
- (937) Therefore, the Commission considers that the Transaction will not result in a significant impediment to effective competition on the relevant market for purchasing copper scrap no.2 in the EEA.

⁷⁷¹ Response to Article 6(1)(c) Decision, paragraph 30.

⁷⁷² Replies to question B.10.1 of Phase II – Q5 – Questionnaire to Suppliers, DocID3094.

9.4. Vertical non-coordinated effects

(938) Metallo produces off-grade copper cathodes, which can be used as input for copper rods and copper shapes manufactured by Aurubis, giving rise to vertical links between the merging Parties. In this section, the Commission assesses the possible non-coordinated effects resulting from these vertical links.

9.4.1. Legal framework for the assessment

(939) Vertical mergers involve companies operating at different levels of the same supply chain. Pursuant to the Commission Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings (the 'Non-Horizontal Merger Guidelines')⁷⁷³, vertical mergers do not entail the loss of direct competition between merging firms in the same relevant market and provide scope for efficiencies. However, there are circumstances in which vertical mergers may significantly impede effective competition. This is in particular the case if they give rise to foreclosure⁷⁷⁴.

(940) The Non-Horizontal Merger Guidelines distinguish between two forms of foreclosure: input foreclosure, where the merger is likely to raise costs of downstream rivals by restricting their access to an important input, and customer foreclosure, where the merger is likely to foreclose upstream rivals by restricting their access to a sufficient customer base⁷⁷⁵.

(941) Pursuant to the Non-Horizontal Merger Guidelines, input foreclosure arises where, post-merger, the new entity would be likely to restrict access to its actual or potential rival in the downstream market to the products or services that it would have otherwise supplied absent the merger, thereby raising its downstream rivals' costs by making it harder for them to obtain supplies of the input under similar prices and conditions as absent the merger⁷⁷⁶.

(942) For input foreclosure to be a concern, a merged entity should have a significant degree of market power in the upstream market. Only when a merged entity has such a significant degree of market power, can it be expected that it will significantly influence the conditions of competition in the upstream market and thus, possibly, the prices and supply conditions in the downstream market⁷⁷⁷.

(943) Pursuant to the Non-Horizontal Merger Guidelines, customer foreclosure may occur when a supplier integrates with an important customer in the downstream market and because of this downstream presence, a merged entity may foreclose access to a sufficient customer base to its actual or potential rivals in the upstream market (the input market) and reduce their ability or incentive to compete which in turn, may raise downstream rivals' costs by making it harder for them to obtain supplies of the input under similar prices and conditions as absent the merger. This may allow a merged entity profitably to establish higher prices on the downstream market⁷⁷⁸.

(944) For customer foreclosure to be a concern, a vertical merger must involve an undertaking which is an important customer with a significant degree of market power in the downstream market. If, on the contrary, there is a sufficiently large

⁷⁷³ OJ C 265, 18.10.2008, p. 6.

⁷⁷⁴ Non-Horizontal Merger Guidelines, paragraph 18.

⁷⁷⁵ Non-Horizontal Merger Guidelines, paragraph 30.

⁷⁷⁶ Non-Horizontal Merger Guidelines, paragraph 31.

⁷⁷⁷ Non-Horizontal Merger Guidelines, paragraph 35.

⁷⁷⁸ Non-Horizontal Merger Guidelines, paragraph 58.

customer base, at present or in the future, that is likely to turn to independent suppliers, the Commission is unlikely to raise competition concerns on that ground⁷⁷⁹.

- (945) In its assessment, the Commission considers whether it is likely that the Merged Entity would engage in input or customer foreclosure strategies. In doing so, the Commission in principle analyses the Merged Entity's ability and incentives to engage in such foreclosure strategies, as well as the possible effects they may have on the relevant markets. Since these factors are intrinsically linked, they are often examined together⁷⁸⁰.

9.4.2. *Market shares concerning vertical links*

- (946) In Table 6, the Commission reproduces the market shares established in Section 5 for the three plausible markets of copper cathodes⁷⁸¹. With respect to this upstream market, for the assessment of the vertical links the Commission takes into account the combined market shares of Aurubis and Metallo based on production of copper cathodes on the global market in 2018.

Table 6: Market shares on the upstream market for copper cathodes

	Off-grade (including captive production)	A-grade and off-grade (merchant market)	A-grade and off-grade (including captive production)
Metallo	[0-5]%	[0-5]%	<[0-5]%
Aurubis	[5-10]%	[0-5]%	[5-10]%
Combined	[5-10]%	[0-5]%	<[5-10]%

⁷⁷⁹ Non-Horizontal Merger Guidelines, paragraph 61.

⁷⁸⁰ Non-Horizontal Merger Guidelines, paragraphs 32 and 59.

⁷⁸¹ The explanations regarding the market shares in Section 5.1.3 and the footnotes apply to the same extent also in this Section 9.4.2.

- (947) For the downstream market for copper rods EEA-wide, that means for the narrowest plausible relevant geographical market, the Notifying Party submitted the following market shares for 2018:

Table 7: Parties' market shares in copper rods, EEA-wide, in 2018⁷⁸²

2018	Sales (in kt)	Market share
Aurubis	[...]	[40-50]%
Metallo	[...]	[0-5]%
Parties combined	[...]	[40-50]%
KGHM	[...]	[10-20]%
Carlo Colombo	[...]	[10-20]%
Nexans	[...]	[0-5]%
La Farga	[...]	[10-20]%
KME & MKM	[...]	[5-10]%
Others	[...]	[10-20]%
Total market size	[...]	100%

- (948) For the downstream market for copper shapes EEA-wide, that means for the narrowest plausible relevant geographical market, the Notifying Party submitted the following market shares in 2018:

Table 8: Parties' market shares in copper shapes, EEA-wide, in 2018⁷⁸³

2018	Sales (in kt)	Market share
Aurubis	[...]	[50-60]%
Metallo	[...]	[0-5]%
Parties combined	[...]	[50-60]%
KME & MKM	[...]	[0-5]%
Montanwerke Brixlegg	[...]	[20-30]%
Wieland	[...]	[0-5]%
MMC Luvata	[...]	[10-20]%
KGHM	[...]	[5-10]%
Others	[...]	[0-5]%
Total market size	[...]	100%

⁷⁸² Reply to request for information 28, Annex 3. The market shares for the years 2017 and 2016 are largely in line with the market shares provided for 2018.

⁷⁸³ Reply to request for information 28, Annex 3. The market shares for the years 2017 and 2016 are largely in line with the market shares provided for 2018.

9.4.3. *Potential input foreclosure*

9.4.3.1. The Notifying Party's arguments

- (949) The Notifying Party submits that there is no risk of input foreclosure with respect to Aurubis' downstream activities both in copper rods and copper shapes⁷⁸⁴. The Notifying Party contends that essential for an input foreclosure scenario is a certain degree of market power in the upstream market. If the upstream market is still sufficiently competitive and if downstream firms are able to substitute easily to alternative inputs, the likelihood that the upstream firm is able to raise the input prices to downstream competitors is small. The Notifying Party further refers to Metallo's market shares submitted in the Form CO and the volume of Metallo's production amounting to [...] thousand tonnes of cathodes in 2018. It puts this production number in the context of the overall global market for cathodes with a total volume (including captive use) of approx. 24 million tonnes. It further states that input foreclosure arises where, post-merger, the new entity would be likely to restrict access to the products or services that it would have otherwise supplied absent the merger, thereby raising its downstream rivals' costs by making it harder for them to obtain supplies of the input under similar prices and conditions as absent the merger. The Notifying Party argues that as Metallo merely accounts for [...] % of the cathode market, it is obvious that even if the Merged Entity would try to foreclose competitors by not selling Metallo's cathodes to third parties, this would not have any appreciable effect. In its view, input foreclosure concerns only arise if the Merged Entity could negatively affect the overall availability of inputs for the downstream market in terms of price or quality. This is cannot be the case where the volume of the input material in question is marginal and non-appreciable in the total market. Also, Metallo only sells off-grade cathodes, whereas the normal input for rod and share are LME grade cathodes. Therefore, as the Notifying Party contends, the quality the overall availability of this input will not be affected⁷⁸⁵.

9.4.3.2. The Commission's assessment with respect to plausible EEA markets

- (950) The Commission notes that with respect to copper cathodes upstream, post-transaction the combined market shares of Metallo and Aurubis would remain low and not exceed [5-10] % in any of the plausible markets. The Commission further takes note of Aurubis market shares on the EEA-wide basis downstream, which are [40-50] % for copper rods and [50-60] % for copper shapes.
- (951) However, even under the plausible market definition with the highest market shares upstream, that means on the global market for off-grade copper cathodes including the captive production, the Commission considers that Metallo's and Aurubis' ability and/or incentive to engage in input foreclosure post-Transaction would be very limited. Therefore, the Transaction is unlikely to result in a significant impediment to effective competition due to input foreclosure.
- (952) **Firstly**, the Commission considers that it is not likely that Metallo and Aurubis would have the ability to engage in an input foreclosure strategy post-Transaction.
- (953) **In the first place**, as outlined in Section 9.4.1, input foreclosure typically requires significant degree of market power in the upstream market, which for both vertical links, is the one of copper cathodes. However, even taking into account the captive production of off-grade copper cathodes, the (combined) market share of the Merged

⁷⁸⁴ Reply to request for information RFI 50, question 2.2.

⁷⁸⁵ Reply to request for information RFI 50, question 2.2.

Entity upstream is [5-10]%. The Commission observes that based on this market share it is unlikely, and there are no indications or even evidence to this regards, that the Merged Entity would command market power on the global copper cathodes.

- (954) **In the second place**, even if the Merged Entity would reduce the access to its copper cathodes, it is likewise unlikely that this could negatively affect the overall availability of copper cathodes for the downstream market in terms of price or quality. The market share of Metallo/Aurubis post-Transaction itself indicates that there is a sufficient number of suppliers of copper cathodes on the market to balance out any shortage of availability in the magnitude of the Merged Entity. This has been confirmed by the market investigation, in which a large majority of Aurubis' competitors in copper rods and copper shapes indicated that it is for them either 'very easy' or 'relatively easy' to get additional input material⁷⁸⁶. This is in line with the replies of the large majority of those competitors, who expressed an opinion (whilst the majority of respondents answered with '*I do not know*'), according to which it is unlikely that Aurubis will be able or will have the incentive to increase prices for copper cathodes post-Transaction⁷⁸⁷.
- (955) **Secondly**, the Commission considers that it is not likely that the Merged Entity would have the incentive to engage in an input foreclosure strategy post-Transaction.
- (956) There is a low probability that Aurubis would benefit from the to be expected profit loss upstream in the sale of copper cathodes as expanding sales of copper rods and or copper shapes downstream or raising prices to its customers is likely difficult.
- (957) In this regard, respondents to the Commission's questionnaires stated that with respect to copper rods, there is an oversupply of copper rods on the market. Half of the copper rods customers, who expressed an opinion, indicated that the supply is in balance but almost the entire second half stated that the market is oversupplied⁷⁸⁸. The picture is even clearer from the replies from copper rod competitors. A large majority of those, who expressed an opinion held the view that the market is currently oversupplied⁷⁸⁹.
- (958) With respect to copper shapes, the replies of copper shapes customers are less conclusive as the majority of the respondents answered with '*I do not know*' and the majority of those, who expressed an opinion contended that the supply is in balance, and only some stated that the market is oversupplied⁷⁹⁰. A large majority of competitors in copper shapes, however, expressed the view that the market is currently oversupplied⁷⁹¹.
- (959) The Commission finds that in this situation, an expansion of the sales of copper rods and/or copper shapes appears unlikely.

⁷⁸⁶ Replies to question D.12 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090. The question was targeted at the situation when the competitors intend to expand their production of copper rods or copper shapes.

⁷⁸⁷ Replies to question D.B.1 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090 with a split of the responses for copper rods and copper shapes.

⁷⁸⁸ Replies to question C.4 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091.

⁷⁸⁹ Replies to question D.1 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090.

⁷⁹⁰ Replies to question C.4 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091.

⁷⁹¹ Replies to question D.1 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090.

(960) Therefore, taking into account the results of the Commission's market investigation and the evidence provided by the Notifying Party, the Commission considers that it is not likely that the Merged Entity would have the ability and/or incentive to engage post-Transaction in an input foreclosure strategy in any of the plausible markets.

9.4.4. *Potential customer foreclosure*

9.4.4.1. The Notifying Party's arguments

(961) The Notifying Party submits that the identified two vertical links will not lead to any risk of customer foreclosure. It contends that customer foreclosure may occur when a supplier integrates with an important customer in the downstream market. There would only be customer foreclosure if, because of the downstream presence, the Merged Entity may foreclose access to a sufficient customer base to its actual or potential rivals in the upstream input market, which may raise downstream rivals' costs by making it harder for them to obtain supplies of the input under similar prices and conditions as absent the merger. This may allow the Merged Entity profitably to establish higher prices on the downstream market. However, according to the Notifying Party, Aurubis is an integrated undertaking, active in the upstream cathode and the downstream rod and shapes market, already before the transaction. The Notifying Party argues that the merger only leads to a marginal increment in market share in the upstream cathodes market due to Metallo's insignificant market position and focus on a different quality. Thus, any customer foreclosure could be excluded⁷⁹².

9.4.4.2. The Commission's assessment with respect to plausible EEA markets

(962) The Commission considers that it is not likely that Metallo and Aurubis would have the ability and incentive to engage in customer foreclosure post-Transaction.

(963) **Firstly**, whereas Aurubis appears to have a strong position on the markets downstream markets in the EEA for copper rods and copper shapes, it is unlikely that it would stop purchasing copper cathodes, decrease the amount of purchases or worsen the conditions of purchasing. In this scenario, it would be necessary to obtain the delta between the previous and the then actual input from a different source, which would be Metallo. However, Metallo's output is rather limited in volume and on top of that confined only to off-grade cathodes. It is therefore difficult to establish that Metallo would be a suitable supplier for Aurubis in the event of a customer foreclosure attempt.

(964) **Secondly**, the price levels of the downstream products copper rods and copper shapes are unlikely to increase post-Transactions. Whilst the overall majority of respondents answered with '*I do not know*', a clear majority of those copper rod customers as well as competitors, who expressed an opinion, took the stance that post-Transaction it is unlikely that the Merged Entity will have the ability and incentive to increase prices for copper rod⁷⁹³. The same applies with respect to prices for copper shapes⁷⁹⁴.

⁷⁹² Reply to request for information RFI 50, question 2.2.

⁷⁹³ Replies to question C.B.2 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091; Replies to question D.B.8 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090.

⁷⁹⁴ Replies to question C.B.2 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091; Replies to question D.B.8 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090.

- (965) **Thirdly**, the competition downstream in copper rods and copper shapes is unlikely to change and to be more difficult for Aurubis' competitors. As regards copper rods, the majority of customers submitted that it is unlikely that Aurubis' competitors will have a more difficult position⁷⁹⁵ and a large majority of those, who expressed an opinion, do not expect any effect on their business⁷⁹⁶. The majority of the competitors themselves, who expressed their opinion, stated that the Transaction will not have any impact on their business in the EEA⁷⁹⁷. As regard copper shapes, whilst the majority of the customer answered '*I do not know*', half of the customers who expressed their views think it is likely that it will be more difficult for Aurubis' competitors post-Transaction and the second half thinks it is not likely⁷⁹⁸. The majority of the competitors, however, who expressed an opinion, does not expect any impact on their copper shapes business in the EEA by the Transaction⁷⁹⁹.
- (966) Therefore, taking into account the results of the Commission's market investigation and the evidence provided by the Notifying Party, the Commission considers, on balance, that it is unlikely that the Merged Entity would have the ability and/or incentive to engage in a customer foreclosure strategy post-Transaction in any of the plausible markets.

9.4.5. Conclusion

- (967) In light of the arguments set out in Sections 9.4.1 to 9.4.4, the Commission concludes that the Transaction does not result in a significant impediment of effective competition in the relevant markets for copper cathodes and for copper rods and copper shapes, respectively, whether on an EEA-wide or global basis.

10. CONCLUSION ON THE COMPATIBILITY OF THE NOTIFIED TRANSACTION WITH THE INTERNAL MARKET

- (968) For the reasons set out in Section 9, the Commission finds that the notified concentration would not significantly impede effective competition in the internal market or in a substantial part of it within the meaning of Article 2(2) of the Merger Regulation and Article 54 of the EEA Agreement.

HAS ADOPTED THIS DECISION:

Article 1

The notified operation whereby Aurubis AG acquires sole control of Metallo Group Holding N.V. within the meaning of Article 3(1)(b) of Council Regulation (EC) No 139/2004 is hereby declared compatible with the internal market and the functioning of the EEA Agreement.

⁷⁹⁵ Replies to question C.B.1 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091.

⁷⁹⁶ Replies to question C.B.5 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091.

⁷⁹⁷ Replies to question D.B.7.1 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090.

⁷⁹⁸ Replies to question C.B.1 of Phase II – Q8 – Questionnaire to Copper rod & shapes customers, DocID3091.

⁷⁹⁹ Replies to question D.B.7.2 of Phase II – Q9 – Questionnaire to competitors in copper rod and copper shapes, DocID3090.

Article 2

This Decision is addressed to:

Aurubis AG
Hovestraße 50
20539 Hamburg
Germany

Done at Brussels, 4.5.2020

For the Commission

(Signed)
Margrethe VESTAGER
Executive Vice-President

CASE M.9409 – AURUBIS / METALLO GROUP HOLDING
ANNEX

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1. METHODOLOGY FOR THE COMMISSION'S MARKET RECONSTRUCTION

- (1) Purchasing shares are used in merger investigations with a focus on buyer power to identify the relative strength of competing sources of demand for the supply on the relevant market.¹ The relevant markets dealt with in the present Annex are the CSSR market, as defined in Section 7.1 of this Decision, and the copper scrap no.2 market, as defined in Section 7.2 of this Decision.

1.1. Competing sources of demand for CSSR

- (2) The Commission considers that there are two main groups of purchasers of CSSR: copper refiners and purchasers of copper scrap for refining other than copper refiners.
- (3) Copper refiners purchase CSSR for valorising the copper contained in the material. CSSR sold by EEA suppliers is purchased by both EEA and non-EEA copper refiners.
- (4) While the Commission considers competition for CSSR among copper refiners to be the main dimension of the competitive process in the relevant market, also purchasers of copper scrap for refining other than copper refiners exert certain competitive constraints on the Parties. Purchasers of CSSR other than copper refiners are a diverse group: (i) refiners of other materials (e.g. nickel, zinc) - these purchasers are also referred to as non-copper refiners; (ii) brass/bronze ingot makers and other manufacturers of semi-finished products - these purchasers are also referred to as non-refiners; (iii) scrap traders; and (iv) recyclers and pre-processors.
- (5) The Commission considers that in particular scrap traders and collectors/pre-processors do not constitute a genuine source of demand and are to be seen mainly as intermediaries between generators of copper scrap for refining and copper refiners (and purchasers of copper scrap for refining other than copper refiners to some extent).
- (6) First, including purchases made by traders and collectors/pre-processors as well as purchases by copper refiners and purchasers of CSSR other than copper refiners would necessarily lead to double counting of the same material generated in the EEA. Traders and collectors/pre-processors ultimately sell their unprocessed (or slightly processed) output to copper refiners and possibly non-copper refiners, or to non-refiners.
- (7) Second, traders' and collectors'/pre-processors' demand is primarily a function of refiners' demand. Unless these companies can sell their output to copper refiners or other non-copper refiners, there would be no basis for their business model.
- (8) Third, traders exhibit, at least to some extent, elastic supply versus copper refiners and elastic demand versus scrap generators. Therefore, they will be able to pass on any deteriorating demand conditions to generators. Scrap traders can thus be seen as neutral demand intermediaries.
- (9) Fourth, similarly to traders, also collectors and pre-processors will be able to pass most of any deteriorating demand conditions to generators. Pre-processors' supply elasticity might be lower than that of traders due to necessary investments for the

¹ See also 'On the calculation of buying shares in purchasing markets', section 1, submitted by the Notifying Party on 19.12.2019.

pre-processing of scrap. For the same reason also their demand elasticity versus generators might be lower. This implies that these companies' economic surplus might be affected to some extent by an increase in buyer power post-Transaction. Yet, it does not imply that collectors and pre-processors are an original source of demand for CSSR.

- (10) Fifth, the fact that pre-processors might process CSSR and therefore the resulting product might belong to a different CSSR segment² does not have a material impact on the market shares of the relevant market (the CSSR market), but rather on the accuracy of the segment shares, which is nevertheless expected to be very reliable for the reasons explained below.³
- (11) In the market reconstruction, the Commission requested information on purchases and sales of CSSR as well as for the following CSSR market segments; industrial residues containing copper, tin-bearing copper scrap, incinerator bottom ashes containing copper and copper-iron scrap⁴. The remaining quantities of CSSR have been allocated to a residual category ('other'). It is thus likely that most transformations would remain within the CSSR market. Even within CSSR, given the technical characteristics of the segments industrial residues containing copper, tin-bearing copper scrap, incinerator bottom ashes containing copper and copper-iron scrap, transformations of material between these segments seem unlikely. More plausibly, most transformations would stay within the residual category.
- (12) Further, a hypothetical situation where a pre-processor buys copper scrap no.2 or e-scrap, pre-processes it and then sells it on as CSSR,⁵ appears to be very unlikely. This is the case due to the high-grade nature of copper scrap no.2, and therefore pro-processors would have technical difficulty and no economical incentive to dilute the copper content in the scrap and obtain CSSR.
- (13) Similarly, a hypothetical situation where a pre-processor buys CSSR, pre-processes it and then sells it on as copper scrap no.2 or e-scrap appears to be uncommon in case of the former and unlikely in case of the latter.⁶ While certain CSSR materials can be transformed into copper scrap no.2 (e.g. tinned copper scrap), this applies only to a small subset of the overall CSSR market. The transformation of CSSR into e-scrap is implausible given the technical features of e-scrap, which derives mainly from printed circuit board.

² See also RBB Economics, On the calculation of buying shares in purchasing markets, page 5 (submission of 19 December 2019).

³ Nevertheless there are some instances where CSSR can be processed in such a way that the resulting material is no longer part of the CSSR market.

⁴ For the purpose of completeness the Commission also requested information on purchases and sales of e-scrap. Since there is no overlap of purchasing shares in this scrap category e-scrap is not analysed in detail.

⁵ Under such a scenario, the Commission would only observe the purchases of CSSR by the copper refiners. Part of these purchases, however, are actually demand for copper scrap no.2/e-scrap at the generation stage.

⁶ Under such a scenario, the Commission would only observe the purchases of copper scrap no.2/e-scrap by the copper refiners. Part of these purchases, however, are actually demand for CSSR at the generation stage.

1.2. Combining demand and supply sources

- (14) Most selling market reconstructions are performed relying on a pure supply-side approach. In many markets relevant to merger control, the supply side is more concentrated than the demand side, thus it is easier to obtain a complete picture by requesting data from suppliers. For the purchasing market of the Transaction, the demand-side is more concentrated than the supply side. The mirrored approach of the selling market reconstruction would be to rely on a pure demand-side approach. However, both a pure supply-side as well as a pure demand-side approach are unfeasible for the Transaction.
- (15) Each of the Parties purchases CSSR and other copper scraps from more than [...] suppliers per year, and there may be even more suppliers that do not supply to either of the Parties. Thus, a pure supply-side market reconstruction by asking information from all suppliers on the market is unfeasible.
- (16) To make this more specific: in the first place, Aurubis had [...] suppliers of copper scrap for refining in 2018,⁷ as shown in the distribution of the supply share in Figure 1. The median supplier provided [...] % of Aurubis' total demand for copper scrap for refining. There were only roughly [...] companies with a supply share of more than [...] %.

Figure 1: Share of individual suppliers in Aurubis' total purchasing of copper scrap for refining, ordered smallest (left) to largest (right)

[...]

- (17) In the second place, Metallo had [...] suppliers of copper scrap for refining in 2018, see the distribution of the supply share in Figure 2. The median supplier provided [...] % of Metallo's total demand for copper scrap for refining. There were only [...] companies with a supply share of more than [...] %.

Figure 2: Share of individual suppliers in Metallo's total purchasing of copper scrap for refining, ordered smallest (left) to largest (right)

[...]

- (18) On the demand side, the Commission was able to obtain complete information from EEA-based copper refiners and almost complete information for those EEA-based non-copper refiners suggested by the Notifying Party to be active in the CSSR market. This forms the basis for the market reconstruction. However, the Commission obtained incomplete purchasing volumes for non-EEA-based copper refiners and non-refiners (both based in the EEA and outside the EEA). Thus, a pure demand-side approach to market reconstruction is also not feasible.

⁷

In this context, the expression 'copper scrap for refining' includes CSSR, copper scrap no.2, and e-scrap. Please note that the set of data presented in this Annex differ from those presented in Section 9.2.2.3 because the present data refer to CSSR and Copper scrap no.2, while those in Section 9.2.2.3 refer to all copper scrap suppliers.

- (19) The Commission therefore used additional information from a variety of supply-side companies to estimate the volumes sold to EEA non-refiners. For the CSSR sold outside the EEA, the Commission relied on official Eurostat trade data.
- (20) In summary, while for EEA purchases made by refiners the Commission could reliably use data provided by the CSSR purchasers, for CSSR purchased outside the EEA and for CSSR purchased by non-refiners, the Commission used export trade data and suppliers data.

1.3. Data Sources

- (21) The Commission's calculation of purchasing shares, refining shares and capacity shares uses information from the following set of questionnaires sent out to market participants.
 - (a) Request for Information to **11 EEA-based copper refiners** identified by the Notifying Party.⁸ The response rate from these market participants is 100%. This information consists of: (i) 2016-2019 annual purchasing quantities of copper scrap no.2, e-scrap, and CSSR. Purchases of CSSR are further broken-down into industrial residues containing copper, tin-bearing copper scrap, incinerator bottom ashes containing copper, copper-iron scrap and other CSSR; (ii) actual and potential total input capacity for refining copper scrap.
 - (b) Request for Information to **5 EEA-based non-copper refiners** identified by the Notifying Party.⁹ The response rate from these market participants is 80%. This information consists of: (i) 2016-2019 annual purchasing quantities of copper scrap no.2, e-scrap, and CSSR. Purchases of CSSR are further broken-down into industrial residues containing copper, tin-bearing copper scrap, incinerator bottom ashes containing copper, copper-iron scrap and other CSSR; (ii) actual and potential total input capacity for refining copper scrap.
 - (c) Request for Information to **240 EEA-based and non-EEA-based suppliers of copper scrap for refining** identified by the Notifying Party.¹⁰ The response rate from these market participants is 33%. This information consists of 2018 export quantities of copper scrap no.2, e-scrap, and CSSR. Exports of CSSR are further broken-down into industrial residues containing copper, tin-bearing copper scrap, incinerator bottom ashes containing copper, copper-iron scrap and other CSSR.
 - (d) Request for Information to **105 EEA-based and non-EEA-based non-refiners plus traders and pre-processors** identified by the Notifying Party.¹¹ The response rate from these market participants is 28%. This information consists of: (i): 2018 purchasing quantities of copper scrap no.2, e-scrap, and CSSR. Purchases of CSSR are further broken down into: industrial residues containing copper, tin-bearing copper scrap, incinerator bottom ashes containing copper, copper-iron scrap and other CSSR; 2018 quantities of copper scrap for refining sold to other customers than EEA-based and non-EEA-based copper refiners.

⁸ Form CO, Annex 7.2-E.

⁹ Reply to request for information 27, Annex Q1c (one of the suggested companies was omitted because it was already a recipient of the questionnaire to EEA-based copper refiners).

¹⁰ Reply to request for information 21, Annex Q2.1 and Annex Q2.2.

¹¹ Reply to request for information 27, Annex Q1c. It should be noticed that, for the purpose of estimating exports, the Commission relied on trade data from Eurostat and not on the purchasing data of non-EEA purchasers. This approach is different from that used in the SO, because, as explained in the present Annex, the Eurostat values used in the SO appear to be not correct.

- (e) The Commission also collected data on exports from the following requests for information. First, a Request for Information to **21 non-EEA-based copper refiners** identified by the Notifying Party;¹² and, second, a Request for Information to **43 additional exporters of EEA copper scrap including CSSR** identified by the Notifying Party.¹³

1.4. Combining the data sources

- (22) As explained in the previous section, the Notifying Party submitted lists of companies active both on the demand and on the supply side of the market, and as a result, several hundred market participants received requests for information during the in-depth market investigation.
- (23) For the sake of clarity, when requesting data from these market participants, the Commission provided the following definitions of the various types of CSSR:
- Tin-bearing copper scrap: *‘including tinned copper scrap (Scrap of copper or copper alloy plated with a layer of tin), copper-tin alloy scrap (Bronze scrap), and tin-containing residues, etc’.*
 - Incinerator bottom ashes containing copper: *‘scrap or waste containing copper which originates from waste incineration (e.g. municipal waste incineration plants)’.*
 - Industrial residues containing copper: *‘slags, drosses, cement, sludge, ash and filter dusts, etc’.*
 - Copper-iron scrap: *‘e.g. electric motors, shredded armatures’.*
 - Copper scrap no.2: *‘Copper scrap with little impurities and a minimum copper content of 94% (as following The Institute of Scrap Recycling Industries, Inc. (ISRI) classification)’.*
 - E-scrap: *‘mainly printed circuit boards’.*
- (24) All EEA-based copper refiners, all non-EEA-based copper refiners and all EEA-based non-copper refiners received an Excel questionnaire with questions on their purchasing volumes and refining capacities for the years 2016-2019.
- (25) All additional exporters, all EEA-based and non-EEA-based suppliers and all EEA-based and non-EEA-based purchasers other than copper refiners (e.g. brass/bronze ingot makers, traders and pre-processors) received online questionnaires with questions on their purchases and sales of copper scrap for refining for the year 2018.
- 1.4.1. Deliveries of EEA copper scrap for refining to EEA-based copper refiners
- (26) The Commission’s market reconstruction covers all deliveries of EEA-based copper scrap for refining to EEA-based copper refiners thanks to a 100% response rate of these companies.

¹² Reply to request for information 21, Annex Q1b.

¹³ Reply to request for information 21, Annex Q1a.

1.4.2. *Deliveries of EEA copper scrap for refining to EEA-based non-copper refiners and non-refiners*

- (27) The Commission's market reconstruction achieves an 80% response rate for those EEA-based non-copper refiners named by the Notifying Party to be purchasing EEA-based copper scrap for refining.
- (28) Purchases of copper scrap for refining of these EEA-based non-copper refiners in the market reconstruction turn out to be minimal with [...] of CSSR and [...] of copper scrap no.2 for the year 2018.
- (29) In addition, the Commission's market reconstruction includes information from EEA non-refiners. The response rate for these companies lies at 25%. The purchases of these companies reported in the market reconstruction are [...] of CSSR and [...] of copper scrap no.2 for the year 2018.

1.4.3. *Approach for compensating for the low response rate of non-refiners*

- (30) As explained in the previous section, the response rate of non-refiners is relatively low. In addition, due to the fragmented nature of these purchasers, there is no certainty that a significant number of these purchasers have been reached during the market reconstruction.
- (31) In order to mitigate this lack of data, the Commission asked pre-processors, collectors and traders reached in the market reconstruction to provide information on the share of their purchases that is eventually sold to non-refiners.¹⁴ The EEA-based copper scrap purchases of non-refiners via these market participants results to be [...] for CSSR and [...] for copper scrap no.2 for the year 2018.
- (32) It should be noticed that, by combining demand side and supply side information for non-refiners, it is in principle possible that some quantities are double-counted. However, since the data from the demand side is very limited, as explained in Section 1.4.2, particularly for CSSR where the demand side purchases are limited to [...], the impact of double counting is minimal, if not negligible. For CSSR, in fact, these [...] should be compared to [...] provided on the supply side. Even assuming that all the [...] provided on the demand side are double counted, these represent less than 0.6% of the [...] provided from the suppliers.

1.4.4. *Exports*

- (33) Trade data publicly available from Eurostat are used for estimating exports of copper scrap for refining, and particularly, CSSR and copper scrap no.2.
- (34) The Commission estimated exports as follows: first, Eurostat codes under which exports of CSSR and copper scrap no.2 are identified; second, for each of these sets of data an estimate of the total amount of CSSR and copper scrap no.2 is made; third, the resulting quantities (which so far aggregate the entire CSSR and copper scrap no.2 exports) are allocated to CSSR (including its market segments) and copper scrap no.2.
- (35) With respect to the Eurostat sets of data relevant for CSSR and copper scrap no.2,¹⁵ the following sets of data have been identified: copper waste and scrap (CN 7404);¹⁶

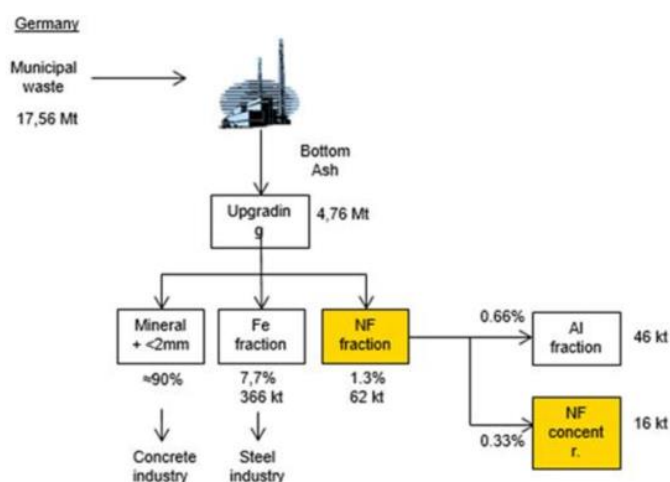
¹⁴ These companies received questionnaire 4 and questionnaire 7. This refers to 9 companies in total of which 7 companies are processors or recyclers and the remaining 2 companies are traders.

¹⁵ The full dataset is in DocID3776.

copper-iron scrap (CN 7204),¹⁷ slags (CN 2620)¹⁸ and waste and incineration plants (CN 262110).¹⁹

- (36) The data under the code CN 7404 contains in total 786 kilo tonnes for the year 2018. These quantities include CSSR, copper scrap no.2 and direct melt.
- (37) Copper iron scrap (CN 7204) contains the CSSR segment copper ferrous (CuFe), which is a segment of CSSR. According to the Eurostat data, in 2018 Ferrous scrap EEA export amounted to 21.6 million tonnes. In order to obtain copper-iron scrap from this value, it is assumed that, as the Notifying Party suggests, only half a percent of this volume is copper-iron scrap, i.e. 10.8 kilo tonnes.
- (38) Slags (CN 2620) in the Eurostat data amount to 173 kilo tonnes of which, according to the Notifying Party, 50% are represented by CSSR, and therefore this quantity is considered as a part of the CSSR export.
- (39) Exports of incinerator bottom ashes containing copper are estimated from the export data on waste incineration plants (CN 262110) which amount to 2.7 million tonnes. According to an Aurubis' internal document represented in Figure 3, the non-ferrous content of incinerator bottom ashes (which is the part that is sold as a CSSR for recovering copper) is 0.33%. Therefore, the 2018 exports of incinerator bottom ashes containing copper are estimated to be 8.91 kilo tonnes.

Figure 3: Share of bottom ash containing copper



Source: DocID1571-7943 (Reply to request for information 16, BAK17702_00079995.pptx), slide 75.

- (40) By summing up the volumes just calculated for each of the Eurostat data set, the resulting exports of CSSR, copper scrap no.2 and direct melt is 991 kilo tonnes.

¹⁶ This product category includes “waste and scrap of copper (excluding ingots or other similar unwrought shapes of remelted copper waste and scraps, ashed and residues containing copper, and waste and scrap of primary cells, primary batteries and electric accumulators)”.

¹⁷ This product category contains “ferrous waste and scrap, premelting scrap ingots of iron or steel (excluding slag, scale and other waste from the production of iron or steel; radioactive waste and scrap; fragments of pigs, blocks or other primary forms of pig iron or spiegeleisen)”.

¹⁸ This product category refers to “slags and ash and residues contain metals, arsenic or their compounds (excluding those from the manufacture of iron or steel)”.

¹⁹ This product category includes “ash and residues from incinerations of municipal waste”.

- (41) From this quantity, direct melt copper scrap, which is assumed to be 348 kilo tonnes,²⁰ is subtracted. This leads to 643 kilo tonnes, which represents the sum of CSSR and copper scrap no.2 exports, as indicated in Table 1.
- (42) This volume of exports is distributed across the categories copper scrap no.2 and CSSR, and, within CSSR it is further broken-down into market segments (i.e. industrial residues containing copper, tin-bearing copper scrap, incinerator bottom ashes containing copper and copper-iron scrap and other), according to the distribution of exports reported by the exporters (see recital (21)(e)).
- (43) The resulting exports are summarised in Table 1. The total exports amount to about 215 kilo tonnes for copper scrap no2 and to about 428 kilo tonnes for CSSR.

Table 1: Total exports of EEA-supplied copper scrap for refining based on Eurostat trade data, in tonnes, 2018

	Copper scrap no.2	CSSR	Industrial residues containing copper	Tin-bearing copper scrap	Incinerator bottom ashes containing copper	Copper-iron scrap	Others
Total exports	214 959	427 859	28 100	38 611	28 407	179 400	153 341

1.5. Modification of the market reconstruction results, versus those presented in the SO

- (44) After analysing the Notifying Party's claims in the Data Room Report, the Commission accepted some of its claims and therefore modified the market reconstruction.
- (45) Based on the indication of some clerical errors in the market reconstruction stated in the Data Room Report the Commission checked and corrected some typographical errors made when collecting the raw data for the market reconstruction. These corrections mainly affect raw data based on questionnaire 4, questionnaire 5 and questionnaire 7.²¹ The Commission checked other claims of the Notifying Party regarding potential clerical errors and did not find any of the claimed errors.²²
- (46) The Commission revised Metallo's volumes of incineration bottom ashes containing copper due to the fact that the market reconstruction of the SO was based on an outdated version of Metallo's RFI reply to the market reconstruction.²³ The final market reconstruction relies on Metallo's updated version, Reply to RFI 36.²⁴ This

²⁰ Direct melt account for 35.1%, as indicated by the Notifying Party in Form CO, Annex 7.2-D.

²¹ The Commission accepted claims of the Notifying Party in the Data Room Report regarding changes made in the raw data based on the combination of questionnaire 4 and questionnaire 5. These adjustments cover the reduction of export volumes of e-scrap and of copper scrap no.2 of three third parties. In questionnaire 7 the Commission corrected a clerical error regarding the volume of one third party, while with respect to the combination of questionnaire 4 and questionnaire 7 the Commission adjusted a clerical error of two third parties' volumes which result in higher volumes for these third parties.

²² All volumes referred to in Section 1.4 base on the corrected market reconstruction data set presented in this section.

²³ Reply to request for information 31.

²⁴ Reply to request for information 36, question 6c, footnote 11.

leads only to an adjustment in the composition of Metallo's CSSR volumes whereby the total volume of Metallo's CSSR purchases do not change.

- (47) Based on the Notifying Party's substantiation in RFI 49,²⁵ direct melt purchases were removed from Aurubis's CSSR volume, as direct melt is not part of the CSSR market, as explained in Section 7.1.3.2 of the Decision.
- (48) In the market reconstruction presented in the SO, the Commission corrected the volumes of industrial residues containing copper purchased by the Notifying Party based on the information provided in White Paper 15. As stated in the Reply to the SO, the Notifying Party previously counted this volume as part of the 'other' CSSR category. Hence, the Commission subtracted the volume in 'other' CSSR by exactly the volume which was added to the residues category.
- (49) According to the definition in RFI 30 and the Form CO,²⁶ e-scrap is referred as '*(mostly) printed circuit boards*' (PCBs). Aurubis included also some shredder of waste electric and electronic equipment (WEEE) in the CSSR 'other' category because these materials are different from PCBs. However, it appears that certain third parties that provided data for the market reconstruction included WEEE shredder in their s-scrap volumes. Hence, for consistency reasons, the WEEE shredder of Aurubis have also been allocated to e-scrap, rather than to CSSR.
- (50) In the SO, the baseline estimation of purchasing shares was based on multiplying the observed exports (that is to say, the exports data provided by market participants in response to the market reconstruction requests) by a factor three. This factor three was based on the fact that the response rate to the Commission's RFI to exporters of EEA copper scrap for refining was limited to 40%. In the light of the Reply to SO, and in particular of the Data Room Report, the Commission considered that Eurostat trade data represent a more reliable source of data for estimating exports.
- (51) It should be recalled that in the SO, the Commission also used Eurostat trade data. In that context, Eurostat data have been used solely for comparing the estimates resulting from the market reconstruction with said trade data. Nevertheless, upon reconsideration, the Commission considers that the Notifying Party's claim that the Eurostat data used in the SO underestimate CSSR exports is correct. Therefore, the Commission considers all the claims made by the Notifying Party in the Data Room Report in this respect, except regarding those Eurostat data indicating exports of waste and scrap of other metals (i.e. nickel, lead, zinc, tin and precious metals). Such a revisited set of data leads to considering the trade data explained in Section 1.4.4.

2. MARKET RECONSTRUCTION

- (52) The results of the market reconstruction indicate moderate combined purchasing shares of the Merged Entity for CSSR in the EEA.
- (53) Purchasing shares tables (and other shares tables in this Annex) are presented in confidentialised form with the following intervals: [0-5]%, [5-10]%, [10-20]%, [20-30]%, [30-40]%, [40-50]% and [50-60]%, [60-70]% and [70-80]%.

²⁵ Reply to request for information 49, questions 1-5.

²⁶ See for examples, Form CO, paragraphs 48, 154 and 156.

- (54) Purchasing shares for copper scrap no.2, and CSSR are presented in Table 2. The table also breaks-down CSSR into its main segments for which data have been collected in the market reconstruction.

Table 2: Purchasing shares for EEA-supplied copper scrap no.e and CSSR, 2018

	Copper scrap no.2	CSSR	Industrial residues containing copper	Tin-bearing copper scrap	Incinerator bottom ashes containing copper	Copper-iron scrap	Others
Aurubis	[30-40]%	[10-20]%	[10-20]%	[20-30]%	[30-40]%	[0-5]%	[10-20]%
Metallo	[5-10]%	[10-20]%	[30-40]%	[20-30]%	[10-20]%	[10-20]%	[10-20]%
<i>Parties Combined</i>	[30-40]%	[20-30]%	[40-50]%	[40-50]%	[50-60]%	[10-20]%	[20-30]%
Brixlegg	[5-10]%	[5-10]%	[0-5]%	[0-5]%	[0-5]%	[5-10]%	[10-20]%
Boliden	[0-5]%	[5-10]%	[20-30]%	[0-5]%	[10-20]%	[0-5]%	[0-5]%
KGHM	[5-10]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[5-10]%
Umicore	[0-5]%	[0-5]%	[5-10]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
Others	[5-10]%	[10-20]%	[0-5]%	[10-20]%	[0-5]%	[5-10]%	[10-20]%
Exports	39%	43%	22%	42%	33%	71%	38%
Total purchasing volume in tonnes	552 441	99 0514	178 423	67 403	85 200	252 764	406 724

- (55) The Parties and their competitors were asked to provide the Commission with 2016, 2017 and 2018 gross volumes of copper scrap purchased from suppliers based both in the EEA and outside the EEA. Further, the refiners were asked to indicate the capacity available for copper scrap consumption at the actual mix of refining inputs used. The respondents provided both the potential and the actual input capacity available to them for refining. The total potential input capacity is the total possible volume of copper scrap consumption under ideal technical conditions, namely absent planned and unplanned maintenance, potential power outages and other unplanned events that can affect consumption. Whereas the actual input capacity is the volume of copper scrap that the refiners can consume under actual technical conditions.
- (56) The Parties exhibit a share of [50-60]% of total actual input capacity available at EEA-based copper refiners.

Table 3: Capacity Shares of EEA-based copper refiners, 2018

	'000 tonnes	Capacity share
Aurubis	[...]	[30-40]%
Metallo	[...]	[20-30]%
Parties Combined	[...]	[50-60]%
Boliden	[...]	[10-20]%
Brixlegg	[...]	[10-20]%
Umicore	[...]	[5-10]%
KGHM	[...]	[5-10]%
Other	[...]	[0-5]%
Total actual input capacity in tonnes	1 307.6	100%

- (57) Based on the volumes of copper scrap purchased and the total actual input capacity of the refiners, the annual rate of utilization of actual capacity was computed. In 2018, the weighted average actual capacity utilization of the respondents was 98.6%. In the earlier years, similar rates of actual capacity utilization were observed with 97.6% in 2016 and 98.5% in 2017. Weighting was performed according to total actual input capacity.

Table 4: Capacity Utilization of EEA-based copper refiners, 2018

	Utilization of actual capacity (%)
Aurubis	[...]%
Metallo	[...]%
Parties Combined	[...]%
Boliden	[...]
Brixlegg	[...]
Umicore	[...]
KGHM	[...]
Other	[...]
Weighted average capacity utilization	99%

- (58) Capacity utilization rates for non-EEA refiners for total actual input capacity in 2018 was 99% on average (weighted), although based on only three non-EEA refiners.

- (59) EEA refining shares exhibit the shares of the total quantities of a certain type of scrap (i.e. copper scrap no.2, CSSR or segments thereof) by EEA-based copper refiners (these EEA refining shares include EEA-supplied and non-EEA-supplied copper scrap, i.e. imports). As such, these shares do not consider exports (Table 5).

Table 5: Refining Shares of copper scrap no.e and CSSR, 2018

	Copper scrap no.2	CSSR	Industrial residues containing copper	Tin-bearing copper scrap	Incinerator bottom ashes containing copper	Copper-iron scrap	Others
Aurubis	[50-60]%	[20-30]%	[10-20]%	[40-50]%	[50-60]%	[5-10]%	[30-40]%
Metallo	[5-10]%	[30-40]%	[40-50]%	[50-60]%	[20-30]%	[60-70]%	[20-30]%
<i>Parties Combined</i>	<i>[60-70]%</i>	<i>[60-70]%</i>	<i>[50-60]%</i>	<i>[90-100]%</i>	<i>[70-80]%</i>	<i>[70-80]%</i>	<i>[50-60]%</i>
Brixlegg	[10-20]%	[10-20]%	[0-5]%	[0-5]%	[0-5]%	[20-30]%	[20-30]%
Boliden	[0-5]%	[5-10]%	[20-30]%	[0-5]%	[20-30]%	[0-5]%	[0-5]%
Umicore	[0-5]%	[5-10]%	[20-30]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%
KGHM	[10-20]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[5-10]%
Other	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[0-5]%	[5-10]%
Total refining volume in metric tonnes	401 807	720 940	223 521	51 199	64 681	57 666	323 873

- (60) The level of the Herfindahl-Hirschman Index (HHI) cannot be reliably calculated due to the mix of supply and demand sources applied in the market reconstruction. Therefore, additional information gathered during the market reconstruction regarding EEA-based copper scrap for refining sold to non-EEA-based purchasers is used. Specifically, the information on exports from two sources are combined for quantifying the exports and the number of exporters. These two sources are the RFI to exporters of EEA copper scrap for refining and the RFI to EEA-based and non-EEA-based suppliers of copper scrap for refining (see Section 1.3).
- (61) The exports of copper scrap for refining reported by these companies in the market reconstruction were 67.1 kilo tonnes for CSSR, 34 kilo tonnes for copper scrap no.2 and 17.2 kilo tonnes for e-scrap in total for the year 2018.
- (62) While the observed exports can be reliably allocated to each of the company that reported export volumes in the market reconstruction, the number of exporters for the remaining part of the exports is unknown. Therefore, HHIs are calculated under two scenarios, and, as a result a range of value for the HHIs is obtained.
- (63) In the first scenario, the Commission assumes that all unobserved exports are conducted by one exporter. This approach leads to a higher concentration index of [2000-2500] for the CSSR market.

- (64) In the second scenario, the number of exporters of unobserved exports is estimated based on the observed exports. In particular, for the unobserved exports it is assumed that the number of exports is proportional to the volume exported with the same proportion existing for the observed exports. In other words, it is assumed that the ratio between the exported volume and the number of exporters is the same for the overall exports and for the exports observed in the market reconstruction. With this approach, the post-Transaction HHI for purchasing of EEA CSSR is [900-1000].
- (65) The HHI delta for CSSR is [300-400] for both the scenarios. Results for CSSR and Copper scrap no.2 are summarised in Table 6.

Table 6: Post-transaction HHI for EEA supplied copper scrap no.2 and CSSR, 2018

HHI post Transaction	Copper scrap no.2	CSSR
HHI based on assumption of one Exporter for unobserved Exports, observed exports according to number of reporters	[2500-3000]	[2000-2500]
HHI based on number of firms of unobserved Exports based on share of unobserved on observed exports, observed exports according to number of reporters	[1500-2000]	[900-1000]
Delta HHI	[300-400]	[300-400]

3. THE PARTIES' PURCHASES OF COPPER SCRAP FOR REFINING

- (66) For the following regressions the Commission applied data provided by the Parties' in order to estimate the difference of refining share and margins for copper scrap for refining from non-EEA-suppliers for Aurubis and Metallo, respectively.²⁷ The results presented in this Section are one element informing the Commission's assessment of the relevant geographic markets for CSSR and copper scrap no.2 as EEA-wide.

3.1. [...]

- (67) The following table shows the outcome of regressing the logarithm of Aurubis' EUR refining charge per ton of copper scrap for refining on the region of the supplier (variable 'Supplier_Region').²⁸ To interpret the coefficient (column 'Coef.') of the variable ('Supplier_Region'), multiply by 100 in order to obtain a percentage interpretation of the difference between non-EEA supplied and EEA-supplied copper scrap for refining.

Figure 4: Regression analysis, refining charges on non-EEA-suppliers, Aurubis, 2018

[...]

- (68) Average refining charges for copper scrap for refining are [...] % higher for non-EEA suppliers to Aurubis.

²⁷ The calculations in Section 3.1 are based on Aurubis's submission of RFI 16 and RFI 38 while Sections 3.2. and 3.3. regarding Metallo's margin use data provided in the Form CO (Annex 8.2-D) and RFI 41.

²⁸ The data covers all purchases by Aurubis for the year 2018.

- (69) In order to differentiate between the markets CSSR, copper scrap and no.2 the Commission estimates regressions for each of these markets respectively. It controls for copper content of the delivery as well as time effects.
- (70) The following table shows the outcome for the subset of Aurubis' purchases in the market CSSR. Refining charges are on average by [...] % higher when the supplier is non-EEA based.

Figure 5: Regression analysis, CSSR refining charges on non-EEA-suppliers (time effects, copper content controls), Aurubis, 2018

[...]

- (71) The following table shows the outcome for the subset of Aurubis' purchases in the market copper scrap no.2. Refining charges are on average [...] % lower when the supplier is non-EEA based.

Figure 6: Regression analysis, copper scrap no.2 refining charges on non-EEA-suppliers (time effects, copper content controls), Aurubis, 2018

[...]

3.2. [...]

- (72) Metallo's dataset does not contain information on refining charges. In order to see whether Metallo's earnings on copper scrap refining are sensitive to the location of the supplier, the following table shows the outcome of regressing the logarithm of Metallo's EUR purchase margin per ton of copper scrap for refining on the region of the supplier (variable 'Supplier_Region') times an indicator variable for the year. To interpret the coefficients ('Coef.'), compare for each year the line for 'EEA' with the line for 'Non-EEA' to obtain the average yearly difference of non-EEA supplied versus EEA-supplied scrap. The difference can be multiplied by 100 in order to obtain a percentage interpretation.

Figure 7: Regression analysis, EUR purchase margin on non-EEA-suppliers, Metallo, 2016-2019

[...]

- (73) Metallo's EUR purchase margins are on average by [...] percent [...] in 2019 ([...]). The difference was [...] percent in 2018, [...] percent in 2017 and [...] percent in 2016.
- (74) The following table shows the outcome for the subset of Metallo's scrap purchases in the market CSSR. The Commission controlled for copper content of the delivery as well as time effects.

Figure 8: Regression analysis, CSSR EUR purchase margin on non-EEA-suppliers (time effects, copper content controls), Metallo, 2016-2019

[...]

- (75) Metallo's EUR purchase margins for CSSR are on average (controlling for copper content and time effects) by [...] percent [...].
- (76) The following table shows the subset of Metallo's scrap purchases in the market copper scrap no.2.

Figure 9: Regression analysis, copper scrap no.2 EUR purchase margin on non-EEA-suppliers (time effects, copper content controls), Metallo, 2016-2019

[...]

- (77) Metallo's EUR purchase margins for no.2 are on average (controlling for copper content and time effects) by [...] percent [...].

3.3. [...]

- (78) In order to control for the fact that margins will also depend on the overall value of a delivered batch of copper scrap for refining, the Commission looks at the relationship between the percentage purchasing margin and whether a delivery stems from a non-EEA-based supplier. The percentage purchasing margin is calculated as the purchasing margin per tonne divided by the sum of purchasing margin per tonne and purchasing price per tonne.
- (79) The following table shows the outcome for the subset of Metallo's scrap purchases in the market CSSR.

Figure 10: Regression analysis, CSSR percentage purchase margin on non-EEA-suppliers (time effects, copper content controls), Metallo, 2016-2019

[...]

- (80) Metallo's percentage purchasing margins for CSSR are on average (controlling for copper content and time effects) by [...] percent [...].
- (81) In addition, the following table shows a regression employing a more detailed split of the supplier regions.

Figure 11: Regression analysis, CSSR percentage purchase margin on supplier regions (time effects, copper content controls), Metallo, 2016-2019

[...]

- (82) The difference between percentage purchase margins earned on [...]. These figures cannot be interpreted causally, they need to be seen as descriptive.
- (83) The following table shows the subset of Metallo's scrap purchases in the market copper scrap no.2.

Figure 12: Regression analysis, copper scrap no.2 percentage purchase margin on non-EEA-suppliers (time effects, copper content controls), Metallo, 2016-2019

[...]

- (84) Metallo's percentage purchasing margins for no.2 are on average (controlling for copper content and time effects) by [...] percent [...].