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PUBLIC VERSION

In the published version of this decision, some information has been omitted pursuant to Article 17(2) of Council Regulation (EC) No 139/2004 concerning non-disclosure of business secrets and other confidential information. The omissions are shown thus […]. Where possible the information omitted has been replaced by ranges of figures or a general description.

To the notifying party

Subject: **Case M.8832 - Knauf/Armstrong**
Commission decision pursuant to Article 6(1)(b) in conjunction with Article 6(2) of Council Regulation No 139/2004[1] and Article 57 of the Agreement on the European Economic Area[2]

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 OJ L 1, 3.1.1994, p. 3 (the 'EEA Agreement').

Commission européenne, DG COMP MERGER REGISTRY, 1049 Bruxelles, BELGIQUE
Europese Commissie, DG COMP MERGER REGISTRY, 1049 Brussel, BELGIË

Tel: +32 229-91111. Fax: +32 229-64301. E-mail: COMP-MERGER-REGISTRY@ec.europa.eu.

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Dear Sir or Madam,

(1) On 17 October 2018, the European Commission received notification of a proposed concentration pursuant to Article 4 of the Merger Regulation by which Knauf International GmbH ('Knauf') would acquire within the meaning of Article 3(1)(b) of the Merger Regulation all of the shares in (i) the subsidiaries of Armstrong World Industries, Inc. in Europe, the Middle East and Africa ('EMEA'), and Asia Pacific ('APAC'), and (ii) certain subsidiaries of Armstrong World Industries' 50/50 joint venture with Worthington Industries ('WAVE JV') with operations in EMEA and APAC (together 'Armstrong', or the 'Target') (the 'Transaction').[3] Knauf and Armstrong are designated hereinafter as the 'Parties'. The Transaction was initially notified to the Commission on 20 June 2018 and subsequently withdrawn on 24 July 2018.

(2) The Transaction has been referred to the Commission by the Austrian Bundeswettbewerbsbehörde pursuant to Article 22(3) of the Merger Regulation (the 'Referral Request'). The Referral Request was subsequently joined by the national competition authorities of Germany, Lithuania, Spain, and the United Kingdom.

1. THE PARTIES

(3) Knauf is a manufacturer of insulation materials, dry-lining systems, plasters, and other products. Knauf has approximately 27 500 employees worldwide.

(4) Armstrong designs and manufactures commercial and residential ceiling, wall and suspension system solutions. Armstrong is the ceiling business of Armstrong World Industries, Inc. outside of the Americas and has over 3 800 employees.

2. THE OPERATION AND THE CONCENTRATION

(5) The Parties entered into a binding Share Purchase Agreement ('SPA') on 17 November 2017, amended and restated on 22 January 2018 and on 18 July 2018, which sets out Knauf's intention to acquire all of the shares in and, therefore, sole control of Armstrong.

(6) The Transaction therefore constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

3. EU DIMENSION

(7) The undertakings concerned have a combined aggregate worldwide turnover of ca. EUR […] (Knauf: EUR […]; Armstrong: EUR […]), but their turnover does not meet any of the other thresholds set out in Article 1 of the Merger Regulation. As a result, the Transaction does not have an EU dimension within the meaning of Article 1 of the Merger Regulation.

[3] Publication in the Official Journal of the European Union No C 384, 24.10.2018, p. 10.

(8) On 7 February 2018, the Commission received the Referral Request from the Austrian Bundeswettbewerbsbehörde on the basis of Article 22 of the Merger Regulation. As mentioned, the Referral Request was joined by the national competition authorities of Germany, Lithuania, Spain, and the United Kingdom within the legal deadline. On 15 March 2018, the Commission adopted five decisions pursuant to Article 22(3) of the Merger Regulation accepting the Referral Request.[4] On this basis, the Commission acquired jurisdiction to examine the Transaction with respect to the territories of Austria, Germany, Lithuania, Spain and the UK.

4. PROCEDURE

(9) Following the referral of the Transaction, the Commission required Knauf to submit a notification pursuant to Article 4 of the Merger Regulation. On 20 June 2018, the Commission received initial notification of the Transaction. Knauf subsequently withdrew the notification on 24 July 2018 and then re-submitted it on 17 October 2018.

(10) Following a limited number of initial phone calls with market participants before notification of the Transaction on 20 June 2018, the Commission initiated a market investigation after that date. The Commission contacted the Parties' customers, distributors and competitors requesting information pursuant to Article 11 of the Merger Regulation through electronic questionnaires, telephone calls and written requests for information. The Commission also collected sales and capacity data from the Parties' competitors. The Commission continued that market investigation after re-notification of the Transaction on 17 October 2018.

(11) In addition, the Commission also sent several written requests for information to the Parties and reviewed internal documents of the Parties submitted during the phase I investigation.

(12) Knauf submitted proposed remedies on 16 November 2018, formally revising them on 19 November 2018 and 23 November 2018. After the Commission gathered the views of market participants and informed Knauf of the outcome of its market test, Knauf submitted further revised commitments on 30 November 2018, and further amended those formally on 6 December 2018.

5. RELEVANT MARKETS

5.1. Introduction

(13) The Transaction concerns the building materials sector and in particular suspended ceilings. The Transaction gives rise to horizontally affected markets in the production and sale of modular and open suspended ceilings.

(14) The Transaction also gives rise to vertical links regarding certain raw materials for suspended ceilings (upstream) and suspended ceilings (downstream). According to the Parties, these vertical links, while technically giving rise to vertically affected

[4] C(2018) 1687 final, addressed to Austria; C(2018) 1684 final, addressed to Germany; C(2018) 1685 final, addressed to Lithuania; C(2018) 1686 final addressed to Spain; C(2018) 1688 final, addressed to the United Kingdom.

markets due to the Parties' combined market shares downstream, are very limited in scope and entirely ancillary to their ceilings business. These vertical links are further discussed in section 7 of this decision.

(15) Suspended ceilings are systems that are fixed to a framework or "grid", which is attached to the main structure of a building to create a void between the actual ceiling (the "soffit") and the suspended ceiling. This allows for technical equipment such as cables and air-conditioning equipment to be placed and concealed in between the two layers.

(16) There are three main types of suspended ceilings: fixed, modular and open. Modular and open suspended ceilings, are predominantly installed in non-residential buildings, such as offices, schools, retail facilities, healthcare facilities, and leisure facilities, whereas fixed suspended ceilings are common in both the residential and the non-residential segments. The main features of each type of suspended ceiling are described in Figure 1.

Figure 1 – Examples of fixed, modular and open suspended ceilings

FIXED 	Fixed ceilings are comprised of plasterboards or other types of large tiles attached to a grid system using some form of mechanical fixture (e.g. clips, screws or nails) or glue, with varying degrees of tile removability and grid visibility. Fixed suspended ceilings can provide access to the ceiling cavity by using either removable tiles (e.g. tiles fixed with screws) or via access hatches. Fixed ceilings are common in both residential and non-residential buildings.
MODULAR 	Modular ceilings are comprised of smaller tiles laid into a grid system from above and held up by the grid system without needing any permanent mechanical fixtures, therefore providing easy access to the technical equipment in the ceiling cavity by simply pushing up the tiles. These ceilings are almost exclusively installed in non-residential buildings.
OPEN 	Open ceilings consist of a suspension and tiles, where the soffit and any technical equipment are only partially concealed by panels that are suspended within a grid system. These panels may have many different forms and shapes, such as canopies, baffles and clouds.

Source: Form CO, paras. 52 - 53, 59, 71

(17) Whereas all grids for suspended ceilings are made of metal, the tiles used for open and modular suspended ceilings are available in a variety of materials, mainly metal, mineral fibre, gypsum, and wood.

(18) The end-customer, who is a building owner, typically does not decide which type of ceiling to install and which material to choose. Instead, that decision is taken by a number of intermediate market participants who play a more or less decisive role in the purchasing decision. For larger projects, where a tender is typically organised, an architect or a "specifier" will often identify the desired supplier and product by naming a suspended ceiling manufacturer or even a specific product of a given manufacturer. The contractor, the distributor and the installer may also play a role by advising to purchase ceilings equivalent to those specified. For smaller projects, standard products are usually purchased off–the-shelf from a distributor directly by the contractor or the installer.

5.2. Product market definition

(19) In previous decisions,[5] the Commission has considered a market for all ceiling solutions while leaving the precise product market definition open.

(20) From a customer's perspective, distinctions can be drawn in the broader ceilings market between (i) fixed, modular and open suspended ceilings, (ii) tiles and grids for modular suspended ceilings, and (iii) tiles for modular suspended ceilings made of different materials. These are discussed separately in sections 5.2.1 to 5.2.3.

5.2.1. Fixed, modular and open suspended ceilings

5.2.1.1. Parties' view

(21) The Parties are of the view that the relevant product market comprises at least modular suspended ceilings, including open suspended ceilings.[6] The Parties consider that open suspended ceilings are a type of modular suspended ceilings, that suppliers can easily switch production between open and modular suspended ceilings and that the two are highly substitutable in terms of end use for customers.

5.2.1.2. Commission's assessment

(22) The Commission finds that, for the reasons outlined in paragraphs (23) to (27), modular and open suspended ceilings do not belong to the same relevant product market as fixed suspended ceilings while it can be left open whether modular suspended ceilings and open suspended ceilings belong to the same product market.

(23) First, from a demand side perspective, the different types of ceilings have different technical characteristics, performance, and price points.[7] On average, and in terms of total costs of ownership, fixed suspended ceilings tend to be more expensive than modular suspended ceilings.[8] As an example, Knauf estimates the price per m^2 of a fixed suspended ceiling made of plasterboard[9] to be up to twice as high as the price per m^2 of a standard modular suspended ceiling made of mineral fibre,[10] which is the predominantly used material for modular suspended ceilings.[11] Furthermore, tiles for

5 In particular Case M.3943 – *Saint-Gobain/BPB*, recital 37 et seq.

6 Form CO, para. 75 et seq.

7 Replies to questions 4.1 and 6 of Questionnaire 1 – Competitors; Form CO, para. 70.

8 Form CO, footnote 11.

9 Plasterboard is the predominantly used material for fixed suspended ceilings, Form CO, para. 61.

10 Form CO, footnote 11.

11 Form CO, M.8832, RFI#1 Confidential Annex 53 (updated): In terms of volume, approx. 74% of all tiles for modular suspended ceilings (excluding open and fixed suspended ceilings) within the EEA

fixed suspended ceilings, which are large boards, are produced in different production facilities than tiles for modular suspended ceilings, they offer a lower degree of flexibility of access to the ceiling cavity and have good acoustic performance even without any treatment.[12] Moreover, if an open suspended ceiling in a given room were to have the same acoustical performance as a modular suspended ceiling, it would on average be more expensive by the factor of approx. 2-2.5.[13]

(24) Second, while there appear to be some overlaps in terms of the end use for the different types of ceilings; modular, fixed and open suspended ceilings are more complements than alternatives to one another.[14] Indeed, in the same construction project the different types of ceilings can be used to meet different needs (e.g. in a hospital, the areas where patients are treated may require specific hygienic qualities, whereas acoustic qualities may be more important for the entrance hall). In light of this, one distributor explained "*[t]hese ceilings do not feature on the same market and in general do not compete with each other*".[15] [Strategic considerations by Knauf in relation to open suspended ceilings].[16]

(25) Third, from a supply-side perspective, fixed suspended ceilings are produced through different processes than modular (or open) suspended ceilings. Moreover, the Parties submit that it may be possible to switch production from modular suspended ceilings to open suspended ceilings. However, it is also submitted that open suspended ceilings have higher manufacturing costs.[17]

(26) Fourth, Armstrong in its internal documents [strategic considerations by AWI in relation to open suspended ceilings].[18] In the same document, it is also stated that [strategic considerations by AWI in relation to open suspended ceilings].[19]

(27) Fifth, with respect to open suspended ceilings, it can be left open whether this type of ceiling constitutes a separate relevant product market from modular suspended ceilings for the following reasons. First, the open suspended ceilings segment is much smaller than that of modular suspended ceilings representing around [5-10]% of demand for modular suspended ceilings in the EEA.[20] Second, its market structure is similar to that of modular suspended ceilings.[21] Therefore, competition concerns arise irrespective of whether suspended modular ceilings and open suspended ceilings are assessed together or separately.

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in 2017 are made of mineral fibre. In terms of value, mineral fibre tiles account for approx. 55% of all materials.

12 Form CO, para. 61.

13 Parties' response to RFI 2.

14 Minutes of a conference call with a customer on 22 May 2018.

15 Minutes of a conference call with a customer on 22 May 2018.

16 Knauf internal document [strategic considerations by Knauf in relation to open suspended ceilings].

17 Form CO, para. 70.

18 Form CO, M.8832, Knauf Confidential Annex 5.4.26, 26.

19 Form CO, M.8832, Knauf Confidential Annex 5.4.26, 32.

20 Form CO, M.8832, RFI#1 Confidential Annex 53 (updated): The overall value of the market for suspended ceilings (including tiles and grids, but excluding fixed ceilings) in the EEA in 2017 was EUR […]. The value attributed to open suspended ceilings was EUR […], which corresponds to roughly [5-10]% of the overall value.

21 Form CO, paras. 52 et seq, para. 237.

(28) The Parties' activities do not overlap with respect to fixed ceilings except for *de minimis* overlap in grids used in fixed ceilings for which the Target holds an estimated share of less than [0-5]% in the UK, Spain, Lithuania and Austria and Germany.[22] Therefore, this overlap will not be further analysed in the present decision.

5.2.1.3. Conclusion

(29) The Commission therefore considers that for the purposes of the present decision, fixed suspended ceilings on the one hand and modular and open suspended ceilings on the other hand constitute separate relevant product markets.

(30) Further, for the purposes of the present decision, it is not necessary to conclude whether modular and open suspended ceilings fall into the same or separate relevant product markets, since the Transaction raises serious doubts under both of those plausible alternative market definitions.

5.2.2. Tiles and grids for modular suspended ceilings

5.2.2.1. Parties' view

(31) The Parties submit that within modular suspended ceilings, tiles and grids are part of the same relevant product market.[23] From a supply-side perspective, the Parties submit that increased demand for sales of tiles together with grids of the same supplier ("system sales") has led almost all major suppliers to develop grid and tile production capabilities. In addition, the Parties consider that from a demand-side perspective customers often source ceiling solutions comprising grids and tiles from one supplier.[24]

5.2.2.2. Commission's assessment

(32) The Commission finds that tiles and grids for modular suspended ceilings form two distinct product markets for the following reasons.

(33) First, as explained in paragraphs (15) to (17), tiles and grids perform very different functions and are inherently different products. The majority of competitors that responded to the market investigation indicated that in a significant number of cases tiles and grids for modular suspended ceilings are sourced from different suppliers. The Commission's market investigation also provided indications that the percentage of customers that seek separate quotes varies greatly depending on a particular supplier. For example, the response of a competitor indicated that in 70% to 80% of instances it supplies only grids or only tiles.[25] This is also corroborated by the Parties' own data. Table 1 below demonstrates that grids and tiles are often sold separately by the Parties themselves. Also, Table 1 shows that the share of system sales is very different for Knauf and Armstrong.

22 Form CO, para. 66.
23 Form CO, para. 75 et seq.
24 Form CO, paras. 77-91.
25 Replies to question 8.1.3 of Questionnaire 1 – Competitors.

Table 1 – Proportion of system sales for each Party in the territories under investigation

Country	Knauf	Armstrong
Austria	[…]%	[…]%
Germany	[…]%	[…]%
Lithuania	[…]%	[…]%
Spain	[…]%	[…]%
United Kingdom	[…]%	[…]%

Source: Form CO

(34) Second, while the main tiles suppliers also offer grids, not all suppliers of grids also offer tiles. Therefore, the competitive landscape for tiles and grids is different. Moreover, those suppliers that offer both tiles and grids always produce them on different production lines and often in different plants.[26] Knauf and Armstrong each have only one plant in the EEA that produces both tiles and grids.[27]

(35) Finally, the Parties' internal documents […].[28]

5.2.2.3. Conclusion

(36) The Commission therefore considers that for the purposes of the present decision, tiles and grids for modular suspended ceilings constitute two separate relevant product markets.

5.2.3. Tiles for modular suspended ceilings made of different materials

5.2.3.1. Parties' view

(37) Tiles for suspended modular ceilings can be made of mineral fibre, metal, gypsum, and wood. Mineral fibre tiles can be further potentially sub-segmented into wet-felt and soft-felt mineral tiles depending on their manufacturing method. The *wet-felt* method consists of mixing raw minerals with water, followed by heating to form a tile. The tile is then painted and cut into smaller pieces. The *soft-felt* method (sometimes also referred to as *dry-felt* method) by contrast simply compresses a high proportion of rock or glass wool and finishes with a painted laminated coating to form the tile.

(38) The Parties take the view that no segmentation is warranted for modular suspended ceilings on the basis of different tile materials. The Parties argue that tiles of different materials can be used across a range of end uses and that the tile material is not the main driver for customers' choice. The Parties moreover submit that similar

26 Form CO, para. 88.

27 For Knauf this refers to one plant out of eight, and for Armstrong this refers to one plant out of seven.

28 Form CO, M.8832, Knauf Confidential Annex 5.4.26., p.11 (for Armstrong)
Form CO, M.8832, Knauf Confidential Annex 5.4.13, p.14 (for Knauf).
See also Form CO, M.8832, RFI#1 AWI Confidential Annex 8.5, p.10, and Knauf internal documents "Annual Report 31 December 2017" (*"Jahresbericht Dezember 2017"),* pages 9 et seq., and "Planning discussion 2016 Knauf AMF with Mr Alexander Knauf" ("*Planungsgespräch 2016 Knauf AMF mit Hrn. Alexander Knauf")*, page 4.

characteristics can be achieved with different materials and that price differences do not justify the conclusion that tiles made of different materials belong to separate product markets.[29]

5.2.3.2. Commission's assessment

(39) The results of the Commission's market investigation demonstrate that tiles made from different materials belong to different product markets, in particular that mineral fibre tiles, where the overlaps between the Parties' activities are most significant, constitute a separate relevant product market for the reasons set out in paragraphs (40) to (43).

(40) First, there are differences between the materials in terms of technical characteristics (such as acoustic quality, hygiene-related qualities and fire resistance), look and design. While technical characteristics can overlap among tiles made of different materials, as claimed by the Parties, the intrinsic qualities of each material make it more or less suited for specific applications. A majority of customers and competitors that participated in the market investigation indicated that the different materials are not perfect substitutes to one another.[30] As one competitor explained "*the performance of different materials are different. For plasterboard it is mainly focused on sound insulation, the price is cheap. For mineral fiber tile it is mainly focused on sound absorption e.g. acoustical performance*".[31] Another competitor summarised as follows the differences among tiles made of different materials "*Mineral fibra: good absortion. bad higiene, medium Price. short live Metal: good absortion, good higiene, Medium Price, long live, easy to shape Wood: good absortins, needs treatments to be hygienic, high Price, for small surfaces*".[32]

(41) Second, there are considerable price differences between tiles made from different materials, in particular for the two largest material segments, *i.e.* mineral and metal, with some market participants indicating that metal tiles can be (significantly) more expensive than mineral fibre tiles.[33] Moreover, the majority of competitors that participated in the market investigation indicated that in case of 5-10% price increase of modular ceiling tiles made from mineral fibre their customers would not change their purchasing preferences or would change them only partly.[34] A majority of customers that participated in the market investigation confirmed the views expressed by competitors.[35] Customers' preference for mineral fibre tiles appears to be mainly driven by the fact that "*acoustical performance of mineral fiber is much*

29 Form CO, paras. 92-115.

30 Replies to question 12 of Questionnaire 1 – Competitors, replies to question 14 of Questionnaire 2 – Customers (Germany and Austria), replies to question 14 of Questionnaire 3 – Customers (Baltics), replies to question 14 of Questionnaire 4 – Customers (Spain), replies to question 14 of Questionnaire 5 – Customers (UK) and replies to question 14 of Questionnaire 6 – Customers other (EEA countries).

31 Replies to question 12.1 of Questionnaire 1 – Competitors.

32 Replies to question 12.1 of Questionnaire 1 – Competitors.

33 Minutes of a conference call with a customer on 28 June 2018;
Minutes of a conference call with a competitor on 18 May 2018.

34 Replies to question 14 of Questionnaire 1 – Competitors.

35 Replies to question 16 of Questionnaire 2 – Customers (Germany and Austria), replies to question 16 of Questionnaire 3 – Customers (Baltics), replies to question 16 of Questionnaire 4 – Customers (Spain), replies to question 16 of Questionnaire 5 – Customers (UK) and replies to question 16 of Questionnaire 6 – Customers other (EEA countries).

better than other materials" and "*[b]ecause mineral fibre tiles are less expensive than the other materials*".[36]

(42) Third, the Parties in their internal documents [information on how Knauf tracks the market].[37] For instance, when reporting on market developments for its ceiling division, [information on how Knauf tracks the market].[38]

(43) Finally, the Commission's investigation showed that mineral fibre tiles produced with the wet-felt and the soft-felt (also referred to as dry-felt) production methods compete with one another but that the products are differentiated and that wet-felt mineral fibre tiles may compete more closely with one another than with soft-felt mineral fibre tiles.[39] As one competitor explained "*[t]he dry-felt ceiling tile is closest to the wet-felt ceiling tile, although they are still used for rather different purposes*".[40] The differences between the products and lack of perfect demand-side substitutability is also reflected in [strategic considerations by Knauf relating to wet-felt and soft-felt mineral fibre tiles].[41] Moreover, Knauf discusses the differences between mineral fibre tiles produced by the wet-felt method and the soft-felt method in its internal documents and also points out [strategic considerations by Knauf relating to wet-felt and soft-felt mineral fibre tiles].[42] These aspects of closeness of competition will be taken into account in the competitive assessment.

5.2.3.3. Conclusion

(44) The Commission therefore considers that for the purposes of the present decision, tiles for modular suspended ceilings made of different materials constitute separate relevant product markets. There are thus separate product markets for (i) tiles for modular suspended ceilings made of mineral fibre (assessed in sections 6.3 and 6.5), (ii) tiles for modular suspended ceilings made of gypsum (assessed in section 6.6), tiles for modular suspended ceilings made of metal (assessed in section 6.6) and tiles for modular suspended ceilings made of wood (assessed in section 6.6). Within the product market of tiles for modular suspended ceilings made of mineral fibre, the differences between soft-felt and wet-felt mineral fibre tiles, albeit not forming a separate product market, will be taken into account in assessing the closeness of competition between the products of the different mineral fibre competitors.

5.3. Geographic market definition

5.3.1. Parties' view

(45) The Parties consider that the markets for suspended ceiling tiles and grids are national in scope with the exception of two clusters of countries, which they claim

36 Replies to question 14.1 of Questionnaire 1 – Competitors.

37 Form CO, M.8832, Knauf Confidential Annex 5.4.26, p.12 (for Armstrong);
Form CO, M.8832, Knauf Confidential Annex 5.4.16, p.1, (for Knauf).

38 Knauf internal document [strategic considerations by Knauf relating to Central and Eastern Europe].

39 Replies to question 21 of Questionnaire 1 – Competitors.

40 Minutes of a conference call with a competitor on18 May 2018.

41 Knauf internal document "Business Report 30 Juni 2014" (*"Geschäftsbericht 30. Juni 2014")*, page 24.

42 Form CO, M.8832, Knauf Confidential Annex 5.4.19, p.16.
Form CO, M.8832, Knauf Confidential Annex 5.4.9, p.30.

constitute two regional markets comprising of (i) Austria and Germany, and (ii) Lithuania, Latvia and Estonia.[43]

5.3.2. The Commission's assessment for suspended ceiling tiles

(46) The Commission's market investigation and other evidence available to it suggests that the geographic market for tiles for modular suspended ceilings, and of mineral fibre tiles in particular which is the main tile market assessed in the present decision, is limited to each of the EEA countries for which the Commission has jurisdiction (Austria, Germany, Lithuania, Spain and the UK) for the reasons set out in paragraphs (47) to (76).

(47) As regards supply-side considerations, the supply of tiles in the EEA is characterised by the producers having a limited number of production plants in the EEA, from which they serve their customers in the EEA. For instance, Knauf produces its mineral fibre tiles for the EEA in [Knauf's mineral fibre production plants in the EEA]. Armstrong has [AWI's mineral fibre production plants in the EEA]. The Parties' competitors have a similarly centralized production in few EEA locations. Therefore, there may be a degree of supply-side substitution within the EEA, which, however, is limited by barriers to expand the sale of tiles in the different EEA markets due to the significant differences in market structure from the demand side. Those differences from a demand-side perspective result in heterogeneous conditions of competition in each of the EEA countries under review, which can be distinguished from neighbouring EEA countries because the conditions of competition are appreciably different as, set out in paragraphs (48) to (53).

(48) First, the demand structure is fragmented and national with a large number of customers active in each of the EEA countries that are generally not active in more than one or at most a few EEA countries.

(49) Second, the average prices for tiles are generally different in different Member States. For example, the Parties indicate that the average price for mineral fibre tiles is EUR/m^2 […] in Austria, EUR/m^2 […] in Germany, EUR/m^2 […] in Lithuania, EUR/m^2 […] in Spain and EUR/m^2 […] in the UK.[44] The Commission's market reconstruction indicates that the Parties appear to have underestimated those price differences and that they are actually larger.[45] Therefore, significant price differences can be observed between the five EEA countries under consideration. Those different prices may be caused by different prices charged for similar products depending on the country in question or by different product mixes sold in the different countries. Both suggest that diverging competitive conditions exist between the analysed EEA countries.

43 Form CO, paras. 122-129.

44 Form CO, M.8832, RFI#2 Confidential Annex 23.1.

45 The Commission carried out a market reconstruction in order to verify the figures provided by the Notifying Party for the EEA countries for which the Commission has jurisdiction. In addition to capacity data, the Commission's market reconstruction collected sales data in volume and value from the Parties and their largest mineral fibre tile competitors, allowing the Commission to calculate average sales prices per competitor and per EEA country.

(50) Third, a local presence and local reputation are important for a suspended ceilings supplier to win sales in a given EEA country.[46] The reason is that different, and very often local, market participants decide about the manufacturer of suspended ceilings to be installed in a building project, mainly architects, contractors, distributors and the installers.[47] One market participant explained its strong market position in one EEA country by its well-functioning sales team that sufficiently covers all regions of this country. For another EEA country where this market participant is less strong and employs only one sales representative, this market participant explained that his sales representative "*cannot address all relevant players in the same manner as his/her colleagues*".[48]

(51) Fourth, brands play a role in the sale of tiles and grids for suspended ceilings and customers have different preferences for different brands across EEA countries. This is reflected in internal documents of Knauf, [strategic considerations by Knauf relating to the Armstrong brand].[49,50] Another example of brand importance is provided by one market participant from Lithuania, who explained that in Lithuania, the brand "Armstrong" is used as the generic name for suspended ceilings, albeit other suppliers are present in the market.[51]

(52) Fifth, [information on how the Parties track the market, in particular strategic considerations by Knauf on the markets in Germany and the UK].[52,53]

(53) Sixth, customers, who expressed their opinion in the course of the Commission's market investigation, would switch to alternative suppliers outside of their country only when the prices for mineral fibre tiles increase significantly.[54]

(54) Seventh, the significant differences between the market shares of the Parties and their competitors in the different EEA countries confirm the findings in paragraphs (48) to (53). The business success of the same suppliers of mineral fibre tiles for modular suspended ceilings differ considerably across EEA countries,

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46 Replies to question 27 of Questionnaire 1 – Competitors, according to which the vast majority of the respondents (12 out of 14) consider an established presence and reputation in the customers' country as "very important" or "important". The customers provide a similar picture, where 25 out of 37 respondents consider a local representative as important for a supplier to be considered reliable, combined replies to question 27 of Questionnaires 2, 3, 4 and 5 – Customers (GER/AT, LT, ES, UK). In addition, the majority of customers considered an "established presence and reputation in [their] country" as "important" or "very important" (replies to question 28 of Questionnaires 2, 3, 4 and 5 – Customers (GER/AT, LT, ES, UK): 11 out of 18 in GER/AT, 4 out of 5 in Lithuania, 6 out of 7 in Spain and 7 out of 7 in the UK.

47 See section 5.1.

48 Minutes of a conference call with a competitor on 6 July 2018.

49 For example in Form CO, M.8832, Knauf Confidential Annex 5.4.19, page 37.

50 For example Form CO, M.8832, Knauf Confidential Annex 5.4.27, page 23.

51 Minutes of a conference call with a customer on 24 May 2018.

52 For example: Form CO, M.8832, Knauf Confidential Annex 5.4.7, p.11 (for Armstrong), Form CO, M.8832, Knauf Confidential Annex 5.4.12, p.27 (for Knauf).

53 Form CO, M.8832, Knauf Confidential Annex 5.4.18, p. 6: convenience translation from German: [strategic considerations by Knauf on the German market] and [strategic considerations by Knauf on the UK market].

54 For Germany and Austria, one respondent indicated 20-30% (Replies to question 32 of Questionnaire 2 – Customers (Germany and Austria)); for Lithuania, four respondnets indicated on average 12.5% (Replies to question 33 of Questionnaire 3 – Customers (Lithuania)); for Spain two respondents indicated on average more than 10% (Replies to question 32, of Questionnaire 4 – Customers (Spain)); and for the UK, three respondents indicated on average 25% (Replies to question 32, of Questionnaire 5 – Customers (UK)).

indicating diverging competitive conditions: According to the Parties' estimates, Knauf's value-based market share in mineral fibre tiles in Austria is [60-70]%, in Spain [40-50]%, in Lithuania [30-40]%, in Germany [20-30]%, and in the UK [5-10]%. Armstrong's value-based market share in mineral fibre tiles in the UK is [40-50]%, in Spain [30-40]%, in Lithuania [20-30]%, in Austria [10-20]%, and in Germany [5-10]%. Such significant differences in market position between EEA countries persisted during the three year time period 2015-2017.

(55) Nevertheless, the Commission will also take into account certain EEA-wide considerations linked to the supply side of the markets, such as production capacities and production output at the EEA level in particular. As explained further in paragraphs (107) to (108), the capacity utilization of the few EEA production plants influences the profitability of the businesses and therefore has a direct influence on the competitive behaviour and aggressiveness of the individual suppliers. Those EEA-wide considerations will therefore be taken into account in the competitive assessment.

(56) The following sections 5.3.2.1 and 5.3.2.2 will address the Parties' arguments specifically with respect to Austria and Germany on the one hand and with respect to the Baltic countries on the other hand.

5.3.2.1. Austria and Germany constitute two distinct geographic markets

(57) The Commission considers that Austria and Germany constitute two distinct relevant geographic markets.

(58) The Commission notes that the supply of mineral fibre tiles in Austria and Germany is characterised by supply from few production facilities across the EEA.[55] In contrast, as the Commission established in paragraph (47) et seq., any supply-side substitution within the EEA is, however, limited by barriers to expand the sale of tiles in the different EEA markets due to the significant differences in market structure from the demand side, which result in heterogeneous conditions of competition. This reasoning applies equally to Austria and Germany for the reasons set out in paragraphs (59) to (65).

(59) First, there are no specific trade flows between Germany and Austria that would set the trade between those two countries apart from the trade flows of mineral fibre tiles between other EEA countries. The Parties' manufacturing network is not organized on the basis of an Austria-Germany region. The Parties operate a number of plants across the EEA and each of these plants typically supplies its products to a large number of countries inside and sometimes even outside of the EEA. The analysis of the suspended ceilings trade flows from the Parties' plants to Austria and Germany does not suggest that the Parties' plants are focused specifically on producing for an Austria-Germany region. For example, Knauf's plant in Grafenau/Germany delivers [Knauf deliveries from its Grafenau plant].[56] Armstrong's plant in Münster/Germany delivers [AWI deliveries from its Münster

55 See also paragraph (46).

56 Form CO, M.8832, Knauf Confidential Annex 8.12 (a).

plant].[57] Furthermore, neither Austria nor Germany can be singled out in this respect if compared to the other EEA countries.[58]

(60) Second, there are differences in the average prices charged in Austria and Germany as set out in paragraph (49), indicating either diverging price levels or diverging product mixes sold, both illustrating diverging competitive conditions.

(61) Third, while there are some customers that purchase suspended ceilings from the Parties both in Germany and in Austria, the market investigation also indicated that there are a considerable number of customers that operate only in either Austria or Germany. One market participant stated that it is "*a regional distributor in [country] with a catchment area of 100 kilometres.*"[59] Another market participant stated, "*[Company] is active only on [country] market and its competitors are also all based in [same country]*."[60]

(62) Fourth, the existence of separate relevant geographic markets for Austria and Germany is supported by the Parties' own assessment of those markets as reflected in internal documents submitted by the Parties. [Information on how the Parties track the market in Germany and Austria].[61] [Information on how the Parties track the market in Germany and Austria].

(63) Fifth, the replies received from customers and competitors during the Commission's market investigation support the view that the geographic markets are separate for Germany and Austria. A large number of respondents considered Germany and Austria to be separate markets.[62] Respondents to the market investigation stated, for instance, that *"The market is specific to each country with often price / marketing / distribution deals and legislation creating barriers for cross border trade*"[63] Other market participants explained that *"[i]n Austria there is a different business culture, partners like [to] know each other"*[64], or "*that the markets are national or local. Even though the products are largely the same, the volumes are different, the building materials trade is partially organized in a different way and the way to market is the main reason for this view").*[65] A customer took the stance that *"[t]he*

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57 Form CO, M.8832, AWI Confidential Annex 8.12 (b).

58 Form CO, M.8832, RFI#2 AWI Confidential Annex 43.1 (corrected);
Form CO,M.8832, RFI#2 Knauf Confidential Annex 43.2.

59 Convenience translation from an email of a market participant dated 23 May 2018 ("*als regionaler Händler in [Land] mit einem Einzugsbereich von 100 km* ").

60 Minutes of a conference call with a customer on 13 June 2018, convenience translation from German ("[UNTRNEHMEN] ist nur auf dem [LAND] Markt tätig, (…) Konkurrenten kommen ebenfalls aus [LAND].").

61 For example: [information on how the Parties track the market in Germany and Austria] for Knauf in Form CO, M.8832, Knauf Confidential Annex 5.4.18, p.7.
For Armstrong in Form CO, M.8832, RFI#1 AWI Confidential Annex 66.1, p.11. Furthermore, in Form CO, M.8832, Knauf Confidential Annex 5.4.15, [information on how Knauf tracks the market in Germany and Austria]. In Knauf's internal document [information on how Knauf tracks the market in Germany and Austria].

62 Replies to question 29 of Questionnaire 1 – Competitors; Replies to question 30 of Questionnaire 2 – Customers (Germany and Austria).

63 Replies to question 24of Questionnaire 1 – Competitors.

64 Replies to question 33 of Questionnaire 1 – Competitors.

65 Minutes of a conference call with a customer on 25 May 2018, convenience translation from German: *"[…] ist der Ansicht, dass die Märkte national bis lokal sind. Auch wenn die Produkte weitestgehend gleich sind, sind die Volumina unterschiedlich, der Baustoffhandel ist teilweise anders organisiert und der Marktzugang ist hier der Hauptgrund für diese Sichtweise."*

main difference is in the structure and the functioning of the markets, in particular the accessibility to the building industry and the wholesale market. The market and the pricing structure are very different in Germany and Austria. Therefore, there are two different departments of [company] responsible for these two countries").[66]

(64) Sixth, a local presence in either Austria or Germany is very important to market participants. The vast majority of respondents considered an established presence and reputation in Austria or Germany as "very important" or "important".[67] Market participants explained, *"[w]hile it is possible for us to sell in Austria or Germany without a local presence, we view that option as very limited. Among other things, we have limited brand recognition, lack of distribution relationships, lack of understanding of local regulations, and limited resources such as sales people in these countries."*[68] or summarized their view as follows: *"Without local marketing there will be no sales"*.[69]

(65) Seventh, the significant differences between the market shares of the Parties and their competitors in Austria and Germany confirm the findings in paragraphs (58) to (64). Those differences are most significant for mineral fibre tiles. Table 2 and Table 4 demonstrate that the business success and market position of the five largest competitors in mineral fibre tiles differ considerably in Austria and Germany. This difference is particularly pronounced for Knauf and OWA and to some degree also for Rockfon. Those differences also persist over time when analysing the 2015-2017 period and have been largely confirmed by the Commission's market reconstruction.

Table 2 – Modular mineral fibre tiles <u>in Austria</u> (excluding open and fixed suspended ceilings)[70]

	Value		Volume	
Competitor	**2017 Turnover (in 000 EUR)**	**2017 share (in %)**	**2017 Volume (in '000 m2/lm)**	**2017 Share (in %)**
Knauf	[…]	[60-70]%	[…]	[60-70]%
Target	[…]	[10-20]%	[…]	[10-20]%
Combined	**[…]**	**[70-80]%**	**[…]**	**[70-80]%**
Rockfon	[…]	[10-20]%	[…]	[10-20]%
OWA	[…]	[5-10]%	[…]	[5-10]%
Saint Gobain	[…]	[5-10]%	[…]	[5-10]%

Source: Parties' estimates, Form CO

66 Minutes of a conference call with a customer on 25 May 2018, convenience translation from German *"Der wesentliche Unterschied besteht in der Struktur und der Funktionsweise der Märkte, insbesondere im Zugang zur Bauindustrie und zum Großhandel. Der Markt und die Preisstruktur sind in diesen Ländern (DE /AUT) sehr unterschiedlich. Daher sind unterschiedliche Abteilungen von [NAME OF THE RESPONDENT] für die jeweiligen Länder zuständig."*

67 Replies to question 27 of Questionnaire 1 – Competitors;
Replies to question 27 of Questionnaire 2 – Customers (Germany and Austria).

68 Reply to question 33.1 of Questionnaire 1 – Competitors.

69 Reply to question 33 of Questionnaire 2 – Customers (Germany and Austria), convenience translation from German: "*Ohne Vermarktung vor Ort, wird nichts verkauft*".

70 The market shares indicated in table 2 are based on the Parties' submission in Form CO, M.8832, RFI#1 Confidential Annex 53 (updated).

Table 3 – Modular mineral fibre tiles in Germany (excluding open and fixed suspended ceilings)[71]

	Value		Volume	
Competitor	**2017 Turnover (in 000 EUR)**	**2017 share (in %)**	**2017 Volume (in '000 m2/lm)**	**2017 Share (in %)**
Knauf	[…]	[20-30]%	[…]	[10-20]%
Target	[…]	[5-10]%	[…]	[5-10]%
Combined	**[…]**	**[20-30]%**	**[…]**	**[20-30]%**
OWA	[…]	[40-50]%	[…]	[30-40]%
Rockfon	[…]	[20-30]%	[…]	[20-30]%
Saint Gobain	[…]	[5-10]%	[…]	[5-10]%

Source: Parties' estimates, Form CO

5.3.2.2. Lithuania, Latvia and Estonia each constitute a separate geographic market

(66) The Commission considers that Lithuania, Latvia and Estonia constitute three distinct relevant geographic markets.

(67) The Commission notes that the supply of mineral fibre tiles in Lithuania, Latvia and Estonia is characterised by supply from few production facilities across the EEA.[72] In contrast, as the Commission established in paragraph (47) et seq., any supply-side substitution within the EEA is, however, limited by barriers to expand the sale of tiles in the different EEA markets due to the significant differences in market structure from the demand side, which result in heterogeneous conditions of competition. This reasoning applies equally to Lithuania, Latvia and Estonia for the reasons set out in paragraphs (68) to (76).

(68) First, there are no specific trade flows between the Baltic countries that would set the trade between those countries apart from the trade flows of mineral fibre tiles and grids between other EEA countries. The Parties' manufacturing network and trade flows are organised in a similar way across Europe and the Baltic Member States alone or as a region do not stand out as compared to other countries in the EEA. The Parties operate a number of plants across the EEA and each of these plants typically supplies its products to a large number of countries inside and sometimes also outside of the EEA.[73]

(69) Second, there are differences in the average prices charged in Estonia on the one hand and Lithuania and Latvia on the other hand, indicating either diverging price levels or diverging product mixes sold, both illustrating diverging competitive condition.[74]

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71 The market shares indicated in tables 2 and 3 are based on the Parties' submission in Form CO, M.8832, RFI#1 Confidential Annex 53 (updated).

72 See also paragraph (46).

73 For Knauf: Form CO, M.8832, Knauf Confidential Annex 8.12 (a): [Knauf deliveries from its Ferndorf plant].
For Armstrong: Form CO, M.8832, AWI Confidential Annex 8.12 (b): [AWI deliveries from its Münster plant].

74 Commission market reconstruction: Average price for mineral fibre in Estonia: EUR 7.27, in Lithuania: EUR 3.63 and in Latvia: EUR 3.54.

(70) Third, the customer base differs significantly between the Baltic countries, as the largest customers are not identical across the Baltic countries.

(71) Fourth, the existence of separate relevant geographic markets for each of the Baltic countries is supported by the Parties' own assessment of those markets as reflected in internal documents submitted by the Parties. [Information on how the Parties track the market in the Baltics].[75,76]

(72) Fifth, the replies received from customers and competitors during the Commission's market investigation support the view that the geographic markets are separate for each of the Baltic states. The majority of responses to the Commission's market investigation, which took a position, indicate that markets are national in scope.[77]

(73) Sixth, the Parties' own distribution networks and customer purchasing patterns (including the requirement to have a local presence) point to each of the Baltic Member States constituting separate national markets. The majority of respondents to the market investigation indicated that sales representatives are required in order to compete efficiently.[78] The importance of local sales representatives is underscored by the fact that they have to know local architects well in order to propose their ceilings in an early stage of a construction project. Also, it appears that language acts as a barrier to purchase abroad.[79] That is also supported by the fact that product catalogues are translated into each language.[80] Customers also explained "*suspended modular ceilings is a technically difficult product, therefore, a consultation, training, project calculation are necessary to participate in this market. Without local sales reps that would be very difficult*."[81]

(74) Seventh, competition takes place at the national level. Distributors indicated that cross-border sales and purchases may occur in isolated cases but are not standard business practice.[82]

(75) Eighth, a well-established presence, i.e. "good reputation", was considered as important.[83] In Lithuania, "good reputation" typically means that a distributor can help to find a solution for specific spaces in a building, has not failed to deliver on time and has proven financial track record.[84]

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75 For example, Form CO, M.8832, Knauf Confidential Annexes 5.4.32, 5.4.34, 5.4.35 and 5.4.36. In Knauf's internal document [information on how the Parties track the market in the Baltics].

76 For example, Form CO, M.8832, Knauf Confidential Annexes 5.4.15 or 5.4.26.

77 Replies to question 30 of Questionnaire 3 Customers (Baltics).

78 Replies to question 28 of Questionnaire 3 Customers (Baltics);
Minutes of a conference call with a distributor on 24 May 2018;
Minutes of a conference call with a customer on 28 June;
Minutes of a conference call with a distributor on 9 July 2018;
Minutes of a conference call with a customer on 9 July 2018.

79 Minutes of a conference call with a distributor on 9 July 2018.

80 Replies to question 37.1 of Questionnaire 3 Customers (Baltics).

81 Replies to question 27.1 of Questionnaire 3 Customers (Baltics).

82 Minutes of a conference call with a distributor on 24 May 2018;
Minutes of a conference call with a distributor on 9 July 2018.

83 Replies to question 28.1 of Questionnaire 3 Customers (Baltics); Non-confidential minutes of a conference call with a distributor on 24 May 2018.

84 Non-confidential minutes of a conference call with a distributor on 9 July 2018.

(76) Ninth, the significant differences in the market shares of the Parties and their competitors between the Baltic countries confirm the findings in paragraphs (68) to (75). Those differences are most significant for mineral fibre tiles. Table 4, Table 5 and Table 6 show that the business success and market position of the five largest competitors in mineral fibre tiles differ considerably between the Baltic countries. For instance, [information on the Parties' competitors' strength in the Baltic countries]. Also, [information on the Parties' competitors' strength in the Baltic countries]. These differences also persist over time when analysing the 2015-2017 period and have been confirmed by the Commission's market reconstruction.[85]

Table 4 – Modular mineral fibre tiles <u>in Lithuania</u> (excluding open and fixed suspended ceilings)

	Value		Volume	
Competitor	**2017 Turnover (in 000 EUR)**	**2017 share (in %)**	**2017 Volume (in '000 m2/lm)**	**2017 Share (in %)**
Knauf	[…]	[30-40]%	[…]	[40-50]%
Armstrong	[…]	[20-30]%	[…]	[20-30]%
Combined	**[…]**	**[60-70]%**	**[…]**	**[70-80]%**
Saint Gobain	[…]	[30-40]%	[…]	[10-20]%
Rockfon	[…]	[5-10]%	[…]	[0-5]%
OWA	[…]	[0-5]%	[…]	[0-5]%
Others	0	0%	0	0%

Source: Parties' estimates, Form CO

Table 5 – Modular mineral fibre tiles <u>in Estonia</u> (excluding open and fixed suspended ceilings)

	Value		Volume	
Competitor	**2017 Turnover (in 000 EUR)**	**2017 share (in %)**	**2017 Volume (in '000 m2/lm)**	**2017 Share (in %)**
Knauf	[…]	[10-20]%	[…]	[10-20]%
Armstrong	[…]	[5-10]%	[…]	[10-20]%
Combined	**[…]**	**[10-20]%**	**[…]**	**[20-30]%**
Saint Gobain	[…]	[40-50]%	[…]	[40-50]%
Rockfon	[…]	[10-20]%	[…]	[10-20]%
OWA	[…]	[5-10]%	[…]	[10-20]%

Source: Parties' estimates, Form CO

85 The Commission market reconstruction confirms the market strengths of the Parties and their competitors in the Baltic countries and largely also the market shares, with deviations from time to time.

Table 6 – Modular mineral fibre tiles in Latvia (excluding open and fixed suspended ceilings)

	Value		Volume	
Competitor	**2017 Turnover (in 000 EUR)**	**2017 share (in %)**	**2017 Volume (in '000 m2/lm)**	**2017 Share (in %)**
Knauf	[…]	[30-40]%	[…]	[40-50]%
Armstrong	[…]	[5-10]%	[…]	[5-10]%
Combined	**[…]**	**[40-50]%**	**[…]**	**[50-60]%**
Saint Gobain	[…]	[20-30]%	[…]	[20-30]%
Rockfon	[…]	[10-20]%	[…]	[10-20]%
OWA	[…]	[10-20]%	[…]	[10-20]%

Source: Parties' estimates, Form CO

5.3.3. The Commission's assessment for grids for suspended ceilings

(77) The Commission's market investigation and other evidence available to it suggests that the geographic market for grids for modular suspended ceilings is limited to each of the EEA countries for which the Commission has jurisdiction (Austria, Germany, Lithuania, Spain and the UK) for the reasons set out in paragraphs (78) to (94).

(78) As regards supply-side considerations, the supply of grids in the EEA is characterised by the producers having a limited number of production plants in the EEA, from which they serve their customers in the EEA. For instance, Knauf produces its grids for the EEA in […] plants.[86] Armstrong has […] plants producing grids in the EEA.[87] The Parties' competitors have a similarly centralized production in few EEA locations. Therefore, there may be a degree of supply-side substitution within the EEA, which, however, is limited by barriers to expand the sale of grids in the different EEA markets due to the significant differences in market structure from the demand side. Those differences from a demand-side perspective result in heterogeneous conditions of competition in each of the EEA countries under review, which can be distinguished from neighbouring EEA countries because the conditions of competition are appreciably different as, set out in paragraphs (80) to (82).

(79) First, the demand structure is fragmented and national with a large number of customers active in each of the EEA countries that are generally not active in more than one or at most a few EEA countries.

(80) Second, the average prices for grids are generally different in different Member States: EUR/lm […] in Austria, EUR/lm […] in Germany, EUR/lm […] in Lithuania, EUR/lm […] in Spain and EUR/lm […] in the UK).[88] Therefore, significant price differences can be observed between the five EEA countries under consideration. Those different prices may be caused by different prices charged for similar products depending on the country in question or by different product mixes sold in the different countries. Both suggest that diverging competitive conditions exist between the analysed EEA countries.

86 Form CO, para. 89: [Knauf grid plants in the EEA].

87 Form CO, para. 89: [AWI grid plants in the EEA].

88 Form CO, M.8832, RFI#2 Confidential Annex 23.1.

(81) Third, several arguments, which apply for mineral fibre tiles are valid also for grids:

(a) A local presence and local reputation are important for a grid supplier to win sales in a given EEA country.[89]

(b) Brands play a role in the sale of grids for suspended ceilings and customers have different preferences for different brands across EEA countries.[90]

(c) [Information on how the Parties track the market in relation to grids].[91]

(d) Customers would switch to suppliers outside of their country only when the prices for grids would increase significantly.[92]

(82) Fourth, the significant differences between the market shares of the Parties and their competitors in the different EEA countries confirm the findings in paragraphs (79) to (81). The business success of the same suppliers of grids for modular suspended ceilings differ considerably across EEA countries, indicating diverging competitive conditions: According to the Parties' estimates, Knauf's value-based market share in grids for modular suspended ceilings in Austria is [50-60]%, in Germany [20-30]%, in Spain [10-20]%, in the UK [10-20]% and in Lithuania [0-5]%. Armstrong's value-based market share in grids for modular suspended ceilings in Lithuania is [50-60]%, in the UK [40-50]%, in Spain [30-40]%, in Austria [10-20]% and in Germany [5-10]%.[93]

(83) Nevertheless, the Commission will also take into account EEA-wide considerations linked to the supply side of the markets, such as production capacities and production output at the EEA level. As explained further in paragraphs (120) to (122), the capacity utilization of the few EEA production plants influences the profitability of the businesses and therefore has a direct influence on the competitive behaviour and aggressiveness of the individual suppliers. Those EEA-wide considerations will therefore be taken into account in the competitive assessment.

(84) The following sections 5.3.3.1 and 5.3.3.2 will address the Parties' arguments specifically with respect to Austria and Germany on the one hand and with respect to the Baltic countries on the other hand.

5.3.3.1. Austria and Germany constitute two distinct geographic markets for grids

(85) The Commission considers that Austria and Germany constitute two distinct relevant geographic markets.

(86) The Commission notes that the supply of grids in Austria and Germany is characterised by supply from few production facilities across the EEA. In contrast, as the Commission established in paragraph (78) et seq., any supply-side substitution within the EEA is, however, limited by barriers to expand the sale of grids in the different EEA markets due to the significant differences in market structure from the demand side, which result in heterogeneous conditions of competition. This

89 See paragraph (50) The sales representatives of one suppler sell both tiles and grids.
90 See paragraph (51).
91 See paragraph (52).
92 See paragraph (53).
93 Form CO, M.8832, RFI#2 Confidential Annex 23.1.

reasoning applies equally to Austria and Germany for the reasons set out in paragraphs (87) to (89).

(87) First, there are no specific trade flows between Germany and Austria that would set the trade between those two countries apart from the trade flows of grids between other EEA countries. The Parties' manufacturing network is not organized on the basis of an Austria-Germany region. The Parties operate a number of plants across the EEA and each of these plants typically supplies its products to a large number of countries inside and sometimes even outside of the EEA. The analysis of the suspended ceilings trade flows from the Parties' plants to Austria and Germany does not suggest that the Parties' plants are focused specifically on producing for an Austria-Germany region. For example, [Knauf deliveries from its Viersen plant].[94] [AWI deliveries from its Valenciennes plant].[95] Furthermore, neither Austria nor Germany can be singled out in this respect if compared to the other EEA countries.[96]

(88) Second, further arguments that apply for mineral fibre tiles apply also to grids:

(a) The market investigation indicated that there are a considerable number of customers that operate only in either Austria or Germany.[97]

(b) The existence of separate relevant geographic markets for Austria and Germany is supported by the Parties' own assessment of those markets as reflected in internal documents submitted by the Parties.[98]

(c) Customers and competitors replies during the Commission's market investigation support the view that the geographic markets are separate for Germany and Austria.[99]

(d) Finally, a local presence in either Austria or Germany is very important to market participants.[100]

(89) Third, the significant differences between the market shares in grids of the Parties and their competitors in Austria and Germany confirm the findings in paragraphs (87) and (88). Table 7 and Table 8 demonstrate that the business success and market position of the largest competitors in grids differ considerably in Austria and Germany. This difference is particularly pronounced for Knauf and OWA, and to some degree also for Rockfon. Those differences also persist over time when analysing the 2015-2017 period and have been largely confirmed by the Commission's market reconstruction.

94 Form CO, M.8832, Knauf Confidentieel Annex 8.12 (a).
95 Form CO, M.8832, AWI Confidential Annex 8.12 (b).
96 Form CO, M.8832, RFI#2 AWI Confidential Annex 43.1 (corrected); Form CO,M.8832, RFI#2 Knauf Confidential Annex 43.2.
97 See paragraph (61).
98 See paragraph (62).
99 See paragraph (63).
100 See paragraph (64).

Table 7 – Grids in Austria[101]

Competitor	Value		Volume	
	2017 Turnover (in 000 EUR)	**2017 share (in %)**	**2017 Volume (in '000 m2/lm)**	**2017 Share (in %)**
Knauf	[…]	[50-60]%	[…]	[50-60]%
Target	[…]	[10-20]%	[…]	[5-10]%
Combined	**[…]**	**[60-70]%**	**[…]**	**[60-70]%**
Rockfon	[…]	[10-20]%	[…]	[10-20]%
OWA	[…]	[10-20]%	[…]	[10-20]%
Saint Gobain	[…]	[0-5]%	[…]	[0-5]%
Other	[…]	[10-20]%	[…]	[10-20]%

Source: Parties' estimates, Form CO

Table 8 – Grids in Germany[102]

Competitor	Value		Volume	
	2017 Turnover (in 000 EUR)	**2017 share (in %)**	**2017 Volume (in '000 m2/lm)**	**2017 Share (in %)**
Knauf	[…]	[20-30]%	[…]	[20-30]%
Target	[…]	[5-10]%	[…]	[5-10]%
Combined	**[…]**	**[30-40]%**	**[…]**	**[30-40]%**
OWA	[…]	[20-30]%	[…]	[20-30]%
Rockfon	[…]	[20-30]%	[…]	[20-30]%
Saint Gobain	[…]	[0-5]%	[…]	[0-5]%
Other	[…]	[10-20]%	[…]	[10-20]%

Source: Parties' estimates, Form CO

5.3.3.2. Lithuania, Latvia and Estonia each constitute a separate geographic market for grids

(90) The Commission considers that Lithuania, Latvia and Estonia constitute three distinct relevant geographic markets.

(91) The Commission notes that the supply of grids in Lithuania, Latvia and Estonia is characterised by supply from few production facilities across the EEA. In contrast, as the Commission established in paragraph (78) et seq., any supply-side substitution within the EEA is, however, limited by barriers to expand the sale of grids in the different EEA markets due to the significant differences in market structure from the demand side, which result in heterogeneous conditions of competition. This reasoning applies equally to Lithuania, Latvia and Estonia for the reasons set out in paragraphs (92) to (94).

101 The market shares indicated in table 2 are based on the Parties' submission in Form CO, M.8832, RFI#1 Confidential Annex 53 (updated).

102 The market shares indicated in tables 2 and 3 are based on the Parties' submission in Form CO, M.8832, RFI#1 Confidential Annex 53 (updated).

(92) First, there are no specific trade flows between the Baltic countries that would set the trade between those countries apart from the trade flows of grids between other EEA countries. The Parties' manufacturing network and trade flows are organised in a similar way across Europe and the Baltic Member States alone or as a region do not stand out as compared to other countries in the EEA. The Parties operate a number of plants across the EEA and each of these plants typically supplies its products to a large number of countries inside and sometimes also outside of the EEA.[103]

(93) Second, further arguments that apply for mineral fibre tiles apply also to grids:

(a) The customer base differs significantly between the Baltic countries as the largest customers are not identical across the Baltic countries.[104]

(b) The existence of separate relevant geographic markets for each of the Baltic countries is supported by the Parties' own assessment of those markets as reflected in internal documents submitted by the Parties.[105]

(c) Replies received from customers and competitors during the Commission's market investigation support the view that the geographic markets are separate for each of the Baltic States.[106]

(d) The Parties' own distribution networks and customer purchasing patterns (including the requirement to have a local presence) point to each of the Baltic Member States constituting separate national markets.[107]

(e) Competition takes place at the national level.[108]

(f) A well-established presence, i.e. "good reputation", was considered as important.[109]

(94) Third, the significant differences in the market shares in grids of the Parties and their competitors between the Baltic countries confirm the findings in paragraphs (92) and (93). Table 9, Table 10 and Table 11 show that the business success and market position of the largest competitors in grids differ considerably between the Baltic countries. For instance, [information on AWI's strength in the Baltic countries]. Also, [information on AWI's strength in the Baltic countries]. These differences also persist over time when analysing the 2015-2017 period and have been confirmed by the Commission's market reconstruction.[110]

103 For both Parties, see paragraph (87).
104 See paragraph (70).
105 See paragraph (71).
106 See paragraph (72).
107 See paragraph (73).
108 See paragraph (74).
109 See paragraph (75).
110 The Commission market reconstruction confirms the market strengths of the Parties and their competitors in the Baltic countries and largely also the market shares, with deviations from time to time.

Table 9 – Grids in Lithuania

	Value		Volume	
Competitor	**2017 Turnover (in 000 EUR)**	**2017 share (in %)**	**2017 Volume (in '000 m2/lm)**	**2017 Share (in %)**
Knauf	[…]	[0-5]%	[…]	[0-5]%
Armstrong	[…]	[50-60]%	[…]	[50-60]%
Combined	**[…]**	**[50-60]%**	**[…]**	**[50-60]%**
Saint Gobain	[…]	[10-20]%	[…]	[10-20]%
Rockfon	[…]	[10-20]%	[…]	[10-20]%
Others	[…]	[10-20]%	[…]	[10-20]%

Source: Parties' estimates, Form CO

Table 10 – Grids in Estonia

	Value		Volume	
Competitor	**2017 Turnover (in 000 EUR)**	**2017 share (in %)**	**2017 Volume (in '000 m2/lm)**	**2017 Share (in %)**
Knauf	[…]	[0-5]%	[…]	[0-5]%
Armstrong	[…]	[10-20]%	[…]	[10-20]%
Combined	**[…]**	**[10-20]%**	**[…]**	**[10-20]%**
Saint Gobain	[…]	[20-30]%	[…]	[20-30]%
Rockfon	[…]	[20-30]%	[…]	[10-20]%
others	[…]	[30-40]%	[…]	[30-40]%

Source: Parties' estimates, Form CO

Table 11 – Grids in Latvia

	Value		Volume	
Competitor	**2017 Turnover (in 000 EUR)**	**2017 share (in %)**	**2017 Volume (in '000 m2/lm)**	**2017 Share (in %)**
Knauf	[…]	[30-40]%	[…]	[20-30]%
Armstrong	[…]	[10-20]%	[…]	[5-10]%
Combined	**[…]**	**[40-50]%**	**[…]**	**[30-40]%**
Saint Gobain	[…]	[20-30]%	[…]	[20-30]%
Rockfon	[…]	[10-20]%	[…]	[10-20]%
others	[…]	[20-30]%	[…]	[20-30]%

Source: Parties' estimates, Form CO

6. COMPETITIVE ASSESSMENT OF THE HORIZONTAL OVERLAPS

6.1. Analytical framework

(95) Under Article 2(2) and 2(3) of the Merger Regulation, the Commission must assess whether a proposed concentration would significantly impede effective competition in the internal market or in a substantial part of it, in particular through the creation or strengthening of a dominant position.

(96) In this respect, a merger may entail horizontal and/or non-horizontal effects. Horizontal effects are those deriving from a concentration where the undertakings concerned are actual or potential competitors of each other in one or more of the relevant markets concerned. Non-horizontal effects are those deriving from a concentration where the undertakings concerned are active in different relevant markets.

(97) As regards non-horizontal mergers, two broad types of such mergers may be distinguished: vertical mergers and conglomerate mergers.[111] Vertical mergers involve companies operating at different levels of the supply chain.[112] Conglomerate mergers are mergers between firms that are in a relationship, which is neither horizontal (as competitors in the same relevant market) nor vertical (as suppliers or customers).[113]

(98) The Commission appraises horizontal effects in accordance with the guidance set out in the relevant notice, that is to say the Horizontal Merger Guidelines.[114] Additionally, the Commission appraises non-horizontal effects in accordance with the guidance set out in the relevant notice, that is to say the Non-Horizontal Merger Guidelines.[115]

6.2. Horizontal non-coordinated effects

(99) The Horizontal Merger Guidelines distinguish between two main ways in which mergers between actual or potential competitors on the same relevant market may significantly impede effective competition, namely non-coordinated and coordinated effects.[116]

(100) Under the substantive test set out in Article 2(2) and 2(3) of the Merger Regulation, mergers that do not lead to the creation or the strengthening of the dominant position of a single firm may also be incompatible with the internal market. The Merger Regulation provides that "*under certain circumstances, concentrations involving the*

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111 Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings ("Non-Horizontal Merger Guidelines"), OJ C 265, 18.10.2008, paragraph 3.

112 Non-Horizontal Merger Guidelines, paragraph 4.

113 Non-Horizontal Merger Guidelines, paragraph 5.

114 Guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings ("Horizontal Merger Guidelines"), OJ C 31, 05.02.2004.

115 Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings ("Non-horizontal Merger Guidelines"), OJ C 265/6, 18.10.2008.

116 In the present decision, the Commission has not found evidence that the Transaction would raise serious doubts as regards its compatibility with the internal market with respect to coordinated effects in any of the horizontally affected markets. During the market investigation, the Commission received no concerns about possible anti-competitive coordinated effects arising from the Transaction.

elimination of important competitive constraints that the merging parties had exerted upon each other, as well as a reduction of competitive pressure on the remaining competitors, may, even in the absence of a likelihood of coordination between the members of the oligopoly, result in a significant impediment to effective competition".[117]

(101) The Horizontal Merger Guidelines list a number of factors which may influence whether or not significant horizontal non-coordinated effects are likely to result from a merger, such as the large market shares of the merging firms, the fact that the merging firms are close competitors, the limited possibilities for customers to switch suppliers, or the fact that the merger would eliminate an important competitive force. That list of factors applies equally, regardless of whether a merger would create or strengthen a dominant position, or would otherwise significantly impede effective competition due to non-coordinated effects. Furthermore, not all of these factors need to be present to make significant non-coordinated effects likely and it is not an exhaustive list.[118]

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

6.3. Aspects common to the assessment of all five mineral fibre tiles markets under review

(103) The Transaction will create or strengthen the market leader in four of the five national markets under review, potentially leading to the creation or strengthening of a dominant position in several of those markets. As there are a number of aspects that are common to the assessment of each of the national markets for mineral fibre tiles in Austria, Germany, Lithuania, Spain and the UK, those aspects are set out in paragraphs (104) to (116).

(104) First, the supply of mineral fibre tiles is concentrated in all five Member States for which the Commission has jurisdiction. There are only five suppliers of mineral fibre tiles in each of those countries: the Parties, OWA, Rockwool (through its Rockfon branch) and Saint-Gobain (through its Ecophon and Eurocoustic branches). The Transaction therefore appears to be a 5-to-4 merger in mineral fibre tiles in each of those countries and, in fact, in the EEA as a whole, limiting the number of actual or potential suppliers in each of the national markets assessed in the present decision.

(105) Second, in the supply of wet-felt mineral fibre tiles, which are a sub segment of mineral fibre tiles albeit not forming a separate product market, there are only three suppliers of wet-felt mineral fibre tiles in each of the five Member States in question: the Parties and OWA. The Transaction therefore appears to be a 3-to-2 merger in wet-felt mineral fibre tiles in each of those countries and, in fact, in the EEA as a whole, limiting the number of actual or potential suppliers in each of the markets assessed in the present decision.

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117 Merger Regulation, recital 25. Similar wording is also found in paragraph 25 of the Horizontal Merger Guidelines.

118 Horizontal Merger Guidelines, paragraph 26.

(106) Third, besides the Parties, there are only two other suspended ceiling manufacturers who are equally active across Europe and thus in Austria, Germany, Lithuania, Spain and the UK, *i.e.* Rockwool and Saint-Gobain. In contrast, OWA is a smaller supplier and is particularly focussed on Germany, where OWA is the current market leader in mineral fibre tiles.[119] In addition, even the European-wide players focus more on certain regions or certain countries within the EEA as has already become apparent from the differences in market shares of the Parties in different EEA countries as set out in paragraph (54).

(107) Fourth, the Parties would become the clear EEA-wide leader in terms of production capacity for mineral fibre tiles after the Transaction. Knauf has an EEA-wide capacity share of [20-30]% and Armstrong of [30-40]% in the EEA,[120] leading to a combined capacity share of [50-60]% in mineral fibre tiles, according to the Parties' estimates. The Commission market reconstruction roughly confirmed these shares.[121] That share is indicative of dominance also in the five Member States in question, in particular since the capacity is used in the EEA as a whole and therefore equally in each of the five Member States in question and the share of the next competitor OWA is estimated at [10-20]%, that is to say at less than a third the size of the merged entity.

(108) Fifth, [strategic considerations by the Parties in relation to capacity utilisation].[122,123]

(109) Sixth, the phase I investigation has resulted in evidence from the Parties' internal documents that Knauf and Armstrong were competing head-to-head in in the Member States under review prior to the Transaction. For instance, Armstrong characterised Knauf in 2016 as [strategic assessment of Knauf by AWI] and [strategic assessment of Knauf by AWI][124] while Knauf commented in a document dated 16 September 2016 on Armstrong that Armstrong is [strategic assessment of AWI by Knauf].[125]

(110) Seventh, in contrast to the close competition between the Parties, and in line with the fact that the market for mineral fibre tiles is differentiated, not all three remaining competitors appear to be competing equally head-to-head with the Parties. In particular, competitor Saint-Gobain's mineral fibre companies either do not compete closely with the Parties or have certain shortcomings.

(a) Saint Gobain’s Ecophon products focus on higher value products and thus compete less closely with the Parties. As set out in Armstrong’s internal

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119 In its phase I investigation the Commission has performed a market reconstruction. The results of this preliminary exercise have largely confirmed the Parties' view with respect to market structure and competitors active in mineral fibre tiles and grids.

120 Each of the suppliers has a limited number of production plants for mineral fibre tiles from which it serves the different national markets in the EEA, making it impossible to assign capacity to specific national markets within the EEA.

121 According to the Commission market reconstruction the combined capacity share of the Parties in mineral fibre tiles is above 60%.

122 Knauf internal document "Business Report 30 Juni 2016" ("*Geschäftsbericht 30. Juni 2016*") page 7 (convenience translation from German): [strategic assessment of AWI by Knauf].

123 Form CO, M.8832, Knauf Confidential Annex 5.4.18, slide 47.

124 Form CO, M.8832, RFI#1 AWI Confidential Annex 66.1, p.37, see also Armstrong internal document [strategic assessment of Knauf by AWI].

125 Form CO, M.8832, Knauf Confidential Annex 5.4.19, p.3; see also Knauf internal document [strategic assessment of AWI by Knauf].

documents, Ecophon [strategic assessment of Ecophon by AWI] and has a [strategic assessment of Ecophon by AWI].[126] Knauf has a similar perspective on Ecophon calling them a [strategic assessment of Ecophon by Knauf][127] and [strategic assessment of Ecophon by Knauf].[128]

(b) Saint Gobain's Eurocoustic products appear to have limitations in terms of product portfolio.[129]

(111) Eighth, on the basis of the findings of the Phase I market investigation, the Commission considers it unlikely that the remaining competitors would have the ability and incentives to react sufficiently aggressively to counter-act any negative effects of the transaction, for instance by expanding output, for the reasons set out in paragraphs (112) to (117).

(112) In the first place, the product market is not homogeneous as there are differences in brand appeal and in product characteristics. That is to say in particular that customers may view the other competitors as less good alternatives due to lesser brand appeal with end customers,[130] due to differences in product characteristics (in particular for Rockfon and Saint-Gobain which sell soft-felt mineral fibre tiles)[131] and due to differences in product positioning (in particular for Saint-Gobain Ecophon which focuses on high quality and high price) or in product portfolio (in particular for Saint-Gobain Eurocoustic).

(113) In the second place, there are indications that the capacity utilization of competitors is higher than that of Knauf and Armstrong. This is indicated by the Commission's collection of capacity data from the three main competitors but also by the Parties' views as reflected in their internal documents: [strategic considerations in relation to capacity utilisation][132] and [strategic considerations in relation to capacity utilisation].[133]

(114) In the third place, the available spare capacity of competitors would not be used exclusively for sales in Austria, Germany, Lithuania, Spain and the UK, but all over the EEA and possibly also outside of the EEA.[134] The Commission notes in that context that the Parties' combined market shares in mineral fibre tiles in other EEA countries than the five countries under review are very high at more than [50-60]% and up to [90-100]% all across substantial parts of Eastern Europe (Czech Republic, Slovenia, Hungary, Croatia, Slovakia, Romania, Bulgaria,) but also at more than [60-70]% in Ireland and Greece and around [40-50]% in Poland and Portugal.[135]

126 Form CO, Annex 66.1.

127 Form CO, Annex 5.4.19, slide 2.

128 Annex 5.4.27, slide 33.

129 According to an internal Knauf document, Form CO, Annex 5.4.27, slide 33.

130 The relevance of brands is acknowledged for instance in Form CO, Annex 5.4.26.

131 Some respondents consider that two distinct product markets exist for wet-felt mineral fibre products and soft-felt mineral fibre products, and the Transaction would, therefore, decrease the number of competitors with respect to wet-felt products from three to two (non-confidential minutes of a call with a customer on 18 May 2018).

132 Annex 66.2 to the Form CO.

133 Annex 66.1 of the Form CO.

134 Both Knauf and Armstrong export a part of their production outside of the EEA, for instance to former CIS states or the Middle East. This is also acknowledged in an Armstrong internal document where Armstrong comments in its analysis of capacity utilization of its competitors: [strategic considerations in relation to capacity utilisation] , Annex 66.2 of the Form CO.

135 Parties' replies to question 1 of RFI #2 dated 22 February 2018.

Therefore, if the merged entity were to increase its prices in countries where its market shares are high, competitors may have the same incentive to use their capacity for sales in those other EEA countries, limiting the spare capacity available for additional sales in Austria, Germany, Lithuania, Spain and the UK.

(115) In the fourth place, as regards incentives to expand output, the competitors would be faced with additional demand if the merged entity raised price or otherwise deteriorated supply conditions and customers tried to switch away after the Transaction. It could therefore be profitable for them to raise their prices in turn. This is particularly relevant against the background that the Parties [strategic considerations by the Parties in relation to capacity utilisation].

(116) In the fifth place, there are indications that in countries where the market structure is already strongly concentrated, prevailing prices may be higher, and they are not offset by the existence of spare capacities of competitors. This is for instance the situation in the United Kingdom as further detailed in paragraph (176). This may also be indicative of likely effects of the transactions in other markets, where the Transaction would bring about a significant increase in market concentration.

(117) Ninth, market entry in mineral fibre tiles in the five Member States under review that would constrain the merged entity after the Transaction is not likely. The majority of respondents in the market investigation providing a meaningful answer hold the view that a market entry of a suspended ceilings supplier within the next five years is rather unlikely or very unlikely.[136] This is echoed in the internal documents of the Parties that do not appear to mention any significant market entry in mineral fibre tiles to be expected in the next five years.

6.4. Aspects common to the assessment of all five grids markets under review

(118) The Transaction will create or strengthen the market leader in three of the five national markets for grids under review, potentially leading to the creation or strengthening of a dominant position in Austria, Spain and the UK. As there are a number of aspects that are common to the assessment of each of the national markets for grids in Austria, Germany, Lithuania, Spain and the UK, those aspects are set out in paragraphs (119) to (122).

(119) First, the supply of grids is concentrated. There are only five main suppliers of grids: the Parties, Rockwool, Saint-Gobain and OWA.[137] The Transaction therefore appears to be a five-to-four merger of main suppliers of grids.

(120) Second, the Parties would become the EEA-wide leader in terms of production capacity for grids after the Transaction. Knauf has a [10-20]% capacity share and Armstrong has a [10-20]% capacity share, leading to a combined capacity share of [30-40]% in the EEA.[138] They would be well ahead of the next two competitors Rockfon ([10-20]%) and Saint Gobain ([10-20]%). The remaining market is highly fragmented.

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136 Replies to questions on entry in the customer questionnaire. For instance, to question 53 of Questionnaire 2 – Customers (Germany and Austria).

137 Considering the five national markets, OWA is not present in Spain and Lithuania.

138 RFI#2 Confidential Annex 32 (corrected). The Commission market reconstruction roughly confirms these figures.

(121) Third, the Parties would become the leading supplier of grids for suspended ceilings in the EEA with a combined sales share of around [40-50]% in grids in the EEA.[139]

(122) Fourth, [strategic considerations by the Parties in relation to capacity utilisation].[140] This would impact equally all five national markets for girds in the Member States under review.

6.5. Competitive assessment of mineral fibre tiles and grids by national market

6.5.1. Austria

6.5.1.1. The Parties' view

(123) The Parties maintain that the relevant geographic market is wider than only Austria and comprises Austria and Germany. Furthermore, the Parties consider that the relevant product market for suspended ceilings comprises grids as well as tiles made from all types of materials.

(124) Based on this, the Parties claim that the combined market shares of the Parties are moderate ([20-30]% on a value basis and [20-30]% on a volume basis) and hence below any presumption of a dominant market position.[141] Moreover, the Parties stress the exertion of strong competitive pressure in particular by OWA, Rockfon and Saint-Gobain, not leaving aside a "*large number of smaller but highly renowned players present in the DA* [Commission clarification: Germany-Austria] *region*".[142]

6.5.1.2. Commission's assessment

(125) Certain aspects of the competitive assessment apply across all of the national markets for mineral fibre tiles and grids under review as explained in sections 6.3[143] and 6.4.[144] Those aspects apply fully to the Austrian markets and therefore argue in favour of raising serious doubts for Austria. The remainder of this section will only set out arguments specific to Austria that apply in addition to those cross-cutting aspects already set out in sections 6.3 and 6.4.

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139 Form CO, M.8832, RFI#1 Confidential Annex 53 (updated):EEA-wide combined market share in value [40-50]% and in volume [40-50]%. The Commission market reconstruction indicates lower figures both in value and volume, but also according to the market reconstruction the merged entity would remain market leader EEA-wide.

140 Form CO, M.8832, Knauf Confidential Annex 5.4.18, slide 47.

141 Form CO, para. 154.

142 Form CO, para. 154.

143 (1) The supply of mineral fibre tiles is concentrated; (2) The supply of wet-felt mineral fibre tiles; which are a subsegment of mineral fibre tiles albeit not forming a separate product market, is even more concentrated; (3) The Parties would become the clear EEA-wide leader in terms of production capacity for mineral fibre tiles after the Transaction; (4) The Parties would become the leading supplier of mineral fibre tiles in the EEA (5) [Strategic considerations by the Parties in relation to capacity utilisation]; (6) Parties' internal documents show that Knauf and Armstrong were competing head-to-head prior to the Transaction; (7) Not all three remaining competitors appear to be competing equally head-to-head with the Parties, this applies in particular to Saint-Gobain; (8) The Commission considers it unlikely that the remaining competitors would have the ability and incentives to react sufficiently aggressively to counter-act any negative effects of the Transaction; (9) Market entry in mineral fibre tiles that would constrain the merged entity after the Transaction is not likely.

144 (1) Supply of grids in the EEA is concentrated; (2) The Parties would become the EEA-wide leader in terms of production capacity for grids after the Transaction; (3) The Parties would become the leading supplier of grids for suspended ceilings in the EEA; (4) [Strategic considerations by the Parties in relation to capacity utilisation].

(a) Market structure and market shares

Table 12 – Market shares of mineral fibre tiles and grids in Austria (2017, by value)

Total market	Knauf (AMF)	Armstrong	Combined	Rockfon	Saint-Gobain	OWA	Others
Tiles – Mineral Fibre €[…]	[60-70]%	[10-20]%	**[70-80]%**	[10-20]%	[5-10]%	[5-10]%	/
Tiles – Wet mineral fibre €[…]	[70-80]%	[10-20]%	**[90-100]%**	/	/	[5-10]%	/
Grids €[…]	[50-60]%	[10-20]%	**[60-70]%**	[10-20]%	[0-5]%	[10-20]%	[10-20]%

Source: Form CO

Table 13 – Market shares of mineral fibre tiles and grids in Austria (2017, by volume)

Total market	Knauf (AMF)	Armstrong	Combined	Rockfon	Saint-Gobain	OWA	Others
Tiles – Mineral Fibre […] m2	[60-70]%	[10-20]%	**[70-80]%**	[10-20]%	[5-10]%	[5-10]%	/
Tiles – Wet mineral fibre […] m2	[70-80]%	[10-20]%	**[80-90]%**	/	/	[10-20]%	/
Grids […] lm	[50-60]%	[5-10]%	**[60-70]%**	[10-20]%	[0-5]%	[10-20]%	[10-20]%

(126) Post Transaction, the Parties will have very high combined market shares of [70-80]% (by value) or [70-80]% (by volume), respectively, in mineral fibre tiles and of [60-70]% (by value) and [60-70]% (by volume), respectively, in girds for modular suspended ceilings. Those market shares are indicative of a dominant market position.

(127) The Transaction will add a sizeable increment to the already very significant, if not dominant, position of Knauf in Austria for mineral fibre tiles and grids.

(a) For tiles produced from mineral fibre, the Transaction gives rise to very high combined value and volume market shares, with increments of [10-20]% and [10-20]% respectively. Competitors in mineral fibre tiles would remain very far behind the merged entity; Rockfon as the largest of these with [10-20]% market share for mineral fibre tiles followed by OWA and Saint-Gobain.

(b) The same applies for grids, where none of the remaining competitors will have a market share of more than [10-20]%.

(128) The market shares have remained stable over the last years. The Commission market reconstruction broadly confirmed the market shares provided by the Parties with a deviation in the value-based combined market shares in mineral fibre tiles. However,

according to the Commission market reconstruction, the value-based market shares are in excess of 50% in mineral fibre tiles.

(b) Closeness of competition

(129) As regards mineral fibre tiles and grids, the market feedback points to existing close competition between Knauf and Armstrong in Austria. Respondents from Austria name Armstrong as an alternative to Knauf, and *vice versa*, even though other suppliers are being named as well.[145] In particular, when mineral fibre is considered the most suitable material for certain type of characteristics (standard, sound, fire reaction), both Parties are very often named as potential suppliers by Austrian market participants.[146]

(130) In other regards (such as the specific manufacturing method of wet-felt tiles, high-end or low-end products, etc.), the majority of the respondents maintain that the Parties are close competitors.[147] In particular as regards the differentiation between the production methods of mineral fibre tiles – wet-felt and soft-felt - one market participant explained that if a particular wet-felt product is named in the specifications for a project, it is practically not possible, mainly because of the price, to switch to soft-felt mineral fibre suppliers, that is to say to Rockfon or Saint Gobain.[148]

(c) Replies from the market investigation on the impact of the Transaction

(131) Most respondents are neutral as regards the impact of the transaction on their company. A minority expects a negative impact but no one a positive. Similarly, the majority of respondents assume that the prices will remain the same but a considerable number of market participants expect a price increase.[149]

(132) Considering mineral fibre tiles only, there is a slight shift towards the opinion that in this product area, prices may increase as consequence of the Transaction.[150] For grids, the opinions that prices will increase or that the prices will remain the same, are rather balanced.[151]

(133) Overall, the Commission observes that whilst many respondents did not express any view on the impact of the transaction or remain neutral, there are more participants expecting a negative impact of the Transaction than those who do not, in particular because of increasing prices.

(134) The available market feedback thus suggests that the Transaction could reinforce Knauf's very strong, if not dominant, position in Austria, regarding both tiles and grids.

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145 Replies to questions 40 and 41 of Questionnaire 2 – Customers (Germany and Austria).

146 Replies to question 44 of Questionnaire 2 – Customers (Germany and Austria).

147 Replies to question 50.1, 52.1 of Questionnaire 2 – Customers (Germany and Austria).

148 Minutes of a call with a customer on 13 June 2018.

149 Replies to questions 57 of Questionnaire 2 – Customers (Germany and Austria): Out of 14 respondents, 4 are of the opinion that the prices will increase, 6 expressed the view that the prices will remain the same and 4 stated "other", most of which did not provide any further explanation.

150 Replies to questions 58 of Questionnaire 2 – Customers (Germany and Austria).

151 Replies to questions 59 of Questionnaire 2 – Customers (Germany and Austria).

6.5.1.3. Conclusion

(135) In view of the reasons set out in paragraphs (125) to (134), the Commission finds that the Transactions raises serious doubts about its compatibility with the internal market as regards the Austrian markets for mineral fibre tiles and grids for modular suspending ceilings.

6.5.2. Lithuania

6.5.2.1. Parties' views

(136) The Parties consider that all Baltic Member States fall under one geographic market and, therefore, no competition concerns arise. Further, the Parties submit that all materials of modular suspended ceilings fall under single relevant product market definition. As a result, the Transaction would not result in the significant impediment of effective competition primarily because the Parties market share would be moderate and there would be other international competitors that would continue to exert sufficient competitive pressure on the Parties.

6.5.2.2. Commission's assessment

(137) Certain aspects of the competitive assessment apply across all of the national markets for mineral fibre tiles and grids under review as explained in sections 6.3[152] and 6.4.[153] Those aspects apply fully to the Lithuanian markets and therefore argue in favour of raising serious doubts for Lithuania. The remainder of this section will only set out arguments specific to Lithuania that apply in addition to those cross-cutting aspects already set out in sections 6.3 and 6.4.

152 (1) The supply of mineral fibre tiles is concentrated; (2) The supply of wet-felt mineral fibre tiles; which are a subsegment of mineral fibre tiles albeit not forming a separate product market, is even more concentrated; (3) The Parties would become the clear EEA-wide leader in terms of production capacity for mineral fibre tiles after the Transaction; (4) The Parties would become the leading supplier of mineral fibre tiles in the EEA (5) [Strategic considerations by the Parties in relation to capacity utilisation]; (6) Parties' internal documents show that Knauf and Armstrong were competing head-to-head prior to the Transaction; (7) Not all three remaining competitors appear to be competing equally head-to-head with the Parties, this applies in particular to Saint-Gobain; (8) The Commission considers it unlikely that the remaining competitors would have the ability and incentives to react sufficiently aggressively to counter-act any negative effects of the Transaction; (9) Market entry in mineral fibre tiles that would constrain the merged entity after the Transaction is not likely.

153 (1) Supply of grids in the EEA is concentrated; (2) The Parties would become the EEA-wide leader in terms of production capacity for grids after the Transaction; (3) The Parties would become the leading supplier of grids for suspended ceilings in the EEA; (4) [Strategic considerations by the Parties in relation to capacity utilisation].

(a) Market structure and market shares

Table 14 – Market shares of mineral fibre tiles and grids in Lithuania (2017, by value)

Total market	Knauf (AMF)	Armstrong	Combined	Saint-Gobain	Rockfon	OWA	Others
Tiles – Mineral Fibre €[…]	[30-40]%	[20-30]%	**[60-70]%**	[30-40]%	[5-10]%	[0-5]%	/
Tiles – Wet mineral fibre €[…]	[50-60]%	[40-50]%	**[90-100]%**	0%	0%	[0-5]%	/
Grids €[…]	[0-5]%	[50-60]%	**[50-60]%**	[10-20]%	[10-20]%	/	[10-20]%

Source: Form CO

Table 15 – Market shares of mineral fibre tiles and grids in Lithuania (2017, by volume)

Total market	Knauf (AMF)	Armstrong	Combined	Saint-Gobain	Rockfon	OWA	Others
Tiles – Mineral Fibre […] m2	[40-50]%	[20-30]%	**[70-80]%**	[10-20]%	[0-5]%	[0-5]%	/
Tiles – Wet mineral fibre […] m2	[60-70]%	[30-40]%	**[90-100]%**	0%	0%	[0-5]%	/
Grids €[…] lm	[0-5]%	[50-60]%	**[50-60]%**	[10-20]%	[10-20]%	/	[20-30]%

Source: Form CO

(138) Post Transaction, the Parties will have very high combined market shares of [60-70]% (by value) or [70-80]% (by volume), respectively, in mineral fibre tiles and of [50-60]% (by value) and [50-60]% (by volume), respectively, in girds for modular suspended ceilings. Those market shares are indicative of a dominant market position.

(139) The Transaction effectively results in a three-to-two merger with respect to mineral fibre tiles in Lithuania, given the negligible market positions of Rockfon and OWA. With respect to the potential narrower segment wet-felt tiles, which are a sub segment of mineral fibre tiles albeit not forming a separate product market, the Transaction results in a monopoly. Over the last three years, the market shares remained relatively stable, for example, the combined market shares in mineral fibre tiles always above 70%. The results of the Commission market reconstruction roughly confirm these results.[154] The market reconstruction shows from time to time lower combined market shares in particular in the value-based consideration, which are, however, always in excess of 50%.

154 Based on the Commission's aggregation of the sales data of the Parties' main competitors received on 15 June 2018 and 5 November 2018.

(140) The only other credible competitor is Saint-Gobain with [30-40]% market share value-based and [10-20]% volume-based. However, its market position under any segmentation will be much smaller if compared to the Parties post-merger. The other major players (Rockfon and OWA) have limited market shares in Lithuania – Rockfon [5-10]% value-based and [0-5]% volume-based, OWA [0-5]% value-based and [0-5]% volume-based – and are unlikely to constrain the parties sufficiently post-merger.

(141) As regards grids, the Parties submit that Knauf's position is minor in Lithuania ([0-5]% market share by both value and volume). The Parties further submit that Knauf entered the Lithuanian market later, which, according to them, explains Knauf's limited presence in grids.[155] Moreover, the parties take the view that while the merger would result in a strong market position of the merged entity with market shares above [50-60]%, over the past three years, however, the combined market shares decreased from above [60-70]% in 2015 to above [50-60]% in 2018. The Commission notes that the increment added by Knauf decreased from [10-20]% in 2015 to [0-5]% in 2017. The Commission market reconstruction confirms the market shares as well as the decrease of both the combined market shares and the increment. This indicates that the Transaction is unlikely to change the competitive landscape in grids in Lithuania.

(b) Closeness of competition

(142) The market investigation provided evidence that the Parties are close, if not the closest, competitors in Lithuania in mineral fibre tiles.

(143) First, the majority of customers and distributors responding to the Commission's market investigation indicated that Armstrong is the closest alternative to Knauf and *vice versa.*[156] Only one distributor considered Saint-Gobain to be a close alternative to the Parties' mineral fibre tiles.

(144) Second, the Parties' mineral fibre tiles and product portfolio are very similar and sometimes even professionals have difficulty to tell them apart.[157]

(145) Third, historically, Armstrong used to be the market leader in Lithuania holding around 50% market share around 8-10 years ago.[158] The "Armstrong" brand was used as a generic term for suspended ceilings irrespective of the actual manufacturer. However, in recent years Knauf has gained market share at the expense of Armstrong.[159]

(146) Fourth, the Parties are each other's close competitors when looking at specific price bands. The market investigation indicated that while Knauf is also active in the entry level DIY sales channel with economic (low-range) mineral ceilings in Lithuania,

155 Parties' response to question 24 RFI#4.
156 Replies to questions 41 and 42 of Questionnaire 3 – Customers (Baltics).
157 Minutes of a conference call with a distributor on 9 July 2018.
158 Minutes of a conference call with a distributor on 9 July 2018.
159 Minutes of a conference call with a distributor on 9 July 2018.

both Parties compete closely for mid- to high-segment which are meant for project sales.[160]

(147) Fifth, the head-to-head competition between Armstrong and Knauf in Lithuania is reflected in Knauf's internal documents: [strategic assessment of AWI by Knauf in relation to Lithuania].[161]

(148) In contrast, the market investigation did not provide evidence that the Parties are close competitors in Lithuania in grids due to Knauf's limited market position in grids in Lithuania.

(c) Architect and other specifiers specification acts as a barrier for non-specified manufacturers

(149) Reputation of the manufacturer/distributor is very important in Lithuania and architects and other specifiers are unlikely to specify manufacturers that they do not know or have not worked with before. In effect, this acts as a barrier for new players to enter the market for the following reasons.

(150) First, the majority of market participants indicated that in the vast majority of cases (around 75%) suspended ceiling specifications from an architect makes a reference to a particular manufacturer.[162]

(151) Second, once a particular manufacturer is specified, ceilings of such a manufacturer are likely to be bought.[163]

(152) Finally, construction companies are unlikely to buy from distributors that they have no experience with.[164]

(153) In conclusion, in contrast to competitors, the Parties' products are well known to architects and other specifiers. Hence, they are more likely to be referenced than those of competitors.

(d) Replies from the market investigation on the impact of the Transaction

(154) The majority of customers responding to the market investigation considered that the Transaction would have negative effects on competition. For example, a customer indicated, "*Theoretically European market is open. Practically it is still segmented geographically per country basis. Merging of two leading suppliers of ceilings is probably not causing any competition problems in a big country. But such a merging can have crucial consequences in a small country like Lithuania, limiting competition almost to zero.*"[165]

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160 Minutes of a conference call with a distributor on 9 July 2018;
Response by a distributor to question 52.2 of Questionnaire 3 – Customers (Baltics).

161 Form CO, M.8832, Knauf Confidential Annex 5.4.32, p.7;
Form CO, M.8832, Knauf Confidential Annex 5.4.34, p.7.

162 Replies to question 48 of Questionnaire 3 – Customers (Baltics). This applies equally to other specifiers.

163 Replies to question 48.2 of Questionnaire 3 – Customers (Baltics).

164 Minutes of a conference call with a distributor on 24 May 2018.

165 Replies to question 61 of Questionnaire 3 – Customers (Baltics).

6.5.2.3. Conclusion

(155) In view of the reasons set out in paragraphs (137) to (154), the Commission finds that the transactions raises serious doubts about its compatibility with the internal market as regards the Lithuanian market for mineral fibre tiles.

(156) In contrast, in light of the limited increment brought about by the transaction in grids and the fact that Knauf's market position in grids has declined constantly over recent years as set out in paragraph (141), no serious doubts arise in regards of grids with respect to grids for modular suspended ceilings.

6.5.3. Spain

6.5.3.1. The Parties' view

(157) As regards Spain, the Parties submit that all materials of modular suspended ceilings fall under a single relevant product market definition. As a result, the Transaction would not result in the significant impediment of effective competition primarily because the Parties market share would be moderate and there would be other international and local competitors that would continue to exert sufficient competitive pressure on the Parties.

6.5.3.2. Commission's assessment

(158) Certain aspects of the competitive assessment apply across all of the national markets for mineral fibre tiles and grids under review as explained in sections 6.3[166] and 6.4.[167] Those aspects apply fully to the Spanish markets and therefore argue in favour of raising serious doubts for Spain. The remainder of this section will only set out arguments specific to Spain that apply in addition to those cross-cutting aspects already set out in sections 6.3 and 6.4.

166 (1) The supply of mineral fibre tiles is concentrated; (2) The supply of wet-felt mineral fibre tiles; which are a subsegment of mineral fibre tiles albeit not forming a separate product market, is even more concentrated; (3) The Parties would become the clear EEA-wide leader in terms of production capacity for mineral fibre tiles after the Transaction; (4) The Parties would become the leading supplier of mineral fibre tiles in the EEA (5) [Strategic considerations by the Parties in relation to capacity utilisation]; (6) Parties' internal documents show that Knauf and Armstrong were competing head-to-head prior to the Transaction; (7) Not all three remaining competitors appear to be competing equally head-to-head with the Parties, this applies in particular to Saint-Gobain; (8) The Commission considers it unlikely that the remaining competitors would have the ability and incentives to react sufficiently aggressively to counter-act any negative effects of the Transaction; (9) Market entry in mineral fibre tiles that would constrain the merged entity after the Transaction is not likely.

167 (1) Supply of grids in the EEA is concentrated; (2) The Parties would become the EEA-wide leader in terms of production capacity for grids after the Transaction; (3) The Parties would become the leading supplier of grids for suspended ceilings in the EEA; (4) [Strategic considerations by the Parties in relation to capacity utilisation].

(a) Market structure and market shares

Table 16 – Market shares of mineral fibre tiles and grids in Spain (2017, by value)

Total market	Knauf (AMF)	Armstrong	Combined	Saint-Gobain	Rockfon	OWA	Others
Tiles – Mineral Fibre €[…]	[40-50]%	[30-40]%	**[70-80]%**	[10-20]%	[10-20]%	[0-5]%	[0-5]%
Tiles – Wet mineral fibre €[…]	[50-60]%	[30-40]%	**[90-100]%**	/	/	[5-10]%	/
Grids €[…]	[10-20]%	[30-40]%	**[40-50]%**	[10-20]%	[5-10]%	/	[30-40]%

Source: Form CO

Table 17 – Market shares of mineral fibre tiles and grids in Spain (2017, by volume)

Total market	Knauf (AMF)	Armstrong	Combined	Saint-Gobain	Rockfon	OWA	Others
Tiles – Mineral Fibre […] m2/lm	[30-40]%	[20-30]%	**[60-70]%**	[10-20]%	[10-20]%	[5-10]%	/
Tiles – Wet mineral fibre […] m2/lm	[50-60]%	[30-40]%	**[90-100]%**	/	/	[5-10]%	/
Grids […] m2/lm	[10-20]%	[30-40]%	**[40-50]%**	[10-20]%	[5-10]%	/	[40-50]%

Source: Form CO

(159) Knauf and Armstrong are the two leading suppliers of mineral fibre tiles and post-Transaction the merged entity would be by far the largest player in value of sales with a combined share of [70-80]%. The merged entity would be more than […] times as large as its next competitors, Saint-Gobain and Rockfon that hold a share of [10-20]% each. Moreover, the Parties' combined share in the 2015-2017 increased by [10-20]percentage points. Market conditions are not materially different if the volume of sales is considered.[168] Those very high market shares are indicative of a dominant market position.

(160) Post-Transaction, the merged entity would also be the largest suppliers of grids in value of sales with a combined share of [40-50]%. The merged entity would be significant larger than its next competitors, Thu Perfil, which holds a share of [20-30]%. Market conditions are not materially different if the volume of sales is considered.[169]

(b) Closeness of competition

(161) Knauf and Armstrong appear to be close competitors in Spain. Based on the tender data submitted by the Parties, Knauf and Armstrong competed closely for mineral fibre projects in the recent past.[170] Moreover, for a majority of Spanish customers that replied to the market investigation, Armstrong is the first alternative to Knauf.[171]

168 Form CO, Annex 8.15 (a).

169 Form CO, Annex 8.15 (a).

170 RFI 2, Annexes 9.1 and 9.2.

171 Replies to question 38 of Questionnaire 4 – Customers (Spain).

Knauf is instead the first or the second alternative to Armstrong.[172] Finally, Knauf and Armstrong are practically the only two significant suppliers in the sub segment of mineral fibre tiles produced with the "wet" production method, as OWA has very limited presence in Spain with a [5-10]% market share in wet-felt mineral fibre tiles.

(162) As shown below, in its internal documents Armstrong identifies Knauf as a close competitor in Spain.[173]

Figure 2 – Closeness of competition in Spain

[Strategic considerations by AWI regarding the Spanish market and close competitor]

Source: RFI#1 AWI Confidential Annex 66.2

(c) Replies from the market investigation on the impact of the Transaction

(163) Finally, the majority of Spanish customers expect the Transaction to have a negative impact and, in particular, believe that it will lead to price increases.[174]

6.5.3.3. Conclusion

(164) In view of the reasons set out in paragraphs (158) to (163), the Commission finds that the Transaction raises serious doubts about its compatibility with the internal market as regards the Spanish markets for mineral fibre tiles and grids for modular suspending ceilings.

6.5.4. UK

6.5.4.1. Parties' view

(165) In the UK, the Parties submit that all materials of modular suspended ceilings fall under a single relevant product market definition. As a result, the Transaction would not result in a significant impediment of effective competition primarily because the Parties' combined market share and the increment brought by Knauf would be moderate. The Parties also take the view that there are other competitors that will continue to exert sufficient competitive pressure on the Parties.

6.5.4.2. Commission's assessment

(166) Certain aspects of the competitive assessment apply across all of the national markets for mineral fibre tiles and grids under review as explained in sections 6.3[175] and 6.4.[176] Those aspects apply fully to the UK markets and therefore argue in favour of raising serious doubts for the UK. The remainder of this section will only set out arguments specific to the UK that apply in addition to those cross-cutting aspects already set out in sections 6.3 and 6.4.

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172 Replies to question 39 of Questionnaire 4 – Customers (Spain).

173 See also Form CO, M.8832, Knauf Confidential Annex 5.4.7, p. 47, [strategic considerations by AWI regarding closeness of competition, including in Spain].

174 Replies to questions 56 and 57 of Questionnaire 4 – Customers (Spain).

175 (1) The supply of mineral fibre tiles is concentrated; (2) The supply of wet-felt mineral fibre tiles; which are a subsegment of mineral fibre tiles albeit not forming a separate product market, is even more concentrated; (3) The Parties would become the clear EEA-wide leader in terms of production capacity for mineral fibre tiles after the Transaction; (4) The Parties would become the leading supplier of

(a) Market shares and market concentration levels

Table 18 – Market shares of mineral fibre tiles and grids in the UK (2017, by value)

Total market	Knauf (AMF)	Armstrong	Combined	Saint-Gobain	SAS	Rockfon	OWA	CEP	Others
Tiles – Mineral Fibre €[…]	[5-10]%	[40-50]%	**[50-60]%**	[20-30]%	/	[10-20]%	[5-10]%	[0-5]%	[0-5]%
Tiles – Wet mineral fibre €[…]	[10-20]%	[60-70]%	**[70-80]%**	/	/	/	[10-20]%	[5-10]%	[0-5]%
Grids €[…]	[10-20]%	[40-50]%	**[50-60]%**	[5-10]%	[5-10]%	[5-10]%	[5-10]%	[0-5]%	[10-20]%

Source: Form CO

Table 19 – Market shares of mineral fibre tiles and grids in the UK (2017, by volume)

Total market	Knauf (AMF)	Armstrong	Combined	Saint-Gobain	Rockfon	OWA	CEP	SAS	Others
Tiles – Mineral Fibre […] m²	[10-20]%	[30-40]%	**[40-50]%**	[20-30]%	[10-20]%	[10-20]%	[5-10]%	/	[0-5]%
Tiles – Wet mineral fibre […] m²	[10-20]%	[50-60]%	**[70-80]%**	/	/	[10-20]%	[5-10]%	/	[0-5]%
Grids […] lm	[10-20]%	[30-40]%	**[40-50]%**	[5-10]%	[5-10]%	[10-20]%		[5-10]%	

Source: Form CO

(167) Post Transaction, the Parties will have very high combined market shares of [50-60]% (by value) or [40-50]% (by volume), respectively, in mineral fibre tiles and of [50-60]% (by value) and [40-50]% (by volume), respectively, in girds for modular suspended ceilings. Those market shares are indicative of a dominant market position.

(168) The Transaction will add a sizeable increment between [5-10]% and [10-20]% to the already very significant market position of Armstrong in the UK for mineral fibre tiles and grids. In addition, the market reconstruction carried out by the Commission

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mineral fibre tiles in the EEA (5) [Strategic considerations by the Parties in relation to capacity utilisation]; (6) Parties' internal documents show that Knauf and Armstrong were competing head-to-head prior to the Transaction; (7) Not all three remaining competitors appear to be competing equally head-to-head with the Parties, this applies in particular to Saint-Gobain; (8) The Commission considers it unlikely that the remaining competitors would have the ability and incentives to react sufficiently aggressively to counter-act any negative effects of the Transaction; (9) Market entry in mineral fibre tiles that would constrain the merged entity after the Transaction is not likely.

176 (1) Supply of grids in the EEA is concentrated; (2) The Parties would become the EEA-wide leader in terms of production capacity for grids after the Transaction; (3) The Parties would become the leading supplier of grids for suspended ceilings in the EEA; (4) [Strategic considerations by the Parties in relation to capacity utilisation].

shows that the Parties' actual market shares in the UK may be even higher than the estimates proposed by the Parties suggest.[177]

(169) With respect to mineral fibre tiles, the Transaction will in any case give rise to very high combined market shares around [50-60]%. The remaining competitors will remain well behind the merged entity, both in terms of value and volume: The strongest competitor in terms of market shares is Saint-Gobain with market shares around [20-30]% both value and volume based. The merged entity's position and the distance between it and remaining competitors would be even more significant in the wet mineral fibre segment, where the merged entity would have a market share in excess of 70%.

(170) The same applies for grids, where the merged entity's market share would be in excess of [50-60]% in value and in excess of [40-50]% in volume, whereas the remaining competitors would have a market share of ca. [10-20]% or less.

(171) Although the Target's market share has been declining both for mineral fibre tiles and for girds over the past 3 years, its position on the UK market is still very significant. In addition, because of the market share increment brought about by the Transaction, the merged entity's market share would be higher than was the Target's in 2015.

(b) Closeness of competition

(172) The Parties are close competitors in mineral fibre tiles in the UK.

(173) First, the Parties are two of only three wet felt tile manufacturers.

(174) Second, internal documents show that the Parties' product portfolios in the UK overlap to a very significant extent (up to [degree of portfolio overlap]%).[178]

(175) Third, independent research suggests that both Armstrong and Knauf are two of the five remaining mineral fibre tile manufacturers and the two main competitors in grids in the UK.[179]

(c) Price levels are already higher in the UK than in other EEA Member States

(176) The existing price levels in mineral fibre tiles in the UK indicate that, already before the Transaction, the remaining competitors did not expand aggressively to capture additional margins. This indicates that their reaction may be similar after the Transaction. The UK market could thus serve as an example of potential future effects of the Transaction on price levels in mineral fibre tiles. Indeed, internal documents indicate that price levels are higher in the UK than in other countries of the EEA.[180] Thus, the UK could be an example of a country where price levels are higher than elsewhere (indicating that there is additional margin to be captured) but the reaction from competitors has not been aggressive enough to bring prices down.

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177 The Commission market reconstruction shows combined market shares in excess of 60% both value and volume based.

178 Annex 5.4.18 to the Form CO, page 45.

179 Annex 29.1 to the Form CO, AMA report, Table 18.

180 See, for example, Annex 5.4.18 to the Form CO, page 5.

(d) Replies from the market investigation on the impact of the Transaction

(177) The market participants in the UK expressed negative sentiment with respect to this Transaction. Reduced product choice and increased prices were cited as the main concerns. For instance, one contractor stated "[t]*here will be less choice and more control from fewer parties. Historically (5 years) in this sector the fewer the manufacturers the higher the price points*".[181] Another said, "[p]*rices are likely to rise as production capacity and product ranges are rationalised and specification share is high*".[182]

(178) A majority of respondents to the Commission's market investigation expects the Transaction to have negative effects for customers. More specifically, half of the responding customers expects the Transaction to result in a price increase for both mineral fibre tiles[183] and grids[184] for modular suspended ceilings.

6.5.4.3. Conclusion

(179) In view of the reasons set out in paragraphs (166) to (178), the Commission finds that the Transactions raises serious doubts about its compatibility with the internal market as regards the UK markets for mineral fibre tiles and for grids for modular suspending ceilings.

6.5.5. Germany

6.5.5.1. The Parties' view

(180) The Parties are of the opinion that Germany and Austria belong to one market for suspended ceilings. Therefore, reference is made to the Parties' view with respect to Austria already set out in paragraphs (123) and (124).

6.5.5.2. Commission's assessment

(181) Certain aspects of the competitive assessment apply across all of the national markets for mineral fibre tiles and grids under review as explained in sections 6.3[185] and 6.4.[186] Those aspects apply in principle to the German markets. However, the specific market structure and competitive conditions in Germany override those

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181 Replies to question 56.2 of Questionnaire 5 – Customers (UK).

182 Replies to question 56.2 of Questionnaire 5 – Customers (UK).

183 Replies to question 56.1 of Questionnaire 5 – Customers (UK).

184 Replies to question 57.1 of Questionnaire 5 – Customers (UK).

185 (1) The supply of mineral fibre tiles is concentrated; (2) The supply of wet-felt mineral fibre tiles; which are a subsegment of mineral fibre tiles albeit not forming a separate product market, is even more concentrated; (3) The Parties would become the clear EEA-wide leader in terms of production capacity for mineral fibre tiles after the Transaction; (4) The Parties would become the leading supplier of mineral fibre tiles in the EEA (5) [Strategic considerations by the Parties in relation to capacity utilisation]; (6) Parties' internal documents show that Knauf and Armstrong were competing head-to-head prior to the Transaction; (7) Not all three remaining competitors appear to be competing equally head-to-head with the Parties, this applies in particular to Saint-Gobain; (8) The Commission considers it unlikely that the remaining competitors would have the ability and incentives to react sufficiently aggressively to counter-act any negative effects of the Transaction; (9) Market entry in mineral fibre tiles that would constrain the merged entity after the Transaction is not likely.

186 (1) Supply of grids in the EEA is concentrated; (2) The Parties would become the EEA-wide leader in terms of production capacity for grids after the Transaction; (3) The Parties would become the leading supplier of grids for suspended ceilings in the EEA; (4) [Strategic considerations by the Parties in relation to capacity utilisation].

general aspects, resulting in the Commission not finding serious doubts for Germany as set out in paragraphs (182) to (195).

(a) Market structure and market shares

Table 20 – Market shares of mineral fibre tiles and grids in Germany (2017, by value)

Total market	Knauf (AMF)	Armstrong	Combined	Rockfon	Saint-Gobain	OWA	Others
Tiles – Mineral Fibre € […]	[20-30]%	[5-10]%	**[20-30]%**	[20-30]%	[5-10]%	[40-50]%	/
Tiles – Wet mineral fibre € […]	[20-30]%	[10-20]%	**[30-40]%**	/	/	[60-70]%	/
Tiles – Soft mineral fibre € […]	[5-10]%	[0-5]%	**[5-10]%**	[60-70]%	[20-30]%	/	/
Grids € […]	[20-30]%	[5-10]%	**[30-40]%**	[20-30]%	[0-5]%	[20-30]%	[10-20]%

Source: Form CO

Table 21 – Market shares of mineral fibre tiles and grids in Germany (2017, by volume)

Total market	Knauf (AMF)	Armstrong	Combined	Rockfon	Saint-Gobain	OWA	Others
Tiles – Mineral Fibre […] m2	[10-20]%	[5-10]%	**[20-30]%**	[20-30]%	[5-10]%	[30-40]%	/
Tiles – Wet mineral fibre […] m2	[20-30]%	[10-20]%	**[30-40]%**	/	/	[60-70]%	/
Tiles – Soft mineral fibre […] m2	[5-10]%	[0-5]%	**[5-10]%**	[60-70]%	[20-30]%	/	/
Grids […] lm	[20-30]%	[5-10]%	**[30-40]%**	[20-30]%	[0-5]%	[20-30]%	[10-20]%

Source: Form CO

(182) The Transaction gives rise to relatively moderate combined value market shares of the Parties in Germany of [20-30]% and volume-based market shares of [20-30]% for mineral fibre tiles and both value and volume based market shares of [30-40]% for grids for modular suspended ceilings. The increments for these categories are [5-10]% and [5-10]% respectively.

(183) Both the current market leader OWA and Rockfon will remain active in mineral fibre tiles with significant positions around 20-30%, OWA will remain market leader with a share even beyond 30%. Moreover, Rockfon has been growing in market shares during the last five years, whereas OWA's and the Parties' shares are slightly on the decline and Saint-Gobain remains stable. Armstrong's market shares in German declined continuously throughout the last years.[187]

(184) Regarding grids, the Commission notes that Rockfon and OWA each have sizeable market shares [of 20-30]% and will thus be in a position to exercise significant competitive constraints on the merged entity post transaction.

(185) The Commission market reconstruction broadly confirmed the parties' market share estimates and thus supports this analysis.

(b) Market strategy Knauf

(186) The Commission observes that according to the assessment of Armstrong from 2016, Knauf follows a strategy [assessment of Knauf strategy by AWI][188] However, so far Knauf's market shares 2015-2017 did not show any result of the strategy.[189]

(c) Closeness of competition

(187) As regards mineral fibre tiles, the market feedback indicates an existing competition between the Parties as respondents from Germany name Armstrong as an alternative to Knauf, and *vice versa*. However, the respondents name other suppliers at least as frequently as the Parties and overall confirm OWA's leading market position in Germany.[190] A significant amount of the respondents from Germany are of the opinion that the Parties do not compete closely with each other.[191]

(188) When mineral fibre is considered the most suitable material for certain type of characteristics (standard, sound, fire reaction), both Parties are often named as potential suppliers. The respondents, however, name OWA regularly as the most preferred supplier and also Rockfon and Saint-Gobain as alternatives from time to time.[192]

(189) In other regards (such as the specific manufacturing method of wet-felt tiles, high-end or low-end products, etc.), the replies from market participants are overall not conclusive with respect of closeness of competition of the Parties.[193]

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187 Internal document of Armstrong: M8832_2015 01 Opportunity Model Germany report_CONFIDENTIAL, p. 9: [development of AWI sales in Germany between 2003 and 2014].
Minutes of a conference call with a customer in Germany on 30 May 2018: Armstrong's market shares declined between 2012 and 2018.
Minutes of a condense call with a competitor on 8 June 2018: As a general statement for all markets, it is perceived that Armstrong has been declining in the past 10 years.

188 Form CO, M.8832, RFI#1 AWI Confidential Annex 66.1, p.37.

189 Form CO RFI#1 Confidential Annex 53 (updated): In 2015, 2016 and 2017 Knauf's market shares in mineral fibre tiles in Germany it at [10-20]%, which is largely confirmed by the Commission market reconstruction.

190 Replies to questions 40 and 41 of Questionnaire 2 – Customers (Germany and Austria).

191 Replies to question 39 of Questionnaire 2 – Customers (Germany and Austria).

192 Replies to question 44 of Questionnaire 2 – Customers (Germany and Austria).

193 Replies to question 50.1, 52.1 of Questionnaire 2 – Customers (Germany and Austria).

(d) Impact of the transaction

(190) The majority of the respondents are neutral as regards the impact of the transaction on their company. A small minority expects a negative impact and none of the respondents a positive one.[194]

(191) No respondent expects the prices of tiles (across all materials) to decrease, some respondents expect a price increase but half of the German respondents assume that the prices will remain the same.[195]

(192) Considering mineral fibre tiles only, there is a slight shift towards the opinion that in this product area, prices may increase as consequence of the Transaction.[196] For grids, the opinions that prices will increase or that the prices will remain the same, are rather balanced.[197]

(193) Overall, the Commission observes that many respondents did not express any view on the impact of the transaction or remain neutral. This is roughly in balance with those participants expecting a negative impact of the Transaction, in particular because of increasing prices.

(e) Commission's conclusion

(194) Combined market shares in mineral fibre tiles of the Parties are moderate in Germany compared to other countries with OWA remaining the market leader post-transaction capturing a market share of about [40-50]%. As regards grids, the merged entity would assume market leadership in regards of the market shares. However, OWA and Rockfon remain strong competitors with their market shares almost equalling the Parties' combined market shares and thus exerting competitive pressure. Market participants perceive the Parties from time to time as close competitors but do not identify any particular closeness of competition between the Parties as opposed to the other competitors OWA, Rockfon and Saint-Gobain. None of the Parties is acting particularly aggressive on the German market and Armstrong's market shares are on the decline considering the last 10 years.

(195) In view of the above reasons, the Commission concludes that the evidence does not support serious doubts about the Transaction's compatibility with the internal market as regards the German markets for mineral fibre tiles and grids for modular suspending ceilings.

6.6. Competitive assessment of the overlaps in tiles made from other materials (metal, gypsum, wood)

(196) For the reasons set out in paragraphs (197) to (200), the Transaction does not raise serious doubts as to its compatibility with the internal market with respect to the national markets for tiles made from other materials than mineral fibre, namely from

194 Replies to question 55 of Questionnaire 2 – Customers (Germany and Austria).

195 Replies to question 57.2 of Questionnaire 2 – Customers (Germany and Austria): Out of 8 respondents 3 except the prices to increase, 4 the prices remain the same, 0 the prices to decrease and 1 indicated "other".

196 Replies to question 58.2 of Questionnaire 2 – Customers (Germany and Austria): Out of 8 respondents 4 except the prices to increase, 3 the prices remain the same, 0 the prices to decrease and 1 indicated "other".

197 Replies to questions 59, 59.1 and 59.2 of Questionnaire 2 – Customers (Germany and Austria).

metal, gypsum or wood, in any of Austria, Germany, Lithuania, Spain or the United Kingdom.

(197) First, the Transaction does not lead to overlaps in the sale of gypsum tiles in any of Austria, Germany, Lithuania, Spain or the United Kingdom because Armstrong does not sell any gypsum tiles in those countries.

(198) Second, the Transaction only leads to an affected market in the sale of metal tiles in Lithuania (market size of EUR […]). While Knauf achieved a market share in value of [20-30]% in 2017, Armstrong's market share was marginal at less than [0-5]% in 2017, indicating that it exercised a marginal competitive constraint on Knauf before the Transaction. In absolute terms, Armstrong achieved sales of metal tiles of a value of EUR […] in Lithuania in 2017 which is negligible. None of the customers and competitors replying to the Commission's market investigation raised any concerns with respect to the overlap between the Parties' activities in the sale of metal tiles in Lithuania.

(199) Third, the Transaction also leads to affected markets with respect to the sale of wood tiles in Germany, Lithuania, Spain and the United Kingdom but the overlaps are limited as apparent from the market shares set out in Table 22.[198]

Table 22 – Market shares of wood tiles in Germany, Lithuania, Spain and the United Kingdom (2017, by value)[199]

Tiles - Wood	Knauf (AMF)	Armstrong	Combined	Troldekt	Celenit	Gustafs	Others
Germany € […]	[50-60]%	[0-5]%	**[50-60]%**	[10-20]%	--	--	[20-30]%
Lithuania € […]	[60-70]%	[0-5]%	**[60-70]%**	N/A	--	--	[30-40]%
Spain € […]	[40-50]%	[0-5]%	**[40-50]%**	[0-5]%	[10-20]%	--	[30-40]%
The United Kingdom € […]	[10-20]%	[10-20]%	**[20-30]%**	[20-30]%	--	[20-30]%	[30-40]%

(200) Armstrong's activities in wood tiles made are marginal in each of Germany (market share of less than [0-5]%, sales of EUR […] in 2017), Lithuania (market share of less than [0-5]%, sales of EUR […] in 2017) and Spain (market share of less than [0-5]%, sales of EUR […]), indicating that it exercised a marginal competitive constraint on Knauf before the Transaction. As regards the United Kingdom, the Parties achieve a moderate combined market share of [20-30]% with an increment of [10-20]%. They will continue to face competition from Gustafs ([20-30]%) and Troldekt ([20-30]%) which will be of a similar size as the merged entity. None of the customers and competitors replying to the Commission's market investigation raised

198 There is no overlap in the sale of wood tiles in Austria as Armstrong does not sell wood tiles there.

199 Form CO, M.8832, RFI#1 Confidential Annex 53 (updated).

any concerns with respect to the overlap between the Parties' activities in the sale of wood tiles in any of Germany, Lithuania, Spain or the United Kingdom.

7. COMPETITIVE ASSESSMENT OF THE VERTICAL LINKS

7.1. Analytical framework – Vertical unilateral effects

(201) Vertical mergers involve companies operating at different levels of the same supply chain. For instance, a vertical merger occurs when a manufacturer of a certain product merges with one of its distributors.

(202) 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")[200], vertical mergers do not entail the loss of direct competition between merging firms in the same relevant market and provide scope for efficiencies.

(203) However, there are circumstances in which vertical mergers may significantly impede effective competition. This is in particular the case if they give rise to foreclosure.[201]

(204) 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 base.[202]

(205) Pursuant to the Non-Horizontal Merger Guidelines, 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.[203]

(206) For input foreclosure to be a concern, the Merged Entity should have a significant degree of market power in the upstream market. Only when the 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 market.[204]

(207) 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, the 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

200 OJ C 265, 18.10.2008, p. 6.
201 Non-Horizontal Merger Guidelines, para 18.
202 Non-Horizontal Merger Guidelines, para 30.
203 Non-Horizontal Merger Guidelines, para 31.
204 Non-Horizontal Merger Guidelines, para 35.

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.[205]

(208) For customer foreclosure to be a concern, a vertical merger must involve a company, 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 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 ground.[206]

7.2. Competitive Assessment

(209) The Transaction leads to only limited vertical links as regards certain input materials sold by Knauf in markets that are upstream to the sale of mineral fibre tiles by Knauf and Armstrong in the EEA; namely secondary glass mineral fibre and secondary stone wool fibre, both of which are used for the production of mineral fibre tiles. In light of the merged entity's very limited sales to third parties and the presence of multiple alternative suppliers and the absence of any concerns raised in the Commission's market investigation, the Commission concludes that the Transaction does not give rise to input foreclosure concerns. Furthermore, considering that the upstream products are used for a number of applications other than modular suspended ceilings (e.g. for insulation applications) and the absence of any concerns raised in the Commission's market investigation, the Commission concludes that the Transaction does not give rise to customer foreclosure concerns either.

(210) Therefore, the Commission considers that the Transaction does not raise serious doubts regarding its compatibility with the internal market as regards the vertical link that is created between the supply of certain raw material from Knauf to Armstrong.

8. PROPOSED REMEDIES

(211) In order to render the concentration compatible with the internal market, Knauf has modified the notified concentration by submitting commitments to the Commission. The legal framework applicable to the assessment of proposed commitments is set out below in Section 8.1.

(212) Knauf submitted two main sets of commitments. Notably, Knauf formally submitted commitments on 16 November 2018, which it formally revised on 19 November 2018 and 23 November 2018 (the 'Initial Commitments'). The Initial Commitments are described below in Section 8.2.

(213) The Commission subsequently gathered the views of market participants on the Initial Commitments (the 'market test') and informed Knauf of the results thereof. The outcome of the market test is discussed below in Section 8.3.

(214) The Notifying Party then submitted further revised commitments on 30 November 2018, and further amended those formally on 6 December 2018 (the 'Final Commitments'). The Commission considers that the Final Commitments are sufficient to ensure that, if implemented, the Transaction no longer raises serious

205 Non-Horizontal Merger Guidelines, para 58.

206 Non-Horizontal Merger Guidelines, para 61.

doubts as to its compatibility with the internal market. The Final Commitments are annexed to this Decision and form an integral part of the Decision. They are described and assessed below in Section 8.4.

8.1. Legal framework

(215) The following principles from the Remedies Notice[207] apply where parties to a merger choose to offer commitments in order to restore effective competition.

(216) Where a concentration raises competition concerns in the sense that it could significantly impede effective competition, in particular as a result of the creation or strengthening of a dominant position, the parties may seek to modify the concentration in order to resolve the competition concerns and thereby gain clearance of their merger.[208]

(217) The Commission only has power to accept commitments that are capable of rendering the concentration compatible with the internal market in that they will prevent a significant impediment to effective competition in all relevant markets where competition concerns were identified.[209] To that end, the commitments have to eliminate the competition concerns entirely[210] and have to be comprehensive and effective from all points of view.[211]

(218) In assessing whether proposed commitments are likely to eliminate its competition concerns, the Commission considers all relevant factors, including *inter alia* the type, scale and scope of the commitments, judged by reference to the structure and particular characteristics of the market in which those concerns arise, including the position of the parties and other participants on the market.[212] Moreover, commitments must be capable of being implemented effectively within a short period of time.[213]

(219) Where a proposed concentration threatens to significantly impede effective competition, the most effective way to maintain effective competition, apart from prohibition, is to create the conditions for the emergence of a new competitive entity or for the strengthening of existing competitors via divestiture by the merging parties.[214]

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207 Commission's Notice on Remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 ("Remedies Notice"), OJ C 267, 22.10.2008, p. 1.

208 Remedies Notice, paragraph 5.

209 Remedies Notice, paragraph 9.

210 Case C-202/06 P *Cementbouw Handel & Industrie v Commission* [2007] ECR 2007 I-12129, paragraph 54: "*it is necessary, when reviewing the proportionality of conditions or obligations which the Commission may, by virtue of Article 8(2) of Regulation No 4064/89, impose on the parties to a concentration, not to determine whether the concentration still has a Community dimension after those conditions or obligations have been complied with, but to be satisfied that those conditions and those obligations* are *proportionate to and would entirely eliminate the competition problem that has been identified*".

211 Remedies Notice, paragraph 9 and 61.

212 Remedies Notice, paragraph 12.

213 Remedies Notice, paragraph 9.

214 Remedies Notice, paragraph 22.

(220) The divested activities must consist of a viable business that, if operated by a suitable purchaser (hereinafter referred to as 'Purchaser'), can compete effectively with the merged entity on a lasting basis and that is divested as a going concern. The business must include all the assets which contribute to its current operation or which are necessary to ensure its viability and competitiveness and all personnel which are currently employed or which are necessary to ensure the business' viability and competitiveness.[215]

(221) Normally, a viable business is a business that can operate on a stand-alone-basis, which means independently of the merging parties as regards the supply of input materials or other forms of cooperation other than during a transitory period.[216]

(222) Even though normally the divestiture of an existing viable stand-alone business is required, the Commission, taking into account the principle of proportionality, may also consider the divestiture of businesses which have existing strong links or are partially integrated with businesses retained by the parties and therefore need to be 'carved out' in those respects.[217] The Commission will only be able to accept commitments which require the carve-out of a business if it can be certain that, at least at the time when the business is transferred to the purchaser, a viable business on a stand-alone basis will be divested and the risks for the viability and competitiveness caused by the carve-out will thereby be reduced to a minimum. The parties therefore have to ensure that the carve-out is started in the interim period, i.e. the period between the adoption of the Commission decision up to the completion of the divestiture (meaning the legal and factual transfer of the business to the purchaser). Consequently, at the end of this period, a viable business on a stand-alone basis will be divested. If this should not be possible or if the carve-out should be particularly difficult, parties may provide the requisite degree of certainty for the Commission by proposing an up-front buyer solution.[218]

8.2. Initial Commitments

(223) The Initial Commitments, as revised on 19[219] and 23 November 2018,[220] were aimed at transferring Knauf's operations in Austria, Lithuania, Spain, the United Kingdom, as well as in Estonia, Latvia, Portugal, Ireland, Italy and Turkey ("the Initially Proposed Divestment Business") and consisted of:

(a) Armstrong's production facility for mineral fibre tiles in Team Valley, UK.;

(b) Armstrong's production facility for grids in Team Valley, UK.;

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215 Remedies Notice, paragraph 23-25.

216 Remedies Notice, paragraph 32.

217 Remedies Notice, paragraph 35.

218 Remedies Notice, paragraph 36.

219 The most important changes consisted of: i) including a commitment that Knauf will finance the upgrade of the Team Valley facilities up to a maximum budget of EUR […] for the tiles plant and EUR […] for the grids plant; and ii) providing that Knauf will hire necessary personnel for some functions and bear the one-off cost of hiring a number of additional employees for some other functions.

220 The most important changes consisted of: i) adding Italy, Estonia, Latvia, Ireland and Portugal to the list of Relevant Countries; ii) extending the scope of the IP arrangements both in terms of products covered and duration; iii) raising the maximum budget for the upgrades (from EUR […] to […] for the tiles plant and from EUR […] to […] for the grids plant); and iv) extending the duration of the possible transitional agreements from […] to […] years.

(c) Armstrong's sales operations, i.e. the sales teams together with the relevant customer bases in Austria, Lithuania, Spain, the United Kingdom, Estonia, Ireland, Italy, Latvia, Portugal and Turkey (the 'Relevant Countries');

(d) Certain (tangible and intangible) assets and staff that contribute to the current operations of the Initially Proposed Divestment Business, including all licences, permits and authorisations issued by any governmental organisation for the benefit of the Initially Proposed Divestment Business; all contracts, leases, commitments and customer orders of the Initially Proposed Divestment Business; all customer, credit and other records of the Initially Proposed Divestment Business;

(e) Exclusive and royalty-free licenses for the company brand Armstrong, as well as for the relevant product trademarks (for mineral fibre tiles and grids) for exclusive use in the Relevant Countries for a term of […] years after Closing, with the option for the Initially Proposed Divestment Business to terminate the license at any time, followed by a black-out period of […] years. The Purchaser would also be offered non-exclusive licences for a term of […] years for the relevant product trademarks, with the option for the Initially Proposed Divestment Business to terminate the license at any time, provided that, outside the Relevant Countries, the product trademarks may only be used in conjunction with a brand name; moreover, the Purchaser would also be offered non-exclusive licenses for all relevant production related IP;

(f) At the option of the Purchaser, the benefit of a supply agreement under which the Purchaser would be able to source certain mineral fibre tiles and grids currently sold by Armstrong in the Relevant Countries, but not produced at the Team Valley mineral fibre tile facility and the Team Valley grid facility for a transitional period until the production of these tiles/grids has been insourced by the Purchaser and – in any event – no longer than for a term of […] years after Closing on terms and conditions to be agreed upon between the Notifying Party and the Purchaser;

(g) To fund the investments necessary to enable the Team Valley mineral fibre facility to manufacture Armstrong's [list of products] mineral fibre tile products, undertaken by the Purchaser, up to a sum of EUR […];

(h) To fund the investments necessary to enable the Team Valley grid facility to manufacture the Armstrong's [list of products] grid products, undertaken by the Purchaser, up to a sum of EUR […];

(i) To the extent not already with the Initially Proposed Divestment Business and unless not required by the Purchaser, to hire, at Knauf's sole cost, adequate personnel (total of […] Full Time Equivalents ("FTE")) to carry out the functions of procurement, R&D, marketing, technical sales and finance, as reasonably necessary to ensure the viability of the Initially Proposed Divestment Business;

(j) To bear the one-off costs for the hiring of […] additional engineering FTEs, […] additional customers service FTEs, and […] additional IT FTEs, to the extent not already with the Initially Proposed Divestment Business and reasonably required by the Purchaser;

(k) To bear the costs for the acquisition of the following R&D equipment by the Initially Proposed Divestment Business: [list of R&D equipment];

(l) At the option of the Purchaser, for a transitional period of up to […] years after Closing, certain transitional services, such as IT systems and processes, etc., to be provided by Knauf in order to facilitate a smooth transfer of the Initially Proposed Divestment Business;

(m) All current arrangements under which Knauf and Armstrong or their affiliated undertakings supply products or services to the Initially Proposed Divestment Business, unless otherwise agreed with the Purchaser for a transitional period of up to […] years after Closing and on terms and conditions equivalent to those at present afforded to the Initially Proposed Divestment Business.

(224) In addition, the Initial Commitments included related commitments, *inter alia* regarding the separation of the Initially Proposed Divestment Business from the retained businesses, the preservation of the viability, marketability and competitiveness of the Initially Proposed Divestment Business, including the appointment of a monitoring trustee and, if necessary, a divestiture trustee.

8.3. The Commission's market test

(225) In view of assessing the appropriateness of the Initial Commitments, the Commission carried out a market test, which was launched on 23 November 2018.

(226) In general, the view of the market test respondents was that the Initial Commitments could in principle remedy the serious doubts identified by the Commission, but subject to modification of the Initial Commitments so as to address a number of specific issues described below in paragraphs (227) *et seq*.

8.3.1. Geographic footprint

(227) Whereas a number of respondents considered that the geographic footprint of the Initially Proposed Divestment Business would be sufficient, some respondents to the market test raised substantiated concerns in this regard, explaining why they considered the Initially Proposed Divestment Business' geographic footprint to be insufficiently homogeneous.[221] In this context, some market participants argued that transporting the relatively lower-value product mix currently produced in the Team Valley plants from the UK would give rise to relatively high shipping costs, increasing with the distance to be crossed.[222] In line with these considerations, several responding competitors considered that the geographic footprint envisaged in the Initial Commitments would put the Initially Proposed Divestment Business at a disadvantage compared to its competitors.[223] Additional concerns expressed related to possible upcoming difficulties for a business producing in the UK to access markets in the European Union.[224]

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221 Replies to questions 5.1 and 6 of the Questionnaire to Competitors on the Commitments offered by Knauf.

222 Replies to question 7.1 of the Questionnaire to Competitors on the Commitments offered by Knauf.

223 Replies to question 6 of the Questionnaire to Competitors on the Commitments offered by Knauf.

224 Replies to question 4 of the Questionnaire to Competitors on the Commitments offered by Knauf.

8.3.2. Product portfolio

(228) The Initial Commitments included a proposed upgrade of the Team Valley plants, in view of enabling this plant to produce a product range comparable to the one currently produced and sold by Armstrong in the Relevant Countries. Several respondents to the market test clearly took the view that such an upgrade was indeed needed, stressing that the Team Valley facilities currently produce a limited range of relatively low-value products.[225] In this context, the Commission also notes that the commercial terms of the transitional supply agreement for products not currently produced at the Team Valley facilities were, according to the Initial Commitments, to be negotiated between Knauf and the Purchaser, which may put the Initially Proposed Divestment Business at a competitive disadvantage vis-à-vis the merged entity and other competitors.

(229) In addition, while a number of respondents to the Commission's market test confirmed that carrying out the envisaged upgrade is technically possible,[226] several respondents indicated that the envisaged industrial upgrades would be complex to carry out.[227] More specifically, it was suggested that these upgrades would have a more significant cost than the Initial Commitments allowed for (i.e. a maximum budget of EUR […] in total for both plants).

8.3.3. R&D capabilities

(230) In their responses to the Commission's market test, respondents stressed the importance of sufficient product development capabilities in order for a modular ceilings producer to remain successful.[228] In this regard, while some market respondents considered the R&D arrangements of the Initial Commitments to be sufficient, others explicitly questioned the sufficiency of the R&D capabilities foreseen in the Initial Commitments, both in terms of the budget made available for the purchasing of additional equipment and of personnel to be hired.[229] In addition, several market respondents pointed out that it may prove challenging to hire adequate R&D personnel.[230]

8.3.4. Potential purchasers

(231) In light of the results of the market test, the Commission considers that it may prove challenging to find a suitable purchaser for the Initially Proposed Divestment Business.

(232) While most market respondents indicated that the Initial Commitments were sufficient to attract a suitable purchaser,[231] most also stressed the need for a purchaser with relevant experience in the business of developing and manufacturing

225 Replies to questions 10.1 and 10.2 of the Questionnaire to Competitors on the Commitments offered by Knauf.

226 Replies to question 9 of the Questionnaire to Competitors on the Commitments offered by Knauf.

227 Replies to questions 9.1 and 10.1of the Questionnaire to Competitors on the Commitments offered by Knauf.

228 Replies to question 13 of the Questionnaire to Competitors on the Commitments offered by Knauf.

229 Replies to question 14 of the Questionnaire to Competitors on the Commitments offered by Knauf.

230 Replies to question 14.1 of the Questionnaire to Competitors on the Commitments offered by Knauf.

231 Replies to question 26 of the Questionnaire to Competitors on the Commitments offered by Knauf; and replies to question 10 of the Questionnaire to Customers on the Commitments offered by Knauf.

mineral fibre tiles and grids for modular suspended ceilings,[232] in particular due to the complexities of the carve-out divestment to be achieved, the required plant upgrade and the need to retain Armstrong's customer relationships.

(233) However, [information on divestment process].

(234) Furthermore, according to some market respondents, an additional obstacle to finding an adequate Purchaser may arise in light of possible future restrictions on exports from the UK into the European Union following the date that the UK is scheduled to leave the European Union on 29 March 2019.[233]

8.4. Final Commitments submitted by Knauf

8.4.1. Description of the Final Commitments

(235) In response to the Commission's feedback regarding the outcome of the market test and its preliminary assessment, Knauf submitted the Final Commitments on 30 December 2018, as revised on 6 December 2018. The divested business as provided for in the Final Commitments is referred to as the "Divestment Business".

(236) The Final Commitments feature the following improvements and additions compared to the Initial Commitments, while preserving the remainder of the elements constituting the Initial Commitments and described above in paragraph (223):

(a) the scope of the Relevant Countries was extended to include not only Austria, Lithuania, Estonia, Latvia, Spain, Portugal, the UK, Ireland, Italy and Turkey, but also Germany (together the "Final Relevant Countries");

(b) regarding the required investments in view of the industrial upgrade of the Team Valley production facilities:

i. the maximum budget made available for these upgrades was raised to EUR […] (for the mineral fibre tiles plant) and EUR […] (for the grids plant);

ii. the Final Commitments provide that the Hold Separate Manager will, to the extent feasible and reasonable, at his own discretion, prepare these investments;

(c) the Final Commitments provide that the possible transitional supply agreements between the merged entity and the Divestment Business:

i. could cover not only the products whose production would be insourced as a result of the plant upgrade but also the "specials" not covered by the upgrade;

ii. would be concluded [terms of the transitional supply agreements];

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232 Replies to question 28 of the Questionnaire to Competitors on the Commitments offered by Knauf; and to question 4 of the Questionnaire to Customers on the Commitments offered by Knauf.

.233 Replies to question 10.1 of the Questionnaire to Customers on the Commitments offered by Knauf.

(d) in terms of additional R&D Personnel, the Final Commitments provide that:

i. Knauf will bear the capped one-off costs of hiring up to […] additional FTEs for R&D, to the extent not already with the Divestment Business and reasonably required by the Purchaser;

ii. Knauf will purchase the required R&D equipment for the Purchaser, in coordination with the Hold Separate Manager and the Monitoring Trustee;

(e) as for other additional Personnel, the Final Commitments provide that:

i. Knauf will hire […] FTEs for technical sales and […] FTEs for finance will be hired, whereas the Initial Commitments provided for the hiring of only […] FTEs for each of these functions;

ii. the number of FTEs for whose hiring Knauf will bear the one-off costs (as well as the corresponding caps) are raised for customer service personnel (to […] FTEs) and IT (to […] FTEs).

(f) the Final Commitments give the Divestment Business the possibility, under certain conditions, to source from Knauf also those products currently produced in the Team Valley facilities, in case of difficulties of access to the single market after 30 March 2019;

(g) the Final Commitments provide that the Transaction shall not be implemented before Knauf or the Divestiture Trustee has entered into a final binding sale and purchase agreement for the sale of the Divestment Business and the Commission has approved the Purchaser and the terms of sale.

8.4.2. Assessment of the proposed remedies

(237) For the reasons outlined in Sections 8.4.2.1 through 8.4.2.3 below, the Commission deems the Final Commitments entered into by the undertakings concerned sufficient to eliminate its serious doubts as to the compatibility of the Transaction with the internal market.

(238) As such, the commitments in section B of the Annex constitute conditions attached to this decision, as only through full compliance therewith can the structural changes in the relevant markets be achieved. The other commitments set out in the Annex constitute obligations, as they concern the implementing steps, which are necessary to achieve the modifications sought in a manner compatible with the internal market.

8.4.2.1. Removal of competition concerns

(239) The Final Commitments will remove the entire overlap between the Parties' activities in each of the national markets for which the Commission had concerns (*i.e.* the markets for mineral fibre tiles and for grids for modular suspended ceilings in Austria, Spain and the UK and the market for mineral fibre tiles for modular suspended ceilings in Lithuania), and with respect to the UK for the markets for mineral fibre tiles and for grids for modular suspended ceilings markets even more than the increment, since the business of the stronger of the two Parties will be divested. As such, the commitments will remove all competition concerns.

8.4.2.2. Viability and competitiveness of the divested business

(240) The Commission is satisfied that the Divestment Business will be viable and competitive, in particular in light of the following considerations.

(241) First, the Commission takes the view that in its Final Commitments, Knauf has adequately addressed the concerns that had become apparent in the context of the market test and discussed above in paragraphs (227) through (234).

(242) Second, the Commission also assessed whether the expected sales of the Divestment Business would enable it to achieve a sufficient capacity utilization rate at the Team Valley facilities in order to develop into a viable competitor. Based on information provided by the Parties regarding the current output of these facilities and the sales, which the Divestment Business can be expected to achieve in the 11 Final Relevant Countries, the Commission concluded that this should indeed be the case. The sales in the Final Relevant Countries are likely to exceed the sales currently achieved by the Team Valley plants and are therefore likely to preserve at least the existing capacity utilization rates.

(243) Third, the Commission considers that the commitments regarding the separation of the Divestment Business from the retained businesses, the preservation of the viability, marketability and competitiveness of the divested businesses in combination with the transitional service and supply agreements provide for sufficient safeguards to protect the Divestment Business during the interim period and allow for a smooth transition to the Purchaser.

8.4.2.3. Purchaser criteria

(244) The Commission takes the view that the commitment taken by Knauf in paragraph 3 of the Final Commitments adequately addresses the Commission's concerns regarding the finding of a suitable Purchaser, inasmuch as Knauf will effectively be prevented from closing the Transaction until a binding agreement is entered into for the sale of the Divestment Business, with both the Purchaser and the sales terms being subject to the Commission's approval.

9. CONCLUSION

(245) For the above reasons, the Commission has decided not to oppose the notified operation as modified by the commitments and to declare it compatible with the internal market and with the functioning of the EEA Agreement, subject to full compliance with the conditions in section B of the commitments annexed to the present decision and with the obligations contained in the other sections of the said commitments. This decision is adopted in application of Article 6(1)(b) in conjunction with Article 6(2) of the Merger Regulation and Article 57 of the EEA Agreement.

For the Commission

(Signed)
Margrethe VESTAGER
Member of the Commission

6 December 2018

Case M.8832 – Knauf/Armstrong

COMMITMENTS TO THE EUROPEAN COMMISSION

Pursuant to Article 6(2) of Council Regulation (EC) No 139/2004 (the "***Merger Regulation***"), Knauf International GmbH (*"**Knauf**"* and the "***Notifying Party***") hereby enters into the following Commitments (the "***Commitments***") vis-à-vis the European Commission (the "***Commission***") with a view to rendering the proposed acquisition by Knauf of 100% of the shares in (i) the subsidiaries of Armstrong World Industries, Inc. ("***AWI***") in Europe, the Middle East and Africa ("***EMEA***") and Asia-Pacific ("***APAC***") and (ii) designated subsidiaries of AWI's 50/50 joint venture with Worthington Industries ("***WAVE***") with operations in EMEA and APAC (the "***Concentration***") compatible with the internal market and the functioning of the EEA Agreement.

This text shall be interpreted in light of the Commission's decision pursuant to Article 6(1)(b) of the Merger Regulation to declare the Concentration compatible with the internal market and the functioning of the EEA Agreement (the "***Decision***"), in the general framework of European Union law, in particular in light of the Merger Regulation, and by reference to the Commission Notice on remedies acceptable under Council Regulation (EC) No 139/2004 and under Commission Regulation (EC) No 802/2004 (the "***Remedies Notice***").

Section A. Definitions

1. For the purpose of the Commitments, the following terms shall have the following meaning:

Affiliated Undertakings: undertakings controlled by the Parties and/or by the ultimate parents of the Parties, whereby the notion of control shall be interpreted pursuant to Article 3 of the Merger Regulation and in light of the Commission Consolidated Jurisdictional Notice under Council Regulation (EC) No 139/2004 on the control of concentrations between undertakings (the "***Consolidated Jurisdictional Notice***").

Assets: the assets that contribute to the current operation or are necessary to ensure the viability and competitiveness of the Divestment Business as indicated in Section B, paragraph 7 and described more in detail in the Schedule.

AWI: Armstrong World Industries, incorporated under the laws of Pennsylvania, with its registered office at 25 Columbia Avenue, Lancaster, Pennsylvania and registered with the Commercial Register of Pennsylvania under number 18304.

Closing: the transfer of the legal title to the Divestment Business to the Purchaser.

Closing Period: the period of […] from the approval of the Purchaser and the terms of sale by the Commission.

Concentration: the notified transaction.

Confidential Information: any business secrets, know-how, commercial information, or any other information of a proprietary nature that is not in the public domain.

Conflict of Interest: any conflict of interest that impairs the Trustee's objectivity and independence in discharging its duties under the Commitments.

Divestment Business: the business as defined in Section B and in the Schedule which the Notifying Party commits to divest.

Divestiture Trustee: one or more natural or legal person(s) who is/are approved by the Commission and appointed by Knauf and who has/have received from Knauf the exclusive Trustee Mandate to sell the Divestment Business to a Purchaser at no minimum price.

Effective Date: the date of adoption of the Decision.

First Divestiture Period: the period of […] from the Effective Date.

FTE: Full Time Equivalent.

Hold Separate Manager: the person appointed by Knauf for the Divestment Business to manage the day-to-day business under the supervision of the Monitoring Trustee.

Key Functions: Procurement, R&D, marketing, technical sales and finance.

Key Personnel: all personnel necessary to maintain the viability and competitiveness of the Divestment Business, as listed in the Schedule, including the Hold Separate Manager.

Knauf: Knauf International GmbH, incorporated under the laws of Germany, with its registered office at Am Bahnhof 7, 97346 Iphofen, Germany and registered with the local court of Würzburg under number HRB 5956.

Monitoring Trustee: one or more natural or legal person(s) who is/are approved by the Commission and appointed by Knauf, and who has/have the duty to monitor Knauf's compliance with the conditions and obligations attached to the Decision.

Notifying Party: Knauf.

Parties: Knauf and AWI.

Personnel: all staff currently employed by the Divestment Business, including staff seconded to the Divestment Business, shared personnel as well as the additional personnel listed in the Schedule.

Purchaser: the entity approved by the Commission as acquirer of the Divestment Business in accordance with the criteria set out in Section D.

Purchaser Criteria: the criteria laid down in paragraph 19 of these Commitments that the Purchaser must fulfil in order to be approved by the Commission.

Relevant Countries: Austria, Estonia, Germany, Ireland, Italy, Latvia, Lithuania, Portugal, Spain, Turkey and the UK (each a "***Relevant Country***").

Relevant Products: Mineral fibre tiles and grids for modular suspended ceilings currently produced by the Target for sale in the EEA and Turkey, with the exception of Specials.

Schedule: the schedule to these Commitments describing more in detail the Divestment Business.

SPA: The Share Purchase Agreement entered into between Knauf and AWI signed on 17 November 2017, as amended and restated on 22 January 2018 and on 18 July 2018.

Specials: The small remainder products not producible in the Team Valley MF Facility after the insourcing funded by the Notifying Party, but sold by the Divestment Business in 2017 and still in the Target's product portfolio. See **AWI Confidential Annex 14** for an exhaustive list.

Target: AWI's business acquired by Knauf.

Target Sales Team: The Target's sales teams for the sale of modular suspended ceilings in Austria, Estonia, Germany, Ireland, Italy, Latvia Lithuania, Portugal, Spain, Turkey and the UK (each a "***Target Sales Team***").

Team Valley Grid Facility: The Target's production facility for grids in Team Valley, UK.

Team Valley MF Facility: The Target's production facility for mineral fibre tiles in Team Valley, UK.

Trustee(s): the Monitoring Trustee and/or the Divestiture Trustee as the case may be.

Trustee Divestiture Period: the period of […] from the end of the First Divestiture Period.

Section B. The commitment to divest and the Divestment Business

Commitment to divest

2. In order to maintain effective competition, the Notifying Party commits to divest, or procure the divestiture of the Divestment Business by the end of the Trustee Divestiture Period as a going concern to a purchaser and on terms of sale approved by the Commission in accordance with the procedure described in paragraph 20 of these Commitments. To carry out the divestiture, the Notifying Party commits to find a purchaser and to enter into a final binding sale and purchase agreement for the sale of the Divestment Business within the First Divestiture Period. If the Notifying Party has not entered into such an agreement at the end of the First Divestiture Period, the Notifying Party shall grant the Divestiture Trustee an exclusive mandate to sell the Divestment Business in accordance with the procedure described in paragraph 32 in the Trustee Divestiture Period.

3. The proposed concentration shall not be implemented before the Notifying Party or the Divestiture Trustee has entered into a final binding sale and purchase agreement for the sale of the Divestment Business and the Commission has approved the purchaser and the terms of sale in accordance with paragraph 20.

4. The Notifying Party shall be deemed to have complied with this commitment if:

   (a) by the end of the Trustee Divestiture Period, the Notifying Party or the Divestiture Trustee has entered into a final binding sale and purchase agreement and the Commission approves the proposed purchaser and the terms of sale as being consistent with the Commitments in accordance with the procedure described in paragraph 20; and

   (b) the Closing of the sale of the Divestment Business to the Purchaser takes place within the Closing Period.

5. In order to maintain the structural effect of the Commitments, the Notifying Party shall, for a period of 10 years after Closing, not acquire, whether directly or indirectly, the possibility of exercising influence (as defined in paragraph 43 of the Remedies Notice, footnote 3) over the whole or part of the Divestment Business, unless, following the submission of a reasoned request from the Notifying Party showing good cause and accompanied by a report from the Monitoring Trustee (as provided in paragraph 46 of these Commitments), the Commission finds that the structure of the market has changed to such an extent that the absence of influence over the Divestment Business is no longer necessary to render the proposed concentration compatible with the internal market.

Structure and definition of the Divestment Business

6. The Divestment Business comprises the Target's mineral fibre tiles and grids business in the Relevant Countries, in particular (i) the Target's sales operations in the Relevant Countries, including the Target Sales Teams together with their entire relevant

customer base; (ii) the Team Valley MF Facility, and (iii) the Team Valley Grid Facility.

7. The Divestment Business, described in more detail in the Schedule, includes certain assets and staff that contribute to the current operation or are necessary to ensure the viability and competitiveness of the Divestment Business, in particular:

   (a) all tangible and intangible assets;

   (b) all licences, permits and authorisations issued by any governmental organisation for the benefit of the Divestment Business;

   (c) all contracts, leases, commitments and customer orders of the Divestment Business; all customer, credit and other records of the Divestment Business; and

   (d) the Personnel.

8. In addition, the Divestment Business includes,

   (a) exclusive and royalty-free licenses for the company brand Armstrong as well as for the relevant product trademarks (for mineral fibre tiles, including Specials, and grids) for exclusive use for the Relevant Products in the Relevant Countries for a term of […] years after Closing (which may be used in parallel to different existing brands by the Divestment Business)[1], with the option for the Divestment Business to terminate the license at any time, followed by a black-out period of […] years; non-exclusive licences for a term of […] years for the relevant product trademarks, with the option for the Divestment Business to terminate the license at any time, will also be offered on an EEA-wide basis, provided that, outside the Relevant Countries, the product trademarks may only be used in conjunction with a brand name; moreover, the Purchaser will also be offered non-exclusive licenses for all relevant production related IP as set out in greater detail in the Schedule;

   (b) at the option of the Purchaser, the benefit of a supply agreement under which the Purchaser will be able to source, sold by the Notifying Party [terms of the supply agreements], certain mineral fibre tiles and grids currently sold by the Target but not produced at the Team Valley MF Facility[2] and the Team Valley Grid Facility[3] for a transitional period until the production of these tiles/grids has been insourced by the Purchaser and – in any event – no longer than for a term of […] years from Closing;

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1 Note that the license would not bar the Notifying Party from manufacturing products under the brand(s) and product trademarks in the Relevant Countries.

2 This relates to the Target's [list of products], as well as [list of products], the Target's [list of products].

3 This relates to the following grid products manufactured by the Target: [list of products].

(c) in case of difficulties of access to the single market after 30 March 2019, at the request of the Purchaser and approved by the European Commission based on a reasoned submission of the Monitoring Trustee, the benefit of a supply agreement under which the Purchaser will be able to source the Relevant Products and Specials from the Notifying Party (i.e., those Relevant Products and Specials which the Notifying Party produces in its plants) irrespective of the insourcing for a period of […], which may be extended on a yearly basis up to a total of […] years from Closing, […] that allows the Divestment Business to be competitive;

(d) a commitment of the Notifying Party to fund the investments necessary to enable the Team Valley MF Facility to manufacture the Target's [list of products] mineral fibre tile products, undertaken by the Purchaser and, to the extent feasible and reasonable, prepared by the Hold Separate Manager at his own discretion, up to a sum of EUR […], whereas the question whether the investments are necessary, feasible and reasonable shall be established taking into consideration AWI Confidential Annex IV and will be subject to review by the Monitoring Trustee;

(e) a commitment of the Notifying Party to fund the investments necessary to enable the Team Valley Grid Facility to manufacture the Target's following grid products: [list of products], undertaken by the Purchaser and, to the extent feasible and reasonable, prepared by the Hold Separate Manager at his own discretion, up to a sum of EUR […];

(f) to the extent not already with the Divestment Business and unless not required by the Purchaser, a commitment of the Notifying Party to hire, in coordination with the Hold Separate Manager and the Purchaser, at its sole cost, adequate personnel to carry out the Key Functions as reasonably necessary to ensure the viability of the Divestment Business – i.e. […]FTEs in procurement, […]FTE in R&D, […]FTEs in marketing, […]FTEs in technical sales and […]FTEs in finance; this personnel shall be available to the Purchaser at the day of Closing;

(g) the benefit of the Notifying Party bearing the one-off costs of up to EUR […] for the hiring of up to […] additional R&D FTEs, to the extent not already with the Divestment Business and reasonably required by the Purchaser;

(h) the benefit of the Notifying Party bearing the one-off costs of up to EUR […] for the hiring of […] additional engineering FTEs, to the extent not already with the Divestment Business and reasonably required by the Purchaser;

(i) the benefit of the Notifying Party bearing the one-off costs of up to EUR […] for the hiring of […] additional customer service FTEs, to the extent not already with the Divestment Business and reasonably required by the Purchaser;

(j) the benefit of the Notifying Party bearing the one-off costs of up to EUR […] for the hiring of […] additional IT FTEs, to the extent not already with the Divestment Business and reasonably required by the Purchaser;

(k) the benefit of the Notifying Party purchasing, in coordination with the Hold Separate Manager and the Monitoring Trustee, the following R&D equipment for the Divestment Business, to the extent not already with the Divestment Business and reasonably required by the Purchaser, to be available to the Divestment Business at the day of Closing: [list of R&D equipment];[4]

(l) at the option of the Purchaser, for a transitional period of up to […] years after Closing, the benefit of certain transitional services, such as IT systems and processes, etc., to be provided by the Notifying Party [terms of transitional services agreements] in order to facilitate a smooth transfer of the Divestment Business;

(m) all current arrangements under which the Parties or their Affiliated Undertakings supply products or services to the Divestment Business, as detailed in the Schedule, unless otherwise agreed with the Purchaser for a transitional period of up to […] years after Closing and on terms and conditions equivalent to those at present afforded to the Divestment Business.

9. Strict firewall procedures will be adopted so as to ensure that any competitively sensitive information related to, or arising from such supply arrangements (for example, product roadmaps) will not be shared with, or passed on to, anyone outside the relevant operations.

Section C. Related commitments

Preservation of viability, marketability and competitiveness

10. From the Effective Date until Closing, the Notifying Party shall preserve or procure the preservation of the economic viability, marketability and competitiveness of the Divestment Business, in accordance with good business practice, and shall minimise as far as possible any risk of loss of competitive potential of the Divestment Business. In particular Knauf undertakes:

(a) not to carry out any action that might have a significant adverse impact on the value, management or competitiveness of the Divestment Business or that might alter the nature and scope of activity, or the industrial or commercial strategy or the investment policy of the Divestment Business;

(b) to make available, or procure to make available, sufficient resources for the development of the Divestment Business, on the basis and continuation of the existing business plans;

(c) to take all reasonable steps, or procure that all reasonable steps are being taken, including appropriate incentive schemes (based on industry practice), to encourage all Key Personnel to remain with the Divestment Business, and not

[4] Note that, already today, the Divestment Business has the following R&D equipment: [list of R&D equipment].

to solicit or move any Personnel to the Notifying Party's remaining businesses. Where, nevertheless, individual members of the Key Personnel exceptionally leave the Divestment Business, the Notifying Party shall provide a reasoned proposal to replace the person or persons concerned to the Commission and the Monitoring Trustee. The Notifying Party must be able to demonstrate to the Commission that the replacement is well suited to carry out the functions exercised by those individual members of the Key Personnel. The replacement shall take place under the supervision of the Monitoring Trustee, who shall report to the Commission.

Hold-separate obligations

11. The Notifying Party commits, from the Effective Date until Closing, to procure that the Divestment Business is kept separate from the business that the Notifying Party will be retaining and, after closing of the notified transaction to keep the Divestment Business separate from the business that the Notifying Party is retaining and to ensure that unless explicitly permitted under these Commitments: (i) management and staff of the businesses retained by the Notifying Party have no involvement in the Divestment Business; (ii) the Key Personnel and Personnel of the Divestment Business have no involvement in any business retained by the Notifying Party and do not report to any individual outside the Divestment Business.

12. Until Closing, the Notifying Party shall assist the Monitoring Trustee in ensuring that the Divestment Business is managed as a distinct and saleable business separate from the businesses which the Notifying Party is retaining. Immediately after the adoption of the Decision, the Notifying Party shall appoint a Hold Separate Manager. The Hold Separate Manager, who shall be part of the Key Personnel, shall manage the Divestment Business independently and in the best interest of the business with a view to ensuring its continued economic viability, marketability and competitiveness and its independence from the businesses retained by the Notifying Party. The Hold Separate Manager shall closely cooperate with and report to the Monitoring Trustee and, if applicable, the Divestiture Trustee. Any replacement of the Hold Separate Manager shall be subject to the procedure laid down in paragraph 10(c) of these Commitments. The Commission may, after having heard the Notifying Party, require the Notifying Party to replace the Hold Separate Manager.

13. To ensure that the Divestment Business is held and managed as a separate entity the Monitoring Trustee shall exercise the Notifying Party's rights as shareholder in the legal entities that form part of the Divestment Business (except for its rights in respect of dividends that are due before Closing and except for any rights relating to carving out assets and relating to complying with the commitments of the Notifying Party to prepare for the sale of the Divestment Business), with the aim of acting in the best interest of the business, which shall be determined on a stand-alone basis, as an independent financial investor, and with a view to fulfilling the Notifying Party's obligations under the Commitments. Furthermore, the Monitoring Trustee shall have the power to replace members of the supervisory board or non-executive directors of the board of directors, who have been appointed on behalf of the Notifying Party.

Upon request of the Monitoring Trustee, the Notifying Party shall resign as a member of the boards or shall cause such members of the boards to resign.

Ring-fencing

14. The Notifying Party shall implement, or procure to implement, all necessary measures to ensure that it does not, after the Effective Date, obtain any Confidential Information relating to the Divestment Business and that any such Confidential Information obtained by the Notifying Party before the Effective Date will be eliminated and not be used by the Notifying Party. This includes measures vis-à-vis any appointees on the supervisory board and/or board of directors of the Divestment Business. In particular, the participation of the Divestment Business in any central information technology network shall be severed to the extent possible, without compromising the viability of the Divestment Business. The Notifying Party may obtain or keep information relating to the Divestment Business which is reasonably necessary for the divestiture of the Divestment Business, the carrying out of their obligations under these Commitments or the disclosure of which to the Notifying Party is required by law.

Non-solicitation clause

15. The Parties undertake, subject to customary limitations, not to solicit, and to procure that Affiliated Undertakings do not solicit, the Key Personnel transferred with the Divestment Business for a period of three years after Closing.

Due diligence

16. In order to enable potential purchasers to carry out a reasonable due diligence of the Divestment Business, the Notifying Party shall, subject to customary confidentiality assurances and dependent on the stage of the divestiture process:
    (a) provide to potential purchasers sufficient information as regards the Divestment Business;
    (b) provide to potential purchasers sufficient information relating to the Personnel and allow them reasonable access to the Personnel.

Reporting

17. The Notifying Party shall submit written reports in English on potential purchasers of the Divestment Business and developments in the negotiations with such potential purchasers to the Commission and the Monitoring Trustee no later than 10 days after the end of every month following the Effective Date (or otherwise at the Commission's request). The Notifying Party shall submit a list of all potential purchasers having expressed interest in acquiring the Divestment Business to the Commission at each and every stage of the divestiture process, as well as a copy of all the offers made by potential purchasers within five days of their receipt.

18. The Notifying Party shall inform the Commission and the Monitoring Trustee on the preparation of the data room documentation and the due diligence procedure and shall

submit a copy of any information memorandum to the Commission and the Monitoring Trustee before sending the memorandum out to potential purchasers.

Section D. The Purchaser

19. In order to be approved by the Commission, the Purchaser must fulfil the following criteria:

    (a) The Purchaser shall be independent of and unconnected to the Notifying Party and its Affiliated Undertakings (this being assessed having regard to the situation following the divestiture).

    (b) The Purchaser shall have the financial resources, proven expertise and incentive to maintain and develop the Divestment Business as a viable and active competitive force in competition with the Parties and other competitors;

    (c) The acquisition of the Divestment Business by the Purchaser must neither be likely to create, in light of the information available to the Commission, prima facie competition concerns nor give rise to a risk that the implementation of the Commitments will be delayed. In particular, the Purchaser must reasonably be expected to obtain all necessary approvals from the relevant regulatory authorities for the acquisition of the Divestment Business.

20. The final binding sale and purchase agreement (as well as ancillary agreements) relating to the divestment of the Divestment Business shall be conditional on the Commission's approval. When the Notifying Party has reached an agreement with a purchaser, it shall submit a fully documented and reasoned proposal, including a copy of the final agreement(s), within one week to the Commission and the Monitoring Trustee. The Notifying Party must be able to demonstrate to the Commission that the purchaser fulfils the Purchaser Criteria and that the Divestment Business is being sold in a manner consistent with the Commission's Decision and the Commitments. For the approval, the Commission shall verify that the purchaser fulfils the Purchaser Criteria and that the Divestment Business is being sold in a manner consistent with the Commitments including their objective to bring about a lasting structural change in the market. The Commission may approve the sale of the Divestment Business without one or more Assets or parts of the Personnel, or by substituting one or more Assets or parts of the Personnel with one or more different assets or different personnel, if this does not affect the viability and competitiveness of the Divestment Business after the sale, taking account of the proposed purchaser.

Section E. Trustee

I. Appointment procedure

21. The Notifying Party shall appoint a Monitoring Trustee to carry out the functions specified in these Commitments for a Monitoring Trustee. The Notifying Party commits not to close the Concentration before the appointment of a Monitoring Trustee.

22. If the Notifying Party has not entered into a binding sale and purchase agreement regarding the Divestment Business one month before the end of the First Divestiture Period or if the Commission has rejected a purchaser proposed by the Notifying Party at that time or thereafter, the Notifying Party shall appoint a Divestiture Trustee. The appointment of the Divestiture Trustee shall take effect upon the commencement of the Trustee Divestiture Period.

23. The Trustee shall:

(i) at the time of appointment, be independent of the Notifying Party and their Affiliated Undertakings;

(ii) possess the necessary qualifications to carry out its mandate, for example have sufficient relevant experience as an investment banker or consultant or auditor; and

(iii) neither have nor become exposed to a Conflict of Interest.

24. The Trustee shall be remunerated by the Notifying Party in a way that does not impede the independent and effective fulfilment of its mandate. In particular, where the remuneration package of a Divestiture Trustee includes a success premium linked to the final sale value of the Divestment Business, such success premium may only be earned if the divestiture takes place within the Trustee Divestiture Period.

Proposal by the Notifying Party

25. No later than two weeks after the Effective Date, the Notifying Party shall submit the name or names of one or more natural or legal persons whom the Notifying Party proposes to appoint as the Monitoring Trustee to the Commission for approval. No later than one month before the end of the First Divestiture Period or on request by the Commission, the Notifying Party shall submit a list of one or more persons whom the Notifying Party proposes to appoint as Divestiture Trustee to the Commission for approval. The proposal shall contain sufficient information for the Commission to verify that the person or persons proposed as Trustee fulfil the requirements set out in paragraph 23 and shall include:

(a) the full terms of the proposed mandate, which shall include all provisions necessary to enable the Trustee to fulfil its duties under these Commitments;
(b) the outline of a work plan which describes how the Trustee intends to carry out its assigned tasks;
(c) an indication whether the proposed Trustee is to act as both Monitoring Trustee and Divestiture Trustee or whether different trustees are proposed for the two functions.

Approval or rejection by the Commission

26. The Commission shall have the discretion to approve or reject the proposed Trustee(s) and to approve the proposed mandate subject to any modifications it deems necessary for the Trustee to fulfil its obligations. If only one name is approved, the Notifying Party shall appoint or cause to be appointed the person or persons concerned as

Trustee, in accordance with the mandate approved by the Commission. If more than one name is approved, the Notifying Party shall be free to choose the Trustee to be appointed from among the names approved. The Trustee shall be appointed within one week of the Commission's approval, in accordance with the mandate approved by the Commission.

New proposal by the Notifying Party

27. If all the proposed Trustees are rejected, the Notifying Party shall submit the names of at least two more natural or legal persons within one week of being informed of the rejection, in accordance with paragraphs 21 and 26 of these Commitments.

Trustee nominated by the Commission

28. If all further proposed Trustees are rejected by the Commission, the Commission shall nominate a Trustee, whom the Notifying Party shall appoint, or cause to be appointed, in accordance with a trustee mandate approved by the Commission.

II. Functions of the Trustee

29. The Trustee shall assume its specified duties and obligations in order to ensure compliance with the Commitments. The Commission may, on its own initiative or at the request of the Trustee or the Notifying Party, give any orders or instructions to the Trustee in order to ensure compliance with the conditions and obligations attached to the Decision.

Duties and obligations of the Monitoring Trustee

30. The Monitoring Trustee shall:

(i) propose in its first report to the Commission a detailed work plan describing how it intends to monitor compliance with the obligations and conditions attached to the Decision.

(ii) oversee, in close co-operation with the Hold Separate Manager, the on-going management of the Divestment Business with a view to ensuring its continued economic viability, marketability and competitiveness and monitor compliance by the Parties with the conditions and obligations attached to the Decision. To that end the Monitoring Trustee shall:

(a) monitor the preservation of the economic viability, marketability and competitiveness of the Divestment Business, and the keeping separate of the Divestment Business from the businesses retained by the Notifying Party, in accordance with paragraphs 10 and 11 of these Commitments;

(b) supervise the management of the Divestment Business as a distinct and saleable entity, in accordance with paragraph 12 of these Commitments;

(c) with respect to Confidential Information:
- determine all necessary measures to ensure that the Notifying Party does not after the Effective Date obtain any Confidential Information relating to the Divestment Business,
- in particular strive for the severing of the Divestment Business' participation in a central information technology network to the extent possible, without compromising the viability of the Divestment Business,
- make sure that any Confidential Information relating to the Divestment Business obtained by the Notifying Party before the Effective Date is eliminated and will not be used by the Notifying Party and
- decide whether such information may be disclosed to or kept by the Notifying Party as the disclosure is reasonably necessary to allow the Notifying Party to carry out the divestiture or their obligations under these Commitments or as the disclosure is required by law.

(d) monitor the splitting of assets and the allocation of Personnel between the Divestment Business and the Parties or Affiliated Undertakings;

(iii) propose to the Notifying Party such measures as the Monitoring Trustee considers necessary to ensure the Notifying Party's compliance with the conditions and obligations attached to the Decision, in particular the maintenance of the full economic viability, marketability or competitiveness of the Divestment Business, the holding separate of the Divestment Business and the non-disclosure of competitively sensitive information;

(iv) review and assess potential purchasers as well as the progress of the divestiture process and verify that, dependent on the stage of the divestiture process:

(a) potential purchasers receive sufficient and correct information relating to the Divestment Business and the Personnel in particular by reviewing, if available, the data room documentation, the information memorandum and the due diligence process, and
(b) potential purchasers are granted reasonable access to the Personnel;

(v) act as a contact point for any requests by third parties, in particular potential purchasers, in relation to the Commitments;

(vi) provide to the Commission, sending the Notifying Party a non-confidential copy at the same time, a written report within 15 days after the end of every month that shall cover the operation and management of the Divestment Business as well as the splitting of assets and the allocation of Personnel so that the Commission can assess whether the business is held in a manner consistent with the Commitments and the progress of the divestiture process as well as potential purchasers;

(vii) promptly report in writing to the Commission, sending the Notifying Party a non-confidential copy at the same time, if it concludes on reasonable grounds that the Parties are failing to comply with these Commitments;

(viii) within one week after receipt of the documented proposal referred to in paragraph 20 of these Commitments, submit to the Commission, sending the Notifying Party a non-confidential copy at the same time, a reasoned opinion as to the suitability and independence of the proposed purchaser and the viability of the Divestment Business after the Sale and as to whether the Divestment Business is sold in a manner consistent with the conditions and obligations attached to the Decision, in particular, if relevant, whether the Sale of the Divestment Business without one or more Assets or not all of the Personnel affects the viability of the Divestment Business after the sale, taking account of the proposed purchaser;

(ix) assume the other functions assigned to the Monitoring Trustee under the conditions and obligations attached to the Decision.

31. If the Monitoring and Divestiture Trustee are not the same legal or natural persons, the Monitoring Trustee and the Divestiture Trustee shall cooperate closely with each other during and for the purpose of the preparation of the Trustee Divestiture Period in order to facilitate each other's tasks.

Duties and obligations of the Divestiture Trustee

32. Within the Trustee Divestiture Period, the Divestiture Trustee shall sell at no minimum price the Divestment Business to a purchaser, provided that the Commission has approved both the purchaser and the final binding sale and purchase agreement (and ancillary agreements) as in line with the Commission's Decision and the Commitments in accordance with paragraphs 19 and 20 of these Commitments. The Divestiture Trustee shall include in the sale and purchase agreement (as well as in any ancillary agreements) such terms and conditions as it considers appropriate for an expedient sale in the Trustee Divestiture Period. In particular, the Divestiture Trustee may include in the sale and purchase agreement such customary representations and warranties and indemnities as are reasonably required to effect the sale. The Divestiture Trustee shall protect the legitimate financial interests of the Notifying Party, subject to the Notifying Party's unconditional obligation to divest at no minimum price in the Trustee Divestiture Period.

33. In the Trustee Divestiture Period (or otherwise at the Commission's request), the Divestiture Trustee shall provide the Commission with a comprehensive monthly report written in English on the progress of the divestiture process. Such reports shall be submitted within 15 days after the end of every month with a simultaneous copy to the Monitoring Trustee and a non-confidential copy to the Notifying Party.

III. Duties and obligations of the Parties

34. The Notifying Party shall provide and shall cause its advisors to provide the Trustee with all such co-operation, assistance and information as the Trustee may reasonably

require to perform its tasks. The Trustee shall have full and complete access to any of the Notifying Party's or the Divestment Business' books, records, documents, management or other personnel, facilities, sites and technical information necessary for fulfilling its duties under the Commitments and the Notifying Party and the Divestment Business shall provide the Trustee upon request with copies of any document. The Notifying Party and the Divestment Business shall make available to the Trustee one or more offices on their premises and shall be available for meetings in order to provide the Trustee with all information necessary for the performance of its tasks.

35. The Notifying Party shall provide the Monitoring Trustee with all managerial and administrative support that it may reasonably request on behalf of the management of the Divestment Business. This shall include all administrative support functions relating to the Divestment Business which are currently carried out at headquarters level. The Notifying Party shall provide and shall cause its advisors to provide the Monitoring Trustee, on request, with the information submitted to potential purchasers, in particular give the Monitoring Trustee access to the data room documentation and all other information granted to potential purchasers in the due diligence procedure. The Notifying Party shall inform the Monitoring Trustee on possible purchasers, submit lists of potential purchasers at each stage of the selection process, including the offers made by potential purchasers at those stages, and keep the Monitoring Trustee informed of all developments in the divestiture process.

36. The Notifying Party shall grant or procure Affiliated Undertakings to grant comprehensive powers of attorney, duly executed, to the Divestiture Trustee to effect the sale (including ancillary agreements), the Closing and all actions and declarations which the Divestiture Trustee considers necessary or appropriate to achieve the sale and the Closing, including the appointment of advisors to assist with the sale process. Upon request of the Divestiture Trustee, the Notifying Party shall cause the documents required for effecting the sale and the Closing to be duly executed.

37. The Notifying Party shall indemnify the Trustee and its employees and agents (each an "***Indemnified Party***") and hold each Indemnified Party harmless against, and hereby agrees that an Indemnified Party shall have no liability to the Notifying Party for, any liabilities arising out of the performance of the Trustee's duties under the Commitments, except to the extent that such liabilities result from the wilful default, recklessness, gross negligence or bad faith of the Trustee, its employees, agents or advisors.

38. At the expense of the Notifying Party, the Trustee may appoint advisors (in particular for corporate finance or legal advice or expert advice on the work necessary, feasible and reasonable for the insourcing), subject to the Notifying Party's approval (this approval not to be unreasonably withheld or delayed) if the Trustee considers the appointment of such advisors necessary or appropriate for the performance of its duties and obligations under the Mandate, provided that any fees and other expenses incurred by the Trustee are reasonable. Should the Notifying Party refuse to approve the advisors proposed by the Trustee the Commission may approve the appointment of such advisors instead, after having heard the Notifying Party. Only the Trustee shall

be entitled to issue instructions to the advisors. Paragraph 37 of these Commitments shall apply *mutatis mutandis*. In the Trustee Divestiture Period, the Divestiture Trustee may use advisors who served the Notifying Party during the Divestiture Period if the Divestiture Trustee considers this in the best interest of an expedient sale.

39. The Notifying Party agrees that the Commission may share Confidential Information proprietary to the Notifying Party with the Trustee. The Trustee shall not disclose such information and the principles contained in Article 17 (1) and (2) of the Merger Regulation apply *mutatis mutandis*.

40. The Notifying Party agrees that the contact details of the Monitoring Trustee are published on the website of the Commission's Directorate-General for Competition and it shall inform interested third parties, in particular any potential purchasers, of the identity and the tasks of the Monitoring Trustee.

41. For a period of 10 years from the Effective Date the Commission may request all information from the Parties that is reasonably necessary to monitor the effective implementation of these Commitments.

IV. Replacement, discharge and reappointment of the Trustee

42. If the Trustee ceases to perform its functions under the Commitments or for any other good cause, including the exposure of the Trustee to a Conflict of Interest:

(a) the Commission may, after hearing the Trustee and the Notifying Party, require the Notifying Party to replace the Trustee; or

(b) the Notifying Party may, with the prior approval of the Commission, replace the Trustee.

43. If the Trustee is removed according to paragraph 42 of these Commitments, the Trustee may be required to continue in its function until a new Trustee is in place to whom the Trustee has effected a full hand over of all relevant information. The new Trustee shall be appointed in accordance with the procedure referred to in paragraphs 21-28 of these Commitments.

44. Unless removed according to paragraph 42 of these Commitments, the Trustee shall cease to act as Trustee only after the Commission has discharged it from its duties after all the Commitments with which the Trustee has been entrusted have been implemented. However, the Commission may at any time require the reappointment of the Monitoring Trustee if it subsequently appears that the relevant remedies might not have been fully and properly implemented.

Section F. The review clause

45. The Commission may extend the time periods foreseen in the Commitments in response to a request from the Notifying Party or, in appropriate cases, on its own initiative. Where the Notifying Party requests an extension of a time period, it shall submit a reasoned request to the Commission no later than one month before the

expiry of that period, showing good cause**.** This request shall be accompanied by a report from the Monitoring Trustee, who shall, at the same time send a non-confidential copy of the report to the Notifying Party. Only in exceptional circumstances shall the Notifying Party be entitled to request an extension within the last month of any period.

46. The Commission may further, in response to a reasoned request from the Notifying Party showing good cause waive, modify or substitute, in exceptional circumstances, one or more of the undertakings in these Commitments. This request shall be accompanied by a report from the Monitoring Trustee, who shall, at the same time send a non-confidential copy of the report to the Notifying Party. The request shall not have the effect of suspending the application of the undertaking and, in particular, of suspending the expiry of any time period in which the undertaking has to be complied with.

Section G. Entry into force

47. The Commitments shall take effect upon the date of adoption of the Decision.

duly authorised for and on behalf of Knauf International GmbH

SCHEDULE

1. The Divestment Business comprises the Target's mineral fibre and grids business in the Relevant Countries, in particular

   (a) the Target's sales operations in the Relevant Countries, including the Target Sales Teams together with their entire relevant customer base;

   (b) the Team Valley MF Facility, and

   (c) the Team Valley Grid Facility,

   together with all essential functions which are necessary to ensure the viability and competitiveness of the business, as set out below.

2. In accordance with paragraphs 6-8 of these Commitments, the Divestment Business includes, but is not limited to:

   (a) all tangible assets and production equipment/machinery of the Team Valley MF Facility and the Team Valley Grid Facility as well as all tangible assets necessary to continue the Target's sales operations in the Relevant Countries. A list of all tangible assets that will form part of the Divestment Business is contained in **AWI Confidential Annex 2**;

   (b) exclusive and royalty-free licenses for the company brand Armstrong as well as for the relevant product trademarks (for mineral fibre tiles, including Specials, and grids) for exclusive use for the Relevant Products in the Relevant Countries for a term of […] years (which may be used in parallel to different existing brands by the Divestment Business)[5], with the option for the Divestment Business to terminate the license at any time, followed by a black-out period of […] years. Non-exclusive licences for a term of […] years for the relevant product trademarks, with the option for the Divestment Business to terminate the license at any time, will also be offered on an EEA-wide basis, provided that, outside the Relevant Countries, the product trademarks may only be used in conjunction with a brand name. Moreover, the Purchaser will also be offered non-exclusive licenses for all relevant production related IP. The terms and conditions of these trademark and other IP licenses are further described in **AWI Confidential Annex 3**;

   (c) main necessary licences, permits and authorisations, a list of which is contained in **AWI Confidential Annex 4**;

   (d) the entire customer base of the Target Sales Teams in relation to the Relevant Products, including – to the extent existing and still running at the time of Closing – all customer contacts, contracts, commitments, inventory and orders in relation to the sale of the Relevant Products in the Relevant Countries. A list of the Target's customers in relation to the Relevant Products in the Relevant Countries is provided in **AWI Confidential Annex 5**; to the extent the transfer of a customer contract/order requires the customer's consent, the Parties will use

5 Note that the license would not bar the Notifying Party from manufacturing products under the brand(s) and product trademarks in the Relevant Countries.

their best endeavours to procure the customer's consent; to the extent customer contracts/orders also relate to other products (e.g. metal tiles), the Parties will use their best endeavours to procure the customer's consent to split these agreements and to procure that all Relevant Products in the Relevant Countries are henceforth supplied by the Divestment Business.

(e) all Personnel and Key Personnel, a list of which is contained in **AWI Confidential Annex 6**;

(f) key supplier contracts, commitments and orders relating to the Divestment Business as set out in **AWI Confidential Annex 7**, to the extent still running at the time of Closing. To the extent the transfer of a supply contract requires the supplier's consent, the Parties will use their best endeavours to procure the supplier's consent. If a supplier refuses to consent, the Notifying Party commits, at the request of the Purchaser, to supply the relevant material to the Divestment Business for the remaining duration and on the terms and conditions of the relevant supply contract;

(g) all customer, credit and other records, as set out in **AWI Confidential Annex 8**;

(h) for a transitional period of up to […] years after Closing and on terms and conditions equivalent to those at present afforded to the Divestment Business, all current arrangements under which the Parties or their Affiliated Undertakings supply products or services to the Divestment Business, as detailed in **Confidential Annex 9**, unless otherwise agreed with the Purchaser; to the extent transitional supplies and services to be provided by the Notifying Party to the Divestment Business relate to supplies and services under the supply agreements and transitional service agreements foreseen in the SPA, the terms and conditions of these agreements shall, *mutatis mutandis*, also apply to the transitional supplies and services to be provided by the Notifying Party to the Divestment Business;

(i) a commitment of the Notifying Party to fund the investments necessary to enable the Team Valley MF Facility to manufacture the Target's [list of products] mineral fibre tile products, undertaken by the Purchaser and, to the extent feasible and reasonable, prepared by the Hold Separate Manager at his own discretion, up to a sum of EUR […], whereas the question whether the investments are necessary, feasible and reasonable shall be established taking into consideration AWI Confidential Annex IV and will be subject to review by the Monitoring Trustee;

(j) a commitment of the Notifying Party to fund the investments necessary to enable the Team Valley Grid Facility to manufacture the Target's following grid products: [list of products] , undertaken by the Purchaser and, to the extent feasible and reasonable, prepared by the Hold Separate Manager at his own discretion, up to a sum of EUR […];

(k) at the option of the Purchaser, for a transitional period until the production of the Target's [list of products] mineral fibre tiles has been insourced by the Purchaser and – in any event – no longer than for a term of […] years after Closing, a supply agreement under which the Notifying Party will supply the Divestment Business with these tiles [terms of the supply agreement];

(l) at the option of the Purchaser, for a transitional period of up to […] years after Closing, a supply agreement under which the Notifying Party will supply the Divestment Business with the Target's Specials [terms of the supply agreement];

(m) at the option of the Purchaser, for a transitional period until the production of the Target's [list of products] grid systems has been insourced by the Purchaser and – in any event – no longer than for a term of […] years after Closing, a supply agreement under which the Notifying Party will supply the Divestment Business with these grids [terms of the supply agreement];

(n) in case of difficulties of access to the single market after 30 March 2019, at the request of the Purchaser and approved by the European Commission based on a reasoned submission of the Monitoring Trustee, a supply agreement under which the Purchaser will be able to source the Relevant Products and Specials from the Notifying Party (i.e., those Relevant Products and Specials which the Notifying Party produces in its plants) irrespective of the insourcing for a period of […], which may be extended on a yearly basis up to a total of […] years from Closing, [terms of the supply agreement] that allows the Divestment Business to be competitive;

(o) to the extent not already with the Divestment Business and unless not required by the Purchaser, a commitment of the Notifying Party to hire, in coordination with the Hold Separate Manager and the Purchaser, at the Notifying Party's sole cost, adequate personnel to carry out the Key Functions as reasonably necessary to ensure the viability of the Divestment Business – i.e. […] FTEs in procurement, […] FTE in R&D, […] FTEs in marketing, […] FTEs in technical sales, […] FTEs in finance; this personnel shall be available to the Purchaser at the day of Closing;

(p) the benefit of the Notifying Party bearing the one-off costs of up to EUR […] for the hiring of up to […] additional R&D FTEs, to the extent not already with the Divestment Business and reasonably required by the Purchaser;

(q) the benefit of the Notifying Party bearing the one-off costs of up to EUR […] for the hiring of […] additional engineering FTEs, to the extent not already with the Divestment Business and reasonably required by the Purchaser;

(r) the benefit of the Notifying Party bearing the one-off costs of up to EUR […] for the hiring of […] additional customer service FTEs, to the extent not already with the Divestment Business and reasonably required by the Purchaser;

(s) the benefit of the Notifying Party bearing the one-off costs of up to EUR […] for the hiring of […] additional IT FTEs , to the extent not already with the Divestment Business and reasonably required by the Purchaser;

(t) the benefit of the Notifying Party purchasing, in coordination with the Hold Separate Manager and the Monitoring Trustee, the following R&D equipment for the Divestment Business, to the extent not already with the Divestment

Business and reasonably required by the Purchaser, to be available to the Divestment Business at the day of Closing: [list of R&D equipment];[6]

(u) at the option of the Purchaser, for a transitional period of […] years after Closing the benefit of certain transitional services, such as IT systems and processes, application engineering, etc., to be provided by the Notifying Party [terms of transitional services agreements] in order to facilitate a smooth transfer of the Divestment Business.

3. The Divestment Business shall not include:

(a) any shared IT systems between the Parties and the Divestment Business as set out in **AWI Confidential Annex 10**;

(b) shared personnel between the Parties and the Divestment Business as set out in **AWI Confidential Annex 11**;

(c) parts of shared customer contracts/orders (to the extent such contracts/orders are in place at the time of Closing) relating to other than the Relevant Products as set out in **AWI Confidential Annex 12**;

(d) shared assets between the Parties and the Divestment Business as set out in **AWI Confidential Annex 13**.

4. If there is any asset or personnel which is not be covered by paragraph 2 of this Schedule but which is both used (exclusively or not) in the Divestment Business and necessary for the continued viability and competitiveness of the Divestment Business, that asset or adequate substitute will be offered to the Purchaser.

5. The proposed concentration shall not be implemented before the Notifying Party or the Divestiture Trustee has entered into a final binding sale and purchase agreement for the sale of the Divestment Business and the Commission has approved the purchaser and the terms of sale in accordance with paragraph 20 of the Commitments.

6 Note that, already today, the Divestment Business has the following R&D equipment: [list of R&D equipment].

ANNEXES & EXHIBITS

- **AWI Confidential Annex 1:** Products manufactured and/or sold by the Divestment Business in the Relevant Countries
- **AWI Confidential Annex 2:** Tangible Assets of the Divestment Business
    - **AWI Confidential Exhibit 2.2.1**: Fixed asset register for the Team Valley MF Facility
    - **AWI Confidential Exhibit 2.2.2:** Land register excerpts for the Team Valley MF Facility
    - **AWI Confidential Exhibit 2.2.3:** Plant layout of the Team Valley MF Facility
    - **AWI Confidential Exhibit 2.3.1**: Fixed asset register of the Team Valley Grid Facility
    - **AWI Confidential Exhibit 2.2.2 (Part 1 and Part 2)**: Land register excerpts for the Team Valley Grid Facility
    - **AWI Confidential Exhibit 2.3.2**: Plant layout of the Team Valley Grid Facility
- **AWI Confidential Annex 3:** Intangible Assets of the Divestment Business
- **AWI Confidential Annex 4:** Main licenses, permits and authorizations of the Divestment Business
- **AWI Confidential Annex 5:** Customer contracts, commitments and orders of the Divestment Business
    - **AWI Confidential Exhibits 5.1 - 5.25**: Customer contracts
- **AWI Confidential Annex 6:** Personnel and Key Personnel of the Divestment Business
    - **AWI Confidential Exhibit 6.1.1**: Organisational chart of the Team Valley MF Facility
    - **AWI Confidential Exhibit 6.1.2**: Organisational chart of the Team Valley Grid Facility
    - **AWI Confidential Exhibit 6.2.1**: Agency agreement for the Baltics
- **AWI Confidential Annex 7:** Key supplier contracts, commitments and orders of the Divestment Business
- **AWI Confidential Annex 8:** Customer, credit and other records of the Divestment Business
- **Confidential Annex 9:** Supply, production, distribution, service or other contracts between the Parties and the Divestment Business
- **AWI Confidential Annex 10:** Shared IT systems or other systems not included in the Divestment Business
- **AWI Confidential Annex 11:** Shared personnel not included in the Divestment Business
- **AWI Confidential Annex 12:** Shared customers between the Target and the Divestment Business

- **AWI Confidential Annex 13**: Tangible assets not included in the Divestment Business
- **AWI Confidential Annex 14:** List of Specials
- **AWI Confidential Annex IV**: Summary assessing the insourcing of mineral fibre tiles currently not produced at Team Valley

AWI Confidential Annex 1

Products manufactured and/or sold by the Divestment Business in the Relevant Countries

The Team Valley MF Facility and the Team Valley Grid Facility currently produce a wide range of mineral fibre tiles and grids. However, certain mineral fibre tiles and grids sold by the Target in the Relevant Countries in 2017 cannot currently be produced at Team Valley, namely:

- Mineral fibre tiles: [list of products];
- Grids: [list of products].

I. Products manufactured and sold by the Divestment Business in 2017

1. Mineral fibre tiles Team Valley

No.	Product type	Brand	Product name	Worldwide sales to customers in 2017		Sales to customers in Relevant Markets in 2017		Current production location
				Volume (m²)	Value (EUR)	Volume (m²)	Value (EUR)	
[...]								

2. Grids Team Valley

No.	Product type	Brand	Product name	Worldwide sales to customers in 2017		Sales to customers in Relevant Markets in 2017		Current production location
				Volume (LM)	Value (EUR)	Volume (LM)	Value (EUR)	
[...]								

3. Sales to other customers Knauf

The table below lists sales of products solely manufactured in the Team Valley MF Facility which will be sold to Knauf and which Knauf will sell in other (non-relevant) countries, mainly in Asia. Knauf will, after the sale of the Divestment Business, not be able to produce these products itself.

No.	Product type	Brand	Product name	Sales to customers in Non Relevant Markets in 2017		Current production location
				Volume (m^2)	Value (EUR)	
[…]						

II. Products also sold by the Divestment Business and manufactured in the Target's plants[1]

No.	Product type	Brand	Product name	Sales to customers in Relevant Markets 2017		Current production location
				Volume (m^2/LM)	Value (EUR)	
[…]						

[1] Products marked with a * can generally also be manufactured in Team Valley (depending on the exact size and edge details of the product).

AWI Confidential Annex 2

Tangible Assets of the Divestment Business

I. Target Sales Teams

1. Movable property

1. Other than non-material assets such as personal computers, desk-chairs or other adjuvant office supplies, the Target Sales Teams do not have any fixed assets.

2. Immovable property

The Target does not have real property which is attributed to either of the Target Sales Teams. All of the relevant sales offices are rented and these rental agreements will be transferred with the Divestment Business.

II. Team Valley MF Facility

1. Movable property

A. List of fixed assets

For a list of fixed assets, production machinery and equipment at the Team Valley MF Facility, please refer to the 2017 Fixed Asset Register submitted as **AWI Confidential Exhibit 2.2.1**.

B. Raw materials, stocks, work-in-progress, semi-finished products

Production-related movable property of the Divestment Business also includes all stocks of raw materials intended for the production of the Relevant Products as well as all stocks of work-in-progress, finished and semi-finished Relevant Products manufactured at the Team Valley MF Facility at the date of Closing.

2. Immovable property

A. List of land/buildings

The relevant real property where the production site, including plant, warehouse and distribution center are located, is leased from a third party, i.e. no real property will be transferred to the Purchaser. However, the relevant leasing agreements will be transferred to the Purchaser. These agreements are attached as **AWI Confidential Exhibit 2.2.2.**

B. Plant layout

An overview of the layout of the Team Valley MF Facility, including warehouse and distribution centre, is submitted as **AWI Confidential Exhibit 2.2.3.**

III. Team Valley Grid Facility

1. Movable property

A. List of fixed assets

For a list of fixed assets, production machinery and equipment at the Team Valley Grid Facility, please refer to the 2017 Fixed Asset Register submitted as **AWI Confidential Exhibit 2.3.1**.

B. Raw materials, stocks, work-in-progress, semi-finished products

Production-related movable property of the Divestment Business also includes all stocks of raw materials intended for the production of the Relevant Products as well as all stocks of work-in-progress, finished and semi-finished Relevant Products manufactured at the Team Valley Grid Facility at the date of Closing.

2. Immovable property

A. List of land/buildings

The relevant real property where the production plant is located, is leased from a third party, i.e. no real property will be transferred to the Purchaser. However, the relevant leasing agreements will be transferred to the Purchaser. These agreements are attached as **AWI Confidential Exhibit 2.2.2.**

B. Plant layout

An overview of the layout of the Team Valley Grid Facility is submitted as **AWI Confidential Exhibit 2.3.2**.

AWI Confidential Exhibit 2.2.1: Fixed asset register for the Team Valley MF Facility

[…]

AWI Confidential Exhibit 2.2.2: Land register excerpts for the Team Valley MF Facility

[…]

AWI Confidential Exhibit 2.2.3: Plant layout of the Team Valley MF Facility

[…]

AWI Confidential Exhibit 2.3.1: Fixed asset register of the Team Valley Grid Facility

[…]

AWI Confidential Exhibit 2.2.2 (Part 1 and Part 2): Land register excerpts for the Team Valley Grid Facility

[…]

AWI Confidential Exhibit 2.3.2: Plant layout of the Team Valley Grid Facility

[…]

AWI Confidential Annex 3

Intangible Assets of the Divestment Business

IP in relation to the production and sale of the Relevant Products

Within the [information about the SPA] (***SPA***) [information about the SPA] and attached to the Form CO as Annexes 3.1.3 and Annex 3.1.3.(a), non-exclusive licenses for the IP relating to the Relevant Products will be offered to the Purchaser by Knauf upon and subject to the terms and conditions agreed between Knauf and AWI in the SPA and in the AWI IP Licence Agreement and WAVE IP Licence Agreement (as defined in the SPA). As far as trademarks relating to the Relevant Products are concerned, these will be licensed for exclusive use in the Relevant Countries for a term of […] years, after Closing, with the option for the Divestment Business to terminate the license at any time, followed by a black-out period of […] years; non-exclusive licences for a term of [...] years for product trademarks, with the option for the Divestment Business to terminate the license at any time, will also be offered on an EEA-wide basis, provided that, outside the Relevant Countries, the product trademarks may only be used in conjunction with a brand name.

AWI Confidential Annex 4

Main licenses, permits and authorizations of the Divestment Business

I. Target Sales Teams

AWI is not aware of any licenses, permits or authorizations required for the sales activities of the Target Sales Teams.

II. Team Valley MF Facility

The following are the main licenses, permits and authorizations required for the conduct of the Team Valley MF Facility to be transferred with the Divestment Business.

No.	Authority	Date of approval	File number	Main content / terms of approval
[…]				

III. Team Valley Grid Facility

The following are the main licenses, permits and authorizations required for the conduct of the Team Valley Grid Facility to be transferred with the Divestment Business.

No.	Authority	Date of approval	File number	Main content / terms of approval
[…]				

AWI Confidential Annex 5

Customer contracts, commitments and orders of the Divestment Business

Existing contracts are submitted as **AWI Confidential Exhibit 5.1 – 5.25**. Please note that these contracts, as far as they relate to rebate agreements, also cover non-relevant products and non-relevant countries (as they are calculated on total purchases). Should any such agreements be in place at the time of Closing, the Parties will use their best endeavours to procure the customer's consent to split these agreements.

Please see below for a list of all customers of the Target that purchased Relevant Products in 2017. The Parties will use their best efforts to transfer, as part of the Divestment Business, all of the orders from these customers in relation to the sale of Relevant Products in the Relevant Countries which are unfulfilled at the time of Closing. As regards customer orders that also relate to other products of the Target (e.g. metal tiles), the Target will use its best endeavours to procure the customer's consent to split these orders and to procure that all Relevant Products in the Relevant Countries are henceforth supplied by the Divestment Business.

Country	Customer	Relevant Products	Total turnover 2017 (EUR, '000)
[…]			

AWI Confidential Exhibits 5.1 - **5.25**: Customer contracts

[…]

AWI Confidential Annex 6

Personnel and Key Personnel of the Divestment Business

I. Organisational charts

An organisational chart of the Team Valley MF Facility is submitted as **AWI Confidential Exhibit 6.1.1,** an organisational chart of the Team Valley Grid Facility is submitted as **AWI Confidential Exhibit 6.1.2**.

II. Personnel of the Divestment Business

1. Target Sales Teams (employees marked with a * are located at the Target's EMEA Headquarters in Uxbridge)

Relevant Country	Name	Position	Employing / Legal Entity
[…][2]			

2. Team Valley MF Facility

The table below lists the current personnel at the Team Valley MF Facility, all of which will be transferred with the Divestment Business.

Department	Business Function	Name / Employee ID number
[…][3][4][5]		

2 […].

3 […].

4 […].

5 […].

3. Team Valley Grid Facility

The table below lists the current personnel at the Team Valley Grid Facility, all of which will be transferred with the Divestment Business.

Department	Business Function	Name
[…]		

III. Key Personnel of the Divestment Business

1. Target Sales Teams in the Relevant Countries

Although economically not indispensable, the following individuals are considered important for their respective Sales Teams:

- Austria: […];
- Germany: […];
- Spain: […].;
- UK: […];
- Turkey: […];
- Ireland: […];
- Portugal: […];
- Italy: […].

The Agency contract for Estonia, Latvia and Lithuania [information about the status of this agency contract].

2. Team Valley MF Facility

The following individuals are considered key personnel for the functioning of the Team Valley MF Facility:

- […];
- […];
- […];
- […];
- […].

3. Team Valley Grid Facility

The following individuals are considered key personnel for the functioning of the Team Valley Grids Facility:

- […];
- […];
- […];
- […].

4. Central Management of the Divestment Business

The envisaged management team of the Divestment Business is considered key personnel:

- […].
- […].
- […].
- […].

AWI Confidential Exhibit 6.1.1: Organisational chart of the Team Valley MF Facility

[…]

AWI Confidential Exhibit 6.1.2: Organisational chart of the Team Valley Grid Facility

[…]

AWI Confidential Exhibit 6.2.1: Agency agreement for the Baltics

[…]

AWI Confidential Annex 7

Key supplier contracts, commitments and orders of the Divestment Business

I. Target Sales Teams

Energy, maintenance, service operations etc.

Apart from any adjuvant services, such as internet connection or electricity, no goods or services are supplied to the Target Sales Teams. To a very limited extent, marketing material, such as product samples, were provided to the Target's Sales Team in Turkey in the past.

II. Team Valley MF Facility

1. Raw materials

In the below table, the Parties list the key raw material supply contracts currently in place for the production of mineral fibre tiles at the Team Valley MF Facility. These will be transferred with the Divestment Business. To the extent the transfer of a supply contract requires the supplier's consent, the Parties will use their best endeavours to procure the supplier's consent. If a supplier refuses to consent, Knauf commits, at the request of the Purchaser, to supply the relevant material to the Divestment Business for the remaining duration and on the terms and conditions of the relevant supply contract.

Supplier name	Raw material supplied	GBP spent in 2017
[…]		

2. Others (energy, service operations, packaging, maintenance, transportation etc.)

Apart from any adjuvant services, such as gas, electricity or an occasional order to have windows cleaned, no other goods or services are supplied to the Team Valley MF Facility.

III. Team Valley Grid Facility

1. Raw materials

In the below table, the Parties list the key raw material supply contracts currently in place for the production of grids at the Team Valley Grid Facility. These will be transferred with the Divestment Business. To the extent the transfer of a supply contract requires the supplier's consent, the Parties will use their best endeavours to procure the supplier's consent. If a supplier refuses to consent, Knauf commits, at the

request of the Purchaser, to supply the relevant material to the Divestment Business for the remaining duration and on the terms and conditions of the relevant supply contract.

Supplier name	Raw material supplied	EUR spent in 2017
[…]		

2. Others (energy, service operations, packaging, maintenance, transportation etc.)

Apart from any adjuvant services, such as gas, electricity or an occasional order to have windows cleaned, no other goods or services are supplied to the Team Valley Grids Facility.

AWI Confidential Annex 8

Customer, credit and other records of the Divestment Business

All relevant customer contacts are with the Target Sales Teams and – if and to the extent related to the Relevant Products – will be transferred. Credit records [information on how the Target handles credit records and credit management] and will be transferred.

Confidential Annex 9

Supply, production, distribution, service or other contracts between the Parties and the Divestment Business

I. Current agreements between AWI and the Target Sales Teams in the Relevant Countries

There are no supply relationships or other contractual relations between AWI and the Target Sales Teams in the Relevant Countries.

II. Current agreements between AWI and the Team Valley MF Facility

There are no contractual relations between AWI and the Team Valley MF Facility. With regards to raw materials from other AWI entities, there is [information about raw material supplies for the Team Valley MF Facility] There is also a [information about raw material supplies for the Team Valley MF Facility]. Lastly, note that certain management services and functions including supervision and oversight are currently provided by [information on who provides these services/functions within the Target]. It is expected that Personnel and Key Personnel listed in AWI Confidential Annex 6 will provide these functions and services going forward.

III. Current agreements between AWI and the Team Valley Grid Facility

There are no contractual relations between AWI and the Team Valley Grid Facility. However, [information about certain non-contractual supply relationships].

IV. Current agreements between Knauf and the Team Valley MF Facility

Supplier (Name of Knauf entity)	Products/services supplied	EUR spent (2017)	Volume supplied (2017)
[…]			

V. Current agreements between Knauf and the Team Valley Grid Facility

There are no supply relationships or other contractual relations between Knauf and the Team Valley Grid Facility.

AWI Confidential Annex 10

Shared IT systems or other systems not included in the Divestment Business

I. Target Sales Teams in the Relevant Countries

The Target Sales Teams in the Relevant Countries work with and are incorporated into AWI's SAP system. There are a number of other programs which are currently owned/licensed by AWI and used by the Target Sales Teams. Neither AWI's SAP license nor any other software (license) currently owned by AWI will be transferred with the Divestment Business.

The main programs for which AWI holds a license and which are also used by the Target Sales Teams in the Relevant Countries are: [list of programs].

II. Team Valley MF Facility

The main programs for which AWI holds a license and which are also used at the Team Valley MF Facility are: [list of programs]. Neither AWI's SAP license nor any other software (license) currently owned by AWI will be transferred with the Divestment Business.

III. Team Valley Grid Facility

The main programs for which AWI holds a license and which are also used at the Team Valley Grid Facility are: [list of programs]. Neither of the software (licenses) currently owned by AWI will be transferred with the Divestment Business.

AWI Confidential Annex 11

Shared personnel not included in the Divestment Business

I. Target Sales Teams in the Relevant Countries

All current personnel of the Target Sales Teams in the Relevant Countries as set out in **Annex 6** will be transferred with the Divestment Business.

The below table lists shared personnel between AWI and the Target's UK sales team which exclusively deals with [product type]. This personnel is not essential for the Divestment Business and will not be transferred.

Relevant Country	Business Function	Name	Employing entity
[…]			

II. Team Valley MF Facility

All current personnel of the Team Valley MF Facility as set out in **Annex 6** will be transferred with the Divestment Business.

III. Team Valley Grid Facility

All current personnel of the Team Valley Grid Facility as set out in **Annex 6** will be transferred with the Divestment Business.

AWI Confidential Annex 12

Shared customers between the Target and the Divestment Business

The Target does not have shared customers with the Divestment Business in a sense that a customer would be obliged to source Relevant Products together with other Target products (e.g. metal tiles) under one agreement. However, should any such agreements (or customer orders) be in place at the time of Closing, the Parties will use their best endeavours to procure the customer's consent to split these agreements and to procure that all Relevant Products are henceforth supplied by the Divestment Business. It is reiterated that customer contracts and records are only transferred if and to the extent they relate to Relevant Products. Other products, such as metal tiles, are not in scope of the Commitments.

AWI Confidential Annex 13

Tangible assets not included in the Divestment Business

I. Target Sales Teams

There are no tangible assets belonging to the Target Sales Teams that will not be transferred.

II. Team Valley MF Facility

There are no tangible assets of the Team Valley MF Facility that will not be transferred.

III. Team Valley Grid Facility

There are no tangible assets of the Team Valley Grid Facility that will not be transferred.

AWI Confidential Annex 14

List of Specials manufactured in the Target's plants

Product Family	Surface Code	Size Dimension
	[…]	

AWI Confidential Annex IV

[…]