

Anticipated acquisition by RHI Magnesita N.V. of Kümaş Manyezit Sanayi A.Ş

Decision on relevant merger situation and substantial lessening of competition

ME/6859/19

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SUMMARY

1. RHI Magnesita N.V. (**RHIM**) has agreedⁱ to acquire Kümaş Manyezit Sanayi A.Ş (**Kümaş**) (the **Merger**). RHIM and Kümaş are together referred to as the **Parties**.
2. The Competition and Markets Authority (**CMA**) believes that it is or may be the case that each of RHIM and Kümaş is an enterprise; that these enterprises will cease to be distinct as a result of the Merger; and that the share of supply test is met. Accordingly, arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.
3. The Parties are both vertically integrated producers active in:
 - (a) The upstream mining and processing of raw dolomite and magnesite; and
 - (b) The downstream manufacture of refractory products from magnesite and dolomite.
4. The Parties overlap in the supply of:
 - (a) processed magnesia products in the EEA, including dead-burned/sintered magnesia; fused magnesia; and caustic calcined magnesia (**CCM**);¹ and

¹ The Parties also both supply small amounts of sintered dolomite – see footnote 37.

- (b) basic refractory products in the EEA, including basic unshaped refractory products from magnesite (**BURM**), basic shaped refractory products from dolomite (**BSRD**), basic shaped fired refractory products from magnesite (**BSRM fired**), and basic shaped unfired refractory products from magnesite (**BSRM unfired**).
- 5. The CMA has assessed whether it is or may be the case that the Merger has resulted, or may be expected to result, in a substantial lessening of competition (**SLC**) in relation to:
 - (a) horizontal unilateral effects in the supply of processed magnesia products in the EEA;
 - (b) horizontal unilateral effects in the supply of basic refractory products in the EEA;
 - (c) vertical effects arising from input foreclosure of downstream competitors in the supply of refractory products in the EEA; and
 - (d) vertical effects arising from customer foreclosure of upstream competitors in the supply of processed raw materials in the EEA.

Horizontal unilateral effects in the supply of processed magnesia products in the EEA

- 6. The CMA has assessed the impact of the Merger in the supply of each of the processed magnesia products in which the Parties overlap, namely dead-burned/sintered magnesia, fused magnesia and CCM.
- 7. The CMA believes that the Merger will result in a relatively small increment in dead-burned/sintered magnesia. The CMA also believes that Kümaş does not impose a significant constraint on RHIM, and that the Parties do not overlap in the supply of high-grade dead-burned/sintered magnesia. Where the Parties do overlap, namely low-medium grade dead-burned/sintered magnesia, there are many alternative competitors available post-Merger, including EEA producers and imports from China, as well as from Turkey and Brazil.
- 8. The CMA believes that the Parties are small suppliers of fused magnesia in the EEA and are smaller still when imports into the EEA from China are taken into account. The CMA also believes that Kümaş does not impose a significant constraint on RHIM and a number of alternative suppliers, including those based in China, will remain post-Merger.
- 9. The CMA believes that the Merger will result in a small increment in CCM. The CMA also believes that the Parties are not close competitors in the

supply of CCM, and that there are a number of alternative suppliers available post-Merger.

10. The CMA therefore believes that the Merger does not give rise to a realistic prospect of a substantial lessening of competition (**SLC**) as a result of horizontal unilateral effects in the supply of processed raw materials.

Horizontal unilateral effects in the supply of basic refractory products in the EEA

11. The CMA has assessed the impact of the Merger in the supply of each of the refractory products in which the Parties overlap, namely BURM, BSRD, BSRM fired) and BSRM unfired.
12. The CMA believes that the Merger will result in a [0-5]% increment in BURM, BSRD and BSRM unfired and [0-5]% increment in BSRM fired. The CMA believes that while Kümaş may be constrained by RHIM, RHIM does not appear to be materially constrained by Kümaş. The evidence also suggests that the parties are not particularly close competitors and that there are a range of alternative competitors available post-Merger.
13. The CMA therefore believes that the Merger does not give rise to a realistic prospect of an SLC as a result of horizontal unilateral effects in the supply of refractory products in the EEA.

Vertical effects arising from input foreclosure of downstream competitors in the supply of refractory products in the EEA

14. During the course of its investigation, the CMA received some responses from third parties highlighting concerns around access to raw material inputs.
15. The CMA considers that input foreclosure is unlikely since the CMA's investigation has shown that the Parties have relatively low shares of supply in the relevant upstream processed magnesia product markets.
16. The CMA therefore believes that the Merger does not give rise to a realistic prospect of an SLC as a result of vertical effects leading to input foreclosure of downstream competitors in the supply of refractory products in the EEA.

Vertical effects arising from customer foreclosure of upstream competitors in the supply of processed raw materials in the EEA

17. The CMA also investigated whether the Merger could allow the Parties to foreclose their rivals in the upstream market for processed magnesia products. The CMA concluded that this is unlikely since the share of supply increment in the downstream refractory market is very small. Further, the

Parties' refractory businesses source the majority of their processed raw materials from their own upstream businesses.

18. The CMA therefore believes that the Merger does not give rise to a realistic prospect of an SLC as a result of vertical effects leading to customer foreclosure of upstream competitors in the supply of processed raw materials in the EEA.
19. Consequently, the CMA does not believe that it is or may be the case that the Merger may be expected to result in an SLC within a market or markets in the United Kingdom.
20. The Merger will therefore **not be referred** under section 33(1) of the Enterprise Act 2002 (the **Act**).

ASSESSMENT

Parties

21. RHIM is headquartered in Vienna and is listed on the London and Vienna Stock Exchanges.² RHIM and its affiliated companies (the **RHIM Group**) are active in the global supply of refractory products. It is active on all steps along the value chain, from the mining of its own materials, to processing these raw materials, to the provision of refractory products.³ The RHIM Group has subsidiaries in Europe, Asia, Africa, North America and South America.
22. The turnover of the RHIM Group in 2018 was approximately [X] worldwide, of which approximately [X] was generated in the UK.⁴
23. Kümaş is a private company incorporated in Turkey. Kümaş is active in the supply of refractory products, predominantly in Eastern Europe and Turkey. It is active on all steps along the value chain, from the mining of its own materials, to processing these raw materials, to the provision of refractory products. It supplies raw magnesite upstream,⁵ and non-refractory products downstream.⁶ Kümaş operates mining and production facilities in Turkey.⁷

² RHIM [X] has [X] with a shareholding above 10%. [X] holds [X]% of RHIM's shares. [X]. Parties' Merger Notice, paragraph 2.3.

³ Parties' Merger Notice, paragraph 2.4.

⁴ Parties' Merger Notice, paragraph 6.1.

⁵ This does not result in any vertical relationships, as this supply is to the PVC industry only, where RHIM is not active. Parties' Merger Notice, paragraph 2.8.

⁶ Parties' Merger Notice, paragraph 2.8.

⁷ Parties' Merger Notice, paragraph 2.8.

24. The turnover of Kümaş in 2018 was [X] worldwide, of which [X] was generated in the UK.⁸

Transaction

25. RHIM is acquiringⁱⁱ Kümaş through its subsidiary Radex Vertriebsgesellschaft m.b.H (**Radex**). The sellers and Radex entered into a non-binding letter of intent on 16 September 2019.⁹
26. According to the draft Sale and Purchase Agreement provided to the CMA on 14 January 2020, Radex is acquiringⁱⁱⁱ 100% of the entire issued share capital of Kümaş. The transaction value is USD [X], subject to adjustments at closing. The Parties have indicated that they should be [X].¹⁰
27. The Parties informed the CMA that the Merger is also the subject of review by the competition authorities in Austria and Turkey. It received clearance from the Austrian Competition Authority on 20 November 2019.

Jurisdiction

28. Each of RHIM and Kümaş is an enterprise. As a result of the Merger, these enterprises will cease to be distinct.
29. The Parties overlap in the supply of refractory products, with a combined share of supply of [70-80]% (increment [0-5]%) by value in BSRD in the UK.¹¹ The CMA therefore believes that the share of supply test in section 23 of the Act is met.
30. The CMA therefore believes that it is or may be the case that arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.
31. The initial period for consideration of the Merger under section 34ZA(3) of the Act started on 28 January 2020 and the statutory 40 working day deadline for a decision is therefore 23 March 2020.

Counterfactual

32. The CMA assesses a merger's impact relative to the situation that would prevail absent the merger (i.e. the counterfactual). For anticipated mergers

⁸ Parties' Merger Notice, paragraph 6.1.

⁹ Parties' Merger Notice, paragraph 2.1.

¹⁰ Parties' response to RFI, 13 January 2019

¹¹ Parties' Merger Notice, Table 15.7.

the CMA generally adopts the prevailing conditions of competition as the counterfactual against which to assess the impact of the merger. However, the CMA will assess the merger against an alternative counterfactual where, based on the evidence available to it, it believes that, in the absence of the merger, the prospect of these conditions continuing is not realistic, or there is a realistic prospect of a counterfactual that is more competitive than these conditions.¹²

33. In this case, the CMA has not received any evidence supporting a different counterfactual, and the Parties and third parties have not put forward arguments in this respect. Therefore, the CMA believes the prevailing conditions of competition to be the relevant counterfactual.

Background

Rationale for the Merger

34. The Parties state that the Merger will enable RHIM to remain competitive in the face of ongoing market developments, especially pressure from Chinese competitors. In particular they state that RHIM will seek to drive efficiencies between its existing operations in Turkey and Kūmaş' operations. In this regard, the Parties submit that the Merger will strengthen RHIM's manufacturing base in Turkey, [REDACTED], which can be led by RHIM's experienced local management team.¹³
35. RHIM's internal documents indicate that [REDACTED].¹⁴ RHIM's internal documents further note the [REDACTED].¹⁵
36. RHIM's internal documents also indicate that the Merger will [REDACTED].¹⁶
37. RHIM's internal documents also indicate that RHIM sees the acquisition of Kūmaş as a way to [REDACTED],¹⁷ [REDACTED],¹⁸ and [REDACTED].¹⁹

¹² *Merger Assessment Guidelines* (OFT1254/CC2), September 2010, from paragraph 4.3.5. The *Merger Assessment Guidelines* have been adopted by the CMA (see *Mergers: Guidance on the CMA's jurisdiction and procedure* (CMA2), January 2014, Annex D).

¹³ Parties' Merger Notice, paragraph 2.11

¹⁴ D-0006, [REDACTED], slides 9-10 and 21.

¹⁵ D-0001, [REDACTED], slide 24.

¹⁶ D-0006, [REDACTED], slides 13 and 21

¹⁷ D-043, [REDACTED], slides 91 and 156-157.

¹⁸ D-0006, [REDACTED], slide 12.

¹⁹ D-054, [REDACTED], slide 91; Annex D-0006, [REDACTED], slide 12; and Annex D-0001, [REDACTED], slide 24.

The Parties

38. The Parties are vertically integrated refractory producers. They overlap in two broad product areas:²⁰
- (a) The upstream mining and processing of raw dolomite and magnesite;²¹ and
 - (b) The downstream manufacture of refractory products from magnesite and dolomite.
39. The Parties process the raw dolomite and magnesite through sintering²² or fusing²³ so that these minerals can be used in the downstream manufacture of refractory or non-refractory products. Both Parties produce the following processed raw materials: dead-burned/sintered magnesia; fused magnesia; and CCM.²⁴
40. The Parties use these processed raw materials captively in the production of their own downstream refractory products. They also supply processed raw materials to rival downstream manufacturers of refractory products, as well as third party manufacturers of non-refractory products.²⁵
41. According to the Parties, around [X%] of the dead-burned/sintered magnesia they supply to third parties goes to refractory producers.²⁶ The Parties [X] sell fused magnesia for refractory uses and [X] sales of fused magnesia for non-refractory uses. CCM is predominantly used in downstream non-refractory applications.

Market dynamics

42. With respect to processed raw materials, refractory producers and refractory product customers typically maintain a list of pre-approved suppliers.²⁷ The

²⁰ Parties' Merger Notice, paragraph 3.1.

²¹ Parties' Merger Notice, paragraph 3.15 RHIM also extracts magnesia products from seawater, along with traditional mining (Parties' Merger Notice, paragraph 3.18).

²² Sintering is the process of compacting and forming a solid mass of material by heat or pressure without melting it to the point of liquefaction. This reduces the weight of the raw material by around 50%, thus reducing transport costs (Parties' Merger Notice, paragraph 3.13).

²³ Fusing requires heating the magnesia to more than 2800 degrees centigrade into a melted state for an extended period before cooling (Parties' Merger Notice, paragraph 3.14). In the case of CCM, this is a by-product of the production of magnesite and can be used in downstream non-refractory applications, and to a lesser extent, refractory applications (Parties' Merger Notice, paragraph 3.20).

²⁴ The Parties also supply small amounts of sintered dolomite – see footnote 37.

²⁵ Parties' Merger Notice, paragraph 3.21.

²⁶ Parties' response to RFI, 19 December 2019: see Table 9.1

²⁷ Parties' Merger Notice, paragraph 15.39 (i)(a), third party responses.

Parties²⁸ and most raw material suppliers indicated it is generally quite easy for refractory producers to switch supplier for processed raw materials. However, customers indicated that switching processed raw material supplier (at least to a non-pre-approved supplier) requires a trial and testing period to ensure that the raw material meets the necessary standards. One respondent suggested that this process can take around three months.

43. With regard to refractory products, in *RHI/Magnesita Refratarios*²⁹ the European Commission (**EC**) found that barriers to switching refractory product supplier are high because new suppliers need to undergo a lengthy qualification process in order to become a pre-approved supplier to a customer. The EC found that this qualification process takes at least 12 months.³⁰ Similarly, the customers and competitors contacted by the CMA confirmed that it can take six to 12 months to switch supplier as new suppliers need to go through a testing period.
44. Overall, the evidence suggests that it is relatively easy for customers of processed raw materials and refractory products to switch between pre-approved suppliers. However, if customers want to switch to a non-approved supplier, this first requires a lengthy qualification and testing process.

Frame of reference

45. Market definition provides a framework for assessing the competitive effects of a merger and involves an element of judgement. The boundaries of the market do not determine the outcome of the analysis of the competitive effects of the merger, as it is recognised that there can be constraints on merging parties from outside the relevant market, segmentation within the relevant market, or other ways in which some constraints are more important than others. The CMA will take these factors into account in its competitive assessment.³¹
46. The starting point for the CMA's assessment of the appropriate frame of reference is the overlapping products of the parties, or where non-horizontal effects are relevant, the product(s) of each party where the non-horizontal relationship occurs.³²

²⁸ Parties' Merger Notice, paragraphs 2.3-2.10.

²⁹ M.8286 - *RHI/Magnesita Refratarios*, European Commission decision of 28 June 2017 (*RHI/Magnesita Refratarios*).

³⁰ *RHI/Magnesita Refratarios*, paragraph 143.

³¹ *Merger Assessment Guidelines*, paragraph 5.2.2.

³² *Merger Assessment Guidelines*, paragraph 5.2.11.

47. As set out above, the Parties overlap in the supply of (i) processed raw materials from dolomite and magnesite, and (ii) refractory products from dolomite and magnesite. These potential frames of reference are considered further below.

Product scope

Processed raw materials

48. The Parties submitted that the CMA should define each processed raw material as a separate market. The Parties submitted that the CMA should not segment these markets further based on the end-use, given that the processed raw materials supplied to refractory and non-refractory customers are the same and there are no barriers to a supplier switching between supplying refractory customers and non-refractory customers.³³
49. In *RHI/Magnesita Refratarios*,³⁴ the EC noted that, in past decisions, it had treated each industrial mineral as a separate product market.³⁵ However, in relation to the processed raw materials considered in that case, including sintered magnesia and sintered dolomite, the EC left the precise product market definition open.³⁶
50. In the present case, the CMA has taken as its starting point the overlapping processed raw materials products of the Parties – i.e.:
- (a) Dead-burned/sintered magnesia;
 - (b) Fused magnesia;
 - (c) CCM; and
 - (d) Sintered dolomite.³⁷
51. The CMA considered whether the product frames of reference should be further segmented by end-use (i.e. refractory and non-refractory uses). Evidence from third parties generally did not support this segmentation. However, it has not been necessary for the CMA to conclude on whether it is

³³ Parties' Merger Notice, paragraphs 12.28 and 12.36.

³⁴ *RHI/Magnesita Refratarios*.

³⁵ M.1381 – *Imetal / English China Clays*, paragraph 34 and M.8130 – *Imerys/Alteo certain assets*.

³⁶ *RHI/Magnesita Refratarios*, paragraphs 43-44, 48.

³⁷ Parties' Merger Notice, paragraph 12.35. The Parties' supply of sintered dolomite is very low. Total sales of sintered dolomite in the EEA in 2018 by RHIM and Kūmaş were €[redacted] and €[redacted] respectively. The estimated size of the EEA market is €[redacted]. (Parties' Merger Notice, tables 15.21 and 15.22). Accordingly, the CMA does not consider that the Merger could result in a realistic prospect of an SLC in respect to this product market on any plausible basis and does not consider this overlap further in this Decision.

appropriate to distinguish between different end-use segments, since no competition concerns arise on any plausible basis.

52. The CMA also considered whether the product frames of reference should be further segmented by quality (e.g. low, medium, or high quality dead-burned/sintered magnesia, with quality being reflective of the magnesia content). Evidence from third parties indicated that competitive conditions could sometimes differ between these subsegments, particularly in relation to dead-burned/sintered magnesia. However, it has not been necessary for the CMA to conclude on whether it is appropriate to distinguish between different quality segments, since no competition concerns arise on any plausible basis.
53. The CMA has therefore assessed the effects of the Merger on the supply of each processed raw material in which the Parties overlap – i.e. dead-burned/sintered magnesia, fused magnesia, and CCM. The CMA has taken into account differences in the quality of these materials in its competitive assessment where appropriate. However, it was not necessary for the CMA to conclude on the exact product frames of reference as no competition concerns arise on any plausible basis.

Refractory products

54. The Parties submitted that the relevant product markets for refractory products should be those adopted by the EC in *RHI/Magnesita Refratarios*.³⁸ In *RHI/Magnesita Refratarios*, the EC segmented refractory products into:
- (a) Basic and non-basic refractory products. Basic refractory products remain stable in alkaline environments but could be damaged due to chemical reactions in acidic environments. The opposite is true for non-basic refractories.³⁹
 - (b) Shaped and unshaped refractory products. Shaped products are produced in a specific shape (mainly bricks), normally have a denser structure than unshaped products, and tend to be more expensive than unshaped products due to their more energy-intensive manufacturing process.⁴⁰
 - (c) Dolomite-based and magnesite-based refractory products. The EC found limited demand-side substitutability between dolomite-based and magnesite-based products since magnesite-based products can withstand harsher conditions and are thus more suited to certain industrial

³⁸ Parties' Merger Notice, paragraph 12.9.

³⁹ *RHI/Magnesita Refratarios*, paragraphs 14-16.

⁴⁰ *RHI/Magnesita Refratarios*, paragraphs 18-20.

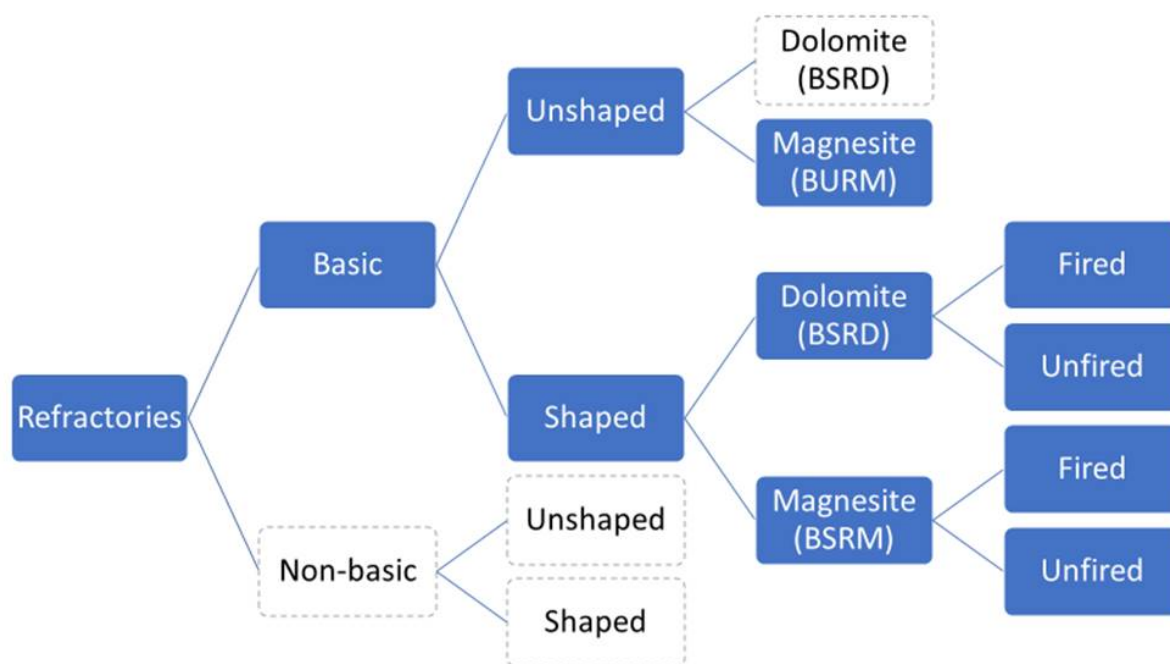
applications. This means that magnesite-based products are more expensive than dolomite-based products.

(d) Fired and unfired shaped magnesite-based refractory products. Shaped refractory products can be fired in order to increase their strength and refractory properties. The EC found there is limited demand-side substitutability between fired and unfired products due to their different properties and fired refractories tend to be more expensive. It concluded that shaped magnesite-based refractory products should be segmented into fired and unfired products. However, it left the market definition open for fired and unfired shaped dolomite-based refractory products.⁴¹

55. Responses from third parties received by the CMA support this segmentation on the basis of a lack of demand-side substitutability between these different products.

56. Accordingly, the CMA has assessed the supply of refractory products using the same product markets adopted by the EC in *RHI/Magnesita Refratarios*, as illustrated by the following diagram:

Figure 1: Diagram showing refractory product markets^{iv}



57. The Parties overlap in the manufacture of the following refractory products:

(a) Basic unshaped refractory products from magnesite (**BURM**);

⁴¹ *RHI/Magnesita Refratarios*, paragraphs 28-39.

- (b) Basic shaped refractory products from dolomite (**BSRD**);⁴²
- (c) Basic shaped fired refractory products from magnesite (**BSRM fired**); and
- (d) Basic shaped unfired refractory products from magnesite (**BSRM unfired**).⁴³

Conclusion on product scope

58. For the reasons set out above, the CMA has considered the impact of the Merger in the following product frames of reference:

(a) For processed raw materials:

- Dead-burned/sintered magnesia;
- Fused magnesia; and
- CCM (together, the **Processed Magnesia Products**).

(b) For refractory products:

- BURM;
- BSRD;
- BSRM fired; and
- BSRM unfired (together, the **Refractory Products**).

59. However, it was not necessary for the CMA to reach a conclusion on the exact product frames of reference as no competition concerns arise on any plausible basis.

Geographic scope

Processed raw materials

60. The Parties submitted that the relevant geographic markets for all of the relevant processed raw materials are at least EEA-wide and may be worldwide, for the following reasons:

⁴² BSRD covers both BSRD fired and BSRD unfired products. Kūmaş is not active in BSRD fired refractory products. The CMA could have segmented BSRD further into BSRD unfired only, as both Parties overlap in this narrower segment. However, as RHIM's market share was much higher under the wider product market definition, the CMA considered that if any competition issues were likely to arise, they would arise under this wider segment. Accordingly, the CMA assessed the supply of BSRD products as a whole.

⁴³ Parties' Merger Notice, paragraph 12.14.

- (a) Raw materials are mined globally and suppliers often operate mines on a worldwide basis;
 - (b) The demand for the processed raw materials originates from purchasers globally;
 - (c) The ease of transport and low costs of maritime freight means that processed raw materials can be traded and shipped globally; and
 - (d) Prices of supply contracts rely on global prices.⁴⁴
61. In the *RHI / Magnesita Refratarios* merger inquiry, the EC noted that there were indications that the geographic market for raw materials may be worldwide in scope but ultimately left the geographic scope of the market for raw materials open.⁴⁵
62. Both Parties are active in the supply of processed raw materials across the EEA. The CMA has considered whether the geographic frame of reference may be wider in scope.
63. A majority of third party processed raw material customers indicated they purchase these raw materials outside the EEA, or would consider doing so if required. However, some of these third parties also indicated that they had a preference for EEA-based products, and it was important to have reliable source for these raw materials near or in the EEA.
64. RHIM's internal documents indicate that RHIM monitors [REDACTED] of these processed raw materials, particularly those based in [REDACTED].^{46,47}
65. On a cautious basis, the CMA has assessed the supply of processed raw materials on an EEA-wide basis. The CMA has taken into account the constraints from suppliers outside the EEA in its competitive assessment where relevant.

Refractory products

66. The Parties submitted that the geographic market for refractory products is at least EEA-wide and is likely to be global, because non-EEA suppliers (in particular Chinese suppliers) have successfully entered the EEA.⁴⁸

⁴⁴ Parties' Merger Notice, paragraph 12.32.

⁴⁵ *RHI/Magnesita Refratarios*, paragraphs 65-66.

⁴⁶ D-020, [REDACTED], page 3.

⁴⁷ D-031, [REDACTED], page 9.

⁴⁸ Parties' Merger Notice, paragraph 12.22

67. In the *RHI / Magnesita Refratarios* merger inquiry, the EC concluded that the market for refractory products is EEA-wide, on the basis that:
- (a) Customers in the EEA have specific preferences compared to customers in other geographic regions;
 - (b) Suppliers that are active on a global basis have regional production facilities to serve regional customers; and
 - (c) Any differences in competition conditions between regions are reflected in price differences.⁴⁹
68. Third party refractory competitors all stated that they face strong competition from outside the EEA, particularly from China. The majority of third party refractory customers also indicated that they buy refractory products from suppliers globally. However, some third parties noted concerns with quality issues and longer lead times with Chinese refractory products.
69. On a cautious basis, the CMA has therefore assessed the supply of refractory products on an EEA-wide basis. The CMA has taken into account the constraint from suppliers outside the EEA in its competitive assessment where relevant.

Conclusion on geographic scope

70. For the reasons set out above, on a cautious basis the CMA has considered the impact of the Merger in the EEA.
71. However, it was not necessary for the CMA to reach a conclusion on the geographic frame of reference, since no competition concerns arise on any plausible basis.

Conclusion on frame of reference

72. For the reasons set out above, the CMA has considered the impact of the Merger in the following frames of reference:

Processed raw materials

- The supply of dead-burned/sintered magnesia in the EEA;
- The supply of fused magnesia in the EEA; and
- The supply of CCM in the EEA.

⁴⁹ *RHI/Magnesita Refratarios*, paragraphs 55-61.

Refractory products

- The supply of BURM in the EEA;
- The supply of BSRD in the EEA;
- The supply of BSRM fired in the EEA; and
- The supply of BSRM unfired in the EEA.

Competitive assessment

Horizontal unilateral effects

73. Horizontal unilateral effects may arise when one firm merges with a competitor that previously provided a competitive constraint, allowing the merged firm profitably to raise prices or to degrade quality on its own and without needing to coordinate with its rivals.⁵⁰ Horizontal unilateral effects are more likely when the merging parties are close competitors.
74. The CMA assessed whether it is or may be the case that the Merger has resulted, or may be expected to result, in an SLC in relation to horizontal unilateral effects in relation to Processed Magnesia Products and Refractory Products.

Horizontal unilateral effects – Processed Magnesia Products

75. The CMA assessed whether it is or may be the case that the Merger has resulted, or may be expected to result, in an SLC in relation to horizontal unilateral effects in relation to the supply of each of the Processed Magnesia Products.
76. In order to assess the likelihood of the Merger resulting in horizontal unilateral effects, the CMA considered a range of evidence in relation to the following areas:
- (a) the shares of supply of the Parties and their competitors;
 - (b) the closeness of competition between the Parties; and
 - (c) the competitive constraints posed by alternative suppliers within the market.

⁵⁰ *Merger Assessment Guidelines*, from paragraph 5.4.1.

Shares of supply

77. The Parties submitted that their combined shares of supply of the Processed Magnesia Products were low and that the Merger would only result in a *de minimis* increment.⁵¹ However, the Parties' submissions were based on their own estimates of the total market size and shares of supply, which the CMA found to be inaccurate, in particular due to their lack of visibility of third-party data.
78. Therefore, as part of its investigation, the CMA constructed its own estimates of shares of supply, based on value of sales data provided by the Parties and third party suppliers.
79. The CMA considers that these estimates are conservative, as they do not capture all the firms that are active in the EEA market and do not include imports from China (or imports from other non-EEA countries).
80. In particular, the CMA considers that imports from China likely account for a substantial portion of the sales of the Processed Magnesia Products in the EEA. According to third party industry reports, in 2018, China accounted for 42%⁵² of global production of dead-burned/sintered magnesia, 55%-75%⁵³ of global production of fused magnesia, and around 64-67% of global production of CCM.⁵⁴ UN Comtrade statistics show that in 2018, the EU imported dead-burned/sintered magnesia and fused magnesia worth \$345m from China.⁵⁵ While the CMA is unable to split this figure out into imports of dead-burned/sintered magnesia and fused magnesia, the total value is substantially higher than the total sales in the two markets estimated by the CMA excluding Chinese imports.

Dead-burned/sintered magnesia

81. The CMA's estimated shares of supply for dead-burned/sintered magnesia in the EEA are set out in the following table:

Table 1: Dead-burned/sintered magnesia – CMA's estimated shares of supply in 2018 (EEA)

	Turnover
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⁵¹ Parties' Merger Notice, paragraph 15.64.

⁵² D-049, [REDACTED]: Global supply of magnesia in 2019, May 2019, slide 15

⁵³ D-049, [REDACTED]: Global supply of magnesia in 2019, May 2019, slide 17

⁵⁴ D-049, [REDACTED]: Global supply of magnesia in 2019, May 2019, slide 14

⁵⁵ <https://comtrade.un.org/>

	Sales (€ million)	Share of Supply (%)
RHIM	[X]	[10-20]%
Kümaş	[X]	[5-10]%
<u>Combined</u>	[X]	[20-30]%
Nedmag	[X]	[40-50]%
SMZ, a.s. Jelšava	[X]	[10-20]%
Grecian Magnesite	[X]	[5-10]%
Peñoles Mexico	[X]	[0-5]%
QMAG	[X]	[0-5]%
UBE	[X]	[0-5]%
Total	[X]	100%

Source: CMA's estimates based on Parties' and third parties' sales revenue data

82. The CMA notes that even based on the CMA's very conservative market share estimates (which are likely to overestimate the Parties' shares), the increment represented by Kümaş is still small for dead-burned/sintered magnesia, at [5-10]%. This would decrease further if imports into the EEA from China were taken into account, as set out in paragraphs 79 to 80 to above.

Fused magnesia

83. The CMA's estimated shares of supply for fused magnesia in the EEA are set out in the following table:

Table 2: Fused magnesia – CMA's estimated shares of supply in 2018 (EEA)

	Turnover	
	Sales (€ million)	Share of Supply (%)
RHIM	[X]	[0-5]%
Kümaş	[X]	[10-20]%

<u>Combined</u>	[X]	[10-20]%
QMAG	[X]	[80-90]%
Peñoles Mexico	[X]	[0-5]%
Total	[X]	100%

Source: CMA's estimates based on Parties' and third parties' sales revenue data

84. The CMA notes that even based on the CMA's very conservative market share estimates (which are likely to overestimate the Parties' shares), the increment represented by RHIM is still very small for fused magnesia, at [0-5]%. Again, the Parties' respective shares would decrease further if imports into the EEA from China are taken into account, as set out in paragraphs 79 to 80 to above.

CCM

85. The CMA's estimated shares of supply for CCM in the EEA are set out in the following table:

Table 3: CCM – CMA's estimated shares of supply in 2018 (EEA)

	Turnover	
	Sales (€ million)	Share of Supply (%)
RHIM	[X]	[20-30]%
Kümaş	[X]	[0-5]%
<u>Combined</u>	[X]	[20-30]%
Grecian Magnesite	[X]	[20-30]%
TernaMag	[X]	[10-20]%
Magnesita Navarras	[X]	[10-20]%
SMZ, a.s. Jelšava	[X]	[5-10]%
Nedmag	[X]	[5-10]%
Peñoles Mexico	[X]	[0-5]%

QMAG	[X]	[0-5]%
Total	[X]	100%

Source: CMA's estimates based on Parties' and third parties' sales revenue data

86. The CMA notes that, based on the CMA's very conservative market share estimates (which are likely to overestimate the Parties' share), the increment represented by Kūmaş is still small for CCM, at [0-5]%.

Conclusion on shares of supply

87. Even on the basis of these conservative shares of supply, the Parties' shares are modest for fused magnesia and the increment represented by Kūmaş is small for both dead-burned/sintered magnesia and CCM. If imports into the EEA from China were taken into account, these shares would be even smaller. The CMA has considered these conservative shares of supply alongside the other evidence discussed below on closeness of competition between the Parties and the constraint from third parties.

Closeness of competition

88. The CMA has examined the closeness of competition between the Parties and considered within its assessment:

- (a) the Parties' views;
- (b) evidence from internal documents; and
- (c) third party views.

Parties' views

89. The Parties submitted that there is very little overlap between their top 10 EEA customers of Processed Magnesia Products, demonstrating that each Party is not an important secondary supplier for the vast majority of the other Party's Processed Magnesia Product customers and that there is therefore no particular closeness of competition between the Parties.⁵⁶
90. The data provided by the Parties shows that there is [X]. Although this data has limitations and does not show the extent of switching between the Parties, the CMA considers that this evidence – taken together with the other evidence discussed below – does not suggest close competition between the Parties.

⁵⁶ Parties' Merger Notice, paragraph 15.66.

Internal documents

91. One third party report shows RHIM and Kümaş as being two of twelve leading dead-burned/sintered magnesia producers, globally.⁵⁷ However, RHIM's internal documents seldom mention Kümaş when discussing Processed Magnesia Products.
92. Kümaş' internal documents likewise mention RHIM as a producer of high-quality dead-burned/sintered magnesia.⁵⁸ However, there is nothing within Kümaş' internal documents to suggest that the Parties are especially close competitors, compared to any other Processed Magnesia Products supplier in the market. RHIM is always mentioned alongside several other competitors in the supply of processed raw material products.⁵⁹
93. Overall, while the Parties' internal documents suggest that Kümaş does monitor RHIM, the larger of the Parties, they do not indicate that RHIM closely monitors Kümaş, or that Kümaş represents a significant competitive constraint. On the contrary, RHIM's internal documents appear to focus on the competitive threat from Chinese production.

Third parties' views

94. Third party Processed Magnesia Product competitors provided mixed responses regarding how closely they considered RHIM and Kümaş to compete.
95. Most respondents indicated that the Parties supply similar products, with one respondent indicating the Parties overlap in medium-grade magnesite products.
96. In terms of dead-burned/sintered magnesia, most customers indicated that Kümaş is a viable alternative supplier to RHIM. However, one common customer of the Parties stated that the Parties were not viable alternatives as they produce different quality grades.
97. Several fused magnesia customers also considered the Parties to be viable alternatives. However, another customer did not consider the Parties to be viable alternatives for fused magnesia.

⁵⁷ D-049, [REDACTED]: Global supply of magnesia in 2019, May 2019, slide 15. The CMA notes this is production, rather than external sales to third parties.

⁵⁸ [English Translation] A-009, [REDACTED], page 14-15.

⁵⁹ [English Translation] A-001, [REDACTED], Slides 17-18 and [English Translation] A-002, [REDACTED], Slides 12-13

98. Finally, third party responses from customers which purchase CCM from RHIM indicate that the Parties supply different product types and are not close competitors, with one customer having never heard of Kümaş.

Conclusion on closeness of competition

99. Overall, in relation to fused magnesia, dead-burned/sintered magnesia and CCM, the CMA considers that the Parties are not particularly close competitors. While third party evidence was mixed, the Parties have very little overlap [X], which suggests that the other Party is not an important secondary supplier for the majority of customers. Internal documents also suggest that while Kümaş monitors RHIM, RHIM does not closely monitor Kümaş, or that Kümaş represents a significant competitive constraint. On the contrary, RHIM's internal documents appear to focus on the competitive threat from Chinese production.

Third party constraints

100. Unilateral effects are more likely where customers have little choice of alternative suppliers. The CMA has therefore assessed whether there are alternative suppliers which would provide a competitive constraint on the merged entity in the supply of the Processed Magnesia Products.
101. The CMA has considered within its assessment:
- (a) the Parties' views;
 - (b) evidence from internal documents; and
 - (c) third party views.

Parties' views

102. The Parties submitted that the merged entity will continue to face competitive constraints from a large number of alternative suppliers, in relation to dead-burned/sintered magnesia and fused magnesia, including Nedmag, UBE and SMZ. In relation to CCM, the Parties submitted that the Parties will continue to face competitive constraints from established suppliers such as Sibelco (QMAG), Baymag and Peñoles.⁶⁰

⁶⁰ Parties' Merger Notice, Para 15.72 and 15.80 (iii).

Internal documents

103. A recent report produced by [REDACTED], a third party market research company, states that companies including Grecian Magnesite, QMAG, Magnezit, SMZ Jelšava, and Nedmag are “leading producers” of magnesia-based products alongside RHIM.⁶¹
104. RHIM’s internal documents show that RHIM tracks a range of suppliers of processed raw materials, including Chinese producers.⁶² Internal documents also appear to show that RHIM tracks China’s production and pricing of Processed Magnesia Products [REDACTED].⁶³
105. Kūmaş’ internal documents [REDACTED].⁶⁴ Further, Kūmaş’ internal documents also show China as accounting for [60-70]% of all global magnesite production,⁶⁵ suggesting that the Parties likely face competitive pressure from imports into the EEA from China.
106. Overall, the Parties’ internal documents indicate that there are a number of other suppliers of Processed Magnesia Products, including Chinese suppliers, who would constrain the merged entity post-Merger.

Third parties’ views

107. The majority of third party respondents considered that there are available alternatives to the Parties, including from outside the EEA.
108. While some third parties expressed concerns about the impact of the Merger on the supply of dead-burned/sintered magnesia, it appears that for low-medium grade dead-burned/sintered magnesia, they have ample alternative suppliers. Third party customers and competitors named several alternative suppliers, including suppliers in Turkey, Greece, Brazil, and China.
109. The evidence from third parties on alternative suppliers for fused magnesia indicates that there are many alternative suppliers based in China.
110. Third party respondents also indicated that there are sufficient alternative suppliers available for CCM. Grecian Magnesite and Ternamag were named as alternative EEA suppliers, along with Chinese suppliers.

⁶¹ D-049, [REDACTED]; Global Supply of Magnesia in 2019, May 2019, Slides 13-15.

⁶² D-044, [REDACTED]; D-054, [REDACTED]; D-057, [REDACTED];

⁶³ D-020, [REDACTED], D-021, [REDACTED]; D-022, [REDACTED]; D-023, [REDACTED]; D-024, [REDACTED]; D-025, [REDACTED]; D-026, [REDACTED].

⁶⁴ [English Translation] A-008, [REDACTED], slide 13; [English Translation] A-009, [REDACTED], slide 14; [English Translation] A-010, [REDACTED], slide 14; [English Translation] A-011, [REDACTED].

⁶⁵ [English Translation] A-002, [REDACTED], slide 9.

111. Some customers (mainly refractory producers) and competitors raised concerns about the effect of the Merger on the supply of Processed Magnesia Products, with some specifically noting the supply of dead-burned/sintered magnesia as a concern. However, further investigation by the CMA indicated that the majority of these customers were concerned about the supply of high-quality dead-burned/sintered magnesia, in which Kümaş is not active.

Conclusion on third party constraints

112. Overall, the CMA considers that the Parties will face sufficient constraint from third parties post-Merger. The Parties' internal documents indicate that both RHIM and Kümaş track a number of suppliers of Processed Magnesia Products, including Chinese suppliers. The evidence from third parties supports this, with the majority of third parties considering that there will be sufficient alternative suppliers to the Parties post-Merger, including suppliers from outside the EEA.

Conclusion on horizontal unilateral effects

113. For the reasons set out above, the CMA believes that the Merger will result in a relatively small increment in dead-burned/sintered magnesia, even on the CMA's conservative share of supply estimates. The CMA also believes that Kümaş does not impose a significant constraint on RHIM, and that the Parties do not overlap in the supply of high-grade dead-burned/sintered magnesia. Where the Parties do overlap, namely low-medium grade dead-burned/sintered magnesia, there are many alternative competitors available post-Merger, including EEA producers and imports from China, as well as from Turkey and Brazil. Accordingly, the CMA found that the Merger does not give rise to a realistic prospect of an SLC as a result of horizontal unilateral effects in relation to the supply of dead-burned/sintered magnesia.
114. Further, for the reasons set out above, the CMA believes that the Parties are small suppliers of fused magnesia in the EEA and are smaller still when imports into the EEA from China are taken into account. The CMA also believes that RHIM does not appear to be significantly constrained by Kümaş and a number of alternative suppliers, including those based in China, will remain post-Merger. Accordingly, the CMA found that the Merger does not give rise to a realistic prospect of an SLC as a result of horizontal unilateral effects in relation to the supply of fused magnesia.
115. Finally, for the reasons set out above, the CMA believes that the Merger will result in a small increment in CCM, even on the basis of the CMA's conservative share of supply estimates. On the available evidence, the CMA also believes that the Parties are not close competitors in the supply of CCM,

and that there are a number of alternative suppliers available post-Merger. Accordingly, the CMA found that the Merger does not give rise to a realistic prospect of an SLC as a result of horizontal unilateral effects in relation to the supply of CCM.

Horizontal unilateral effects – refractory products

116. The CMA also assessed whether it is or may be the case that the Merger has resulted, or may be expected to result, in an SLC in relation to horizontal unilateral effects in the supply of each of the Refractory Products.
117. In order to assess the likelihood of the Merger resulting in horizontal unilateral effects, the CMA considered a range of evidence:
- (a) the shares of supply of the Parties and their competitors;
 - (b) the closeness of competition between the Parties; and
 - (c) the competitive constraints posed by alternative suppliers within the market.

Shares of supply

118. The Parties provided the following shares of supply for the EEA.⁶⁶

Table 4: BURM – Parties’ estimated shares of supply in 2018 (EEA)⁶⁷

	Turnover	
	Sales (€ million)	Share of Supply (%)
RHIM	[REDACTED]	[30-40]%
Kümaş	[REDACTED]	[0-5]%
<u>Combined</u>	[REDACTED]	[30-40]%
Magnesitas Navarras	[REDACTED]	[20-30]%

⁶⁶ The Parties used a third-party report ([REDACTED]) to obtain the figure for the total size of the industry. They then used sales figures for themselves and estimates for third parties to calculate the estimated shares of supply. This was similar to the methodology used by the EC in the *RHI / Magnesita Refratarios* merger inquiry. The estimated shares of supply presented by the Parties are similar to those found by the EC in this case, except in respect of BSRD products. This is because, following the EC merger inquiry, RHI was required to divest its entire dolomite business in the EEA. Given this, the CMA considered that the shares of supply estimated by the Parties were likely to be a reasonably accurate reflection of the market.

⁶⁷ Parties’ Merger Notice, Table 15.2.

Vesuvius	[X]	[5-10]%
Daussan	[X]	[5-10]%
Others	[X]	[20-30]%
Total	[X]	100%

Source: [X] 2018,⁶⁸ Parties' revenues and estimates

Table 5: BSRD – Parties' estimated shares of supply in 2018 (EEA)⁶⁹

	Turnover	
	Sales (€ million)	Share of Supply (%)
RHIM	[X]	[50-60]%
Kümaş	[X]	[0-5]%
<u>Combined</u>	[X]	[50-60]%
Intocast/Dolomite Franchi	[X]	[10-20]%
Kelsen (Calcinor)	[X]	[5-10]%
Krosaki AM Refractories	[X]	[5-10]%
Others	[X]	[10-20]%
Total	[X]	100%

Source: [X], Parties' revenues and estimates

Table 6: BSRM fired – Parties' estimated shares of supply in 2018 (EEA)⁷⁰

	Turnover	
	Sales (€ million)	Share of Supply (%)
RHIM	[X]	[40-50]%

⁶⁸ [X], Global Refractory Markets, 4th Edition, 2018

⁶⁹ Parties' Merger Notice, Table 15.6.

⁷⁰ Parties' Merger Notice, Table 15.4.

Kümaş	[REDACTED]	[0-5]%
<u>Combined</u>	[REDACTED]	[40-50]%
Refratechnik	[REDACTED]	[30-40]%
Ropczyce	[REDACTED]	[10-20]%
Krosaki AM Refractories (AMR)	[REDACTED]	[5-10]%
Others	[REDACTED]	[5-10]%
Total	[REDACTED]	100%

Source: [REDACTED], Parties' revenues and estimates

Table 7: BSRM unfired – Parties' estimated shares of supply in 2018 (EEA)⁷¹

	Turnover	
	Sales (€ million)	Share of Supply (%)
RHIM	[REDACTED]	[30-40]%
Kümaş	[REDACTED]	[0-5]%
<u>Combined</u>	[REDACTED]	[30-40]%
Intocast/Dolomite Franchi	[REDACTED]	[10-20]%
Refratechnik	[REDACTED]	[10-20]%
Sanac	[REDACTED]	[10-20]%
Others	[REDACTED]	[20-30]%
Total	[REDACTED]	100%

Source: [REDACTED], Parties' revenues and estimates

119. The Parties submitted that the increments arising from the Merger, for each of the Refractory Products above, would be *de minimis*.⁷²

⁷¹ Parties' Merger Notice, Table 15.5.

⁷² Parties' Merger Notice, Para 15.24.

Conclusion on shares of supply

120. The CMA notes that the increments represented by Kümaş are very small: [0-5]% for BURM, [0-5]% for BSRD, [0-5]% for BSRM fired, and [0-5]% for BSRM unfired. However, as RHIM's shares of supply in Refractory Products are quite large, any further reduction in competition as a result of the Merger may give rise to concerns. Accordingly, the CMA considered evidence on the closeness of competition between the Parties and the available alternative suppliers.

Closeness of competition

121. The CMA has examined the closeness of competition between the Parties in the supply of Refractory Products and has considered:
- (a) the Parties' views;
 - (b) evidence from internal documents; and
 - (c) third party views.

Parties' views

122. The Parties submitted that there is limited overlap between RHIM and Kümaş' EEA customers and there is limited [REDACTED], indicating that RHIM and Kümaş are not close competitors.⁷³
123. The data provided by the Parties shows that [REDACTED] between the Parties' customers. The data also indicates that [REDACTED]. Equivalent data was not available for RHIM customer losses. Although there are limitations to this data, the CMA considers that this evidence – taken together with the other evidence discussed below – does not suggest close competition between the Parties.

Internal documents

124. In the 2018 [REDACTED] Report, which refers to the wider refractory market as a whole, RHI and Magnesita (prior to the formation of RHIM) were referred to as two of the world's six largest refractory manufacturers in 2016, along with Krosaki Harima (Japan), Shinagawa Refractories (Japan), Saint-Gobain (France), and Vesuvius (UK).⁷⁴ Kümaş was mentioned once in this report, as

⁷³ Parties' Merger Notice, Para 15.43.

⁷⁴ [REDACTED], page 185.

a refractory manufacturer based in Turkey, along with two other competitors, Haznedar Group, and Söğüt Refrakter Malzemeleri (SORMAŞ).⁷⁵

125. In RHIM's internal documents which discuss Refractory Product competitors, [REDACTED], while a number of other competitors, including [REDACTED]. This suggests that RHIM does not view Kümaş as a significant competitor in relation to Refractory Products.
126. RHIM often appears in Kümaş' internal documents as a competitor, both in relation to Refractory Products as a whole,⁷⁶ as well as "magnesite mortars",⁷⁷ BSRD (unfired), and BSRM fired refractory products.⁷⁸ However, RHIM appears alongside several other competitors.⁷⁹ No competitors are singled out as being particularly close to Kümaş.
127. Overall, the Parties' internal documents suggest that Kümaş monitors RHIM, the larger of the Parties, in relation to the Refractory Products. Kümaş' documents appear not to consider RHIM as a close competitor in terms of product range. RHIM's documents suggest that [REDACTED].

Third parties' views

128. All third party Refractory Products competitors that responded to the CMA's investigation believe that RHIM and Kümaş are close competitors in the supply of all of the Refractory Products.
129. The CMA asked third party customers of RHIM and Kümaş whether they would consider the other merging Party to be a viable alternative for the Refractory Products which they purchased. The responses the CMA received to this question were mixed. In relation to BURM and BSRD, most customers indicated that Parties were not viable alternatives to one another. For BSRM fired and BSRM unfired, some customers indicated the Parties were viable alternatives to one another, while others indicated they were not.
130. Overall, the evidence from third parties was mixed across all of the Refractory Products as to whether the Parties are close competitors.

Conclusion on closeness of competition

131. Overall, the CMA considers that the evidence suggests that the Parties are not particularly close competitors. Although evidence from third parties was mixed, evidence from internal documents showed that while Kümaş does

⁷⁵ [REDACTED], page 182.

⁷⁶ [English Translation] A-001, [REDACTED], slide 17; and [English Translation] A-002 [REDACTED], slide 12.

⁷⁷ The CMA understands that mortar in this context may refer to unshaped product, i.e. BURM.

⁷⁸ [English Translation] A-001, [REDACTED], slide 18; and [English Translation] A-002, [REDACTED], slide 13.

⁸⁰ Parties' Merger Notice, Paragraph 15.13(ii).

monitor RHIM, the larger of the Parties, in relation to the Refractory Products, Kümaş' documents appear not to consider RHIM as a close competitor. Further, RHIM's documents suggest that [X].

Third party constraints

132. In relation to third party constraints, the CMA has considered:

- (a) the Parties' views;
- (b) evidence from internal documents; and
- (c) third party views.

Parties' views

133. The Parties submitted that the Merged Entity will continue to face competitive constraints for each Refractory Product from a number of established competitors with substantial shares of supply. In particular, the Parties submitted that:

- (a) BURM: The Merged Entity will continue to face competitive constraints from Magnesitas Navaras, which has a [20-30]% share of supply, Vesuvius and Daussan, which both have shares of [5-10]%, and a large number of other suppliers which have a combined share of supply of [20-30]% (based on value);
- (b) BSRD: The Merged Entity will face competitive constraints from Intocast / Dolomite Franchi ([10-20]%), Kelsen ([5-10]%) and Krosaki ([5-10]%) (based on value);
- (c) BSRM fired: the Merged Entity will continue to face competitive constraints from Refratechnik, which has a share of supply of [30-40]%, Ropczyce, which has a share of supply of [10-20]% and Krosaki which has a share of supply of [5-10]% (all based on both volume and value of sales); and
- (d) BSRM unfired: the Merged Entity will continue to face competitive constraints from Intocast / Dolomite Franchi ([10-20]%), Refratechnik ([10-20]%) and Sanac ([10-20]%) (all based on both volume and value of sales).⁸⁰

⁸⁰ Parties' Merger Notice, Paragraph 15.13(ii).

Internal documents

134. RHIM's internal documents suggest that it views [X] as its closest competitor across refractory products as a whole. [X] is mentioned in a number of its internal documents and is shown as having a broader international presence and producing a relatively wide range of refractory products compared to other rival suppliers.⁸¹
135. RHIM's internal documents also specifically mention competitors in relation to the different Refractory Product segments:
- (a) In relation to BURM, RHIM's internal documents mention [X] as a competitor.⁸²
 - (b) In the market for BSRD (fired), RHIM's internal documents mention [X]⁸⁹ and [X].⁸³
 - (c) For BSRM fired, RHIM's internal documents mention [X],⁸⁴ [X],⁸⁵ and [X].⁸⁶
 - (d) Finally, in the market for BSRM unfired, RHIM's internal documents mention [X],⁸⁴ [X],⁸⁷ [X],⁸⁷ [X],⁸⁷ [X],⁸⁸ [X],⁸⁹ and [X].⁸⁹
136. Kūmaş' internal documents also suggest that refractory products as a whole there are several alternatives available to customers of RHIM and Kūmaş, including [X].⁹⁰
137. One of Kūmaş' internal documents also provides a breakdown of its competitors by Refractory Product type. This is presented below in Table 8.

⁸¹ D-054, [X], slide 19; D-057, [X], slide 48; D-045, [X].

⁸² D-054, [X], Slide 20

⁸³ D-075, [X], Slide 2

⁸⁴ D-063, [X], Slide 6

⁸⁵ D-066, [X], Slide 11

⁸⁶ D-075, [X], Slide 3

⁸⁷ D-071, [X], Slide 9

⁸⁸ D-072, [X], Slide 5

⁸⁹ D-073, [X], Slide 15

⁹⁰ [English Translation] A-001, [X], Slide 18

Table 8: Kümaş' competitors in the different Refractory Product segments⁹¹

BURM	BSRD (unfired)	BSRM fired	BSRM unfired
- [✂]	- [✂]	- [✂]	- [✂]

138. Overall, the Parties' internal documents suggest that there are a number of alternative competitors available for the supply of each of BURM, BSRD, BSRM fired and BSRM unfired.

Third parties' views

139. In relation to Refractory Products, several customers identified Intocast as a viable alternative supplier to the Parties in every segment.

140. In addition:

(a) In relation to BURM, some customers also identified Magnesita Navarras. Individual customers also identified a number of alternative suppliers, including Minteq.

(b) In relation to BSRD, some customers further identified Kelsen and Duferco. One customer also identified a number of alternative suppliers, including Qinghua and Dolomite Franchi.

(c) In relation to BSRM fired, some customers also identified Duferco.

(d) In relation to BSRM unfired, customers also identified Mayerton, Misano, Duferco, Refratechnik, and Vesuvius as viable alternatives.

141. Some Refractory Product customers of one or both of the merging Parties raised concerns about the Merger relating to reduced customer choice and higher prices.

142. However, the evidence gathered by the CMA shows that Kümaş represents a small increment to RHIM's market shares and Kümaş does not pose a significant competitive constraint on RHIM and there are a number of alternative suppliers for each of the Refractory Products.

⁹¹ [English Translation] A-001, [✂] Slide 18

Conclusion on third party constraints

143. Overall, the evidence from third parties shows that viable alternative suppliers of Refractory Products will remain post-Merger.

Conclusion on horizontal unilateral effects

144. As set out above, the CMA believes that the Merger will result in a [0-5]% in BURM, BSRD and BSRM unfired and [0-5]% in BSRM fired. The CMA believes that while Kümaş may be constrained by RHIM, RHIM does not appear to be materially constrained by Kümaş. The evidence also indicates that there are a range of alternative competitors available post-Merger. Accordingly, the CMA found that the Merger does not give rise to a realistic prospect of an SLC as a result of horizontal unilateral effects in relation to BURM, BSRD, BSRM unfired and BSRM fired.

Vertical effects

145. Vertical effects may arise when a merger involves firms at different levels of the supply chain, for example a merger between an upstream supplier and a downstream customer or downstream competitors of the supplier's customers.
146. The CMA's approach to assessing vertical theories of harm is to analyse (a) the ability of the merged entity to foreclose competitors, (b) the incentive of it to do so, and (c) the overall effect of the strategy on competition.⁹²
147. In the present case, the CMA has considered whether two potential vertical concerns may arise:
- (a) First, the CMA considered whether the Merger may give the Parties the ability and incentive to raise prices for, or stop supplying, downstream competitors in the market for refractory products, i.e. input foreclosure.
 - (b) Second, the CMA considered whether the Merger could give the Parties the ability and incentive to stop sourcing processed raw materials from rival upstream suppliers, i.e. customer foreclosure.

Input foreclosure

148. During the course of its investigation, the CMA received some responses from third parties highlighting concerns around access to raw material inputs. Some respondents felt that non-vertically integrated manufacturers of

⁹² *Merger Assessment Guidelines*, paragraph 5.6.6.

refractory products are likely to have fewer available choices when sourcing Processed Magnesia Products as a result of the Merger. However, both the Parties are vertically integrated. Accordingly, the Merger will not lead to fewer non-vertically integrated suppliers of Processed Magnesia Products in the market.

149. Furthermore, the Parties have a relatively low share of supply in the upstream Processed Magnesia Product markets (see paragraphs 81 to 85 above). Specifically, the CMA's estimate of the Parties' combined share of supply in the dead-burned/sintered magnesia market is [20-30]% with an increment of [5-10]% (see **Table 1** above). However, the CMA believes this estimate is conservative on the basis that it does not capture all the firms that are active in the EEA market and it does not capture any imports from China (as well as other non-EEA countries).
150. On this basis, it is unlikely that the Parties have the ability to foreclose any of their downstream rivals and no conclusions need to be drawn on the Parties' incentives to do so.
151. The CMA therefore believes that the Merger does not give rise to a realistic prospect of an SLC as a result of vertical effects leading to input foreclosure of downstream competitors in the supply of refractory products in the EEA.

Customer foreclosure

152. In terms of customer foreclosure, the share of supply increment in the downstream refractory market is very small. In particular, the largest share of supply increment is in the BSRM unfired segment where the increment is [0-5]% (see Table 7 above).
153. In addition, the Parties have told the CMA that their downstream refractory businesses source the majority of their processed raw materials from their own upstream business. Specifically, RHIM's refractory business sources approximately [X]% of its processed raw materials from its upstream business with the equivalent figure for Kūmaş being [X]%.⁹³
154. On this basis, it is unlikely that the Parties have the ability to foreclose any of their upstream rivals and no conclusions need to be drawn on the Parties' incentives to do so.
155. The CMA therefore believes that the Merger does not give rise to a realistic prospect of an SLC as a result of vertical effects leading to customer

⁹³ Parties' Merger Notice, paragraph 15.61 and 15.63.

foreclosure of upstream competitors in the supply of processed raw materials in the EEA.

Barriers to entry and expansion

156. Entry, or expansion of existing firms, can mitigate the initial effect of a merger on competition, and in some cases may mean that there is no SLC. In assessing whether entry or expansion might prevent an SLC, the CMA considers whether such entry or expansion would be timely, likely and sufficient.⁹⁴
157. However, the CMA has not had to conclude on barriers to entry or expansion as the Merger does not give rise to competition concerns on any basis.

Countervailing buyer power

158. The Parties submitted that customers exercise countervailing buyer power through their ability to switch refractory producer and raw material supplier.⁹⁵ However, the CMA has not seen any evidence to support this.
159. As noted in paragraphs 42 and 43 above, switching to non-approved suppliers is difficult, because any supplier will need to go through a trial and testing period to ensure that the product meets the necessary standards. This would suggest that buyer power may be limited.

Third party views

160. The CMA contacted customers and competitors of the Parties.
161. Third party comments, including concerns raised in relation to the Merger, have been taken into account where appropriate in the competitive assessment above.

Decision

162. Consequently, the CMA does not believe that it is or may be the case that the Merger may be expected to result in an SLC within a market or markets in the United Kingdom.
163. The Merger will therefore **not be referred** under section 33(1) of the Act.

⁹⁴ *Merger Assessment Guidelines*, from paragraph 5.8.1.

⁹⁵ Parties' Merger Notice, paragraph 15.2 (vi).

Richard Romney
Director, Mergers
Competition and Markets Authority
20 March 2020

ⁱ The Parties satisfied the CMA that they had a good faith intention to proceed with the Merger, but at the time of the decision, they had not yet entered into a contractual agreement.

ⁱⁱ See end note i above.

ⁱⁱⁱ See end note i above.

^{iv} The reference to basic unshaped refractory product from dolomite should be referred to as “BURD”, rather than “BSRD”.