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***Case No M.7593 - ALCOA  
/ RTI INTERNATIONAL  
METALS***

Only the English text is available and authentic.

**REGULATION (EC) No 139/2004  
MERGER PROCEDURE**

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Article 6(1)(b) NON-OPPOSITION  
Date: 11/06/2015

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## EUROPEAN COMMISSION

Brussels, 11.6.2015  
C(2015) 4113 final

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 Where possible the information omitted has been replaced by ranges of figures or a general description.

PUBLIC VERSION

MERGER PROCEDURE

### To the notifying party

Dear Sir/Madam,

**Subject: Case M.7593 - ALCOA / RTI INTERNATIONAL METALS  
Commission decision pursuant to Article 6(1)(b) of Council Regulation  
No 139/2004<sup>1</sup> and Article 57 of the Agreement on the European Economic  
Area<sup>2</sup>**

- (1) On 4 May 2015, the European Commission (the "Commission") received notification of a proposed concentration pursuant to Article 4 of the Merger Regulation by which Alcoa Inc. ("Alcoa", U.S.) will acquire within the meaning of Article 3(1)(b) of the Merger Regulation sole control over RTI International Metals, Inc. ("RTI", U.S.) by way of purchase of shares.<sup>3</sup> Alcoa is designated hereinafter as the "Notifying Party" and together with RTI as the "Parties" to the proposed transaction.

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<sup>1</sup> 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.

<sup>2</sup> OJ L 1, 3.1.1994, p. 3 ("the EEA Agreement").

<sup>3</sup> Publication in OJ C 158, 13.5.2015, p. 16.

## **1. THE PARTIES AND THE OPERATION**

- (2) Alcoa is a publicly listed producer active in lightweight metals engineering and manufacturing. Its multi-material products include aluminium, titanium, and nickel and are used in aircraft, automobiles, commercial transportation, packaging, building and construction, oil and gas, defence, consumer electronics, and industrial applications. Alcoa is also active in the production and management of primary aluminium, fabricated aluminium, and alumina. Alcoa's operations consist of four worldwide segments: (i) Alumina, (ii) Primary Metals, (iii) Global Rolled Products and (iv) Engineered Products and Solutions.
- (3) RTI is a publicly listed producer of titanium mill and melted products, and of extruded and machined components, for the aerospace, defence, energy, medical device, and other consumer and industrial markets. Its business is divided into two segments: (i) upstream: Titanium segment, and (ii) downstream: Engineered Products and Services (EP&S) segment.
- (4) By agreement and plan of merger signed on 8 March 2015 between the Parties and Ranger Ohio Corporation, a direct wholly owned subsidiary of Alcoa ("Merger Sub"), the Parties intend that Merger Sub shall be merged with and into RTI International, with RTI International surviving the merger as the direct wholly owned subsidiary of Alcoa.
- (5) The proposed concentration, which will be effected by way of purchase of shares in a stock-for-stock transaction, constitutes a concentration within the meaning of Article 3(1)(b) of the Merger Regulation.

## **2. EU DIMENSION**

- (6) The transaction will have a Union dimension under Article 1(3) of the Merger Regulation. The undertakings concerned have a combined aggregate world-wide turnover of more than EUR 2 500 million<sup>4</sup> [Alcoa: EUR [...]; RTI: EUR [...]]. In each of at least three Member States [[...]], the combined aggregate turnover of the undertakings concerned is more than EUR 100 million. In each of these Member States, the aggregate turnover of each of the undertakings concerned is more than EUR 25 million, but they do not achieve more than two-thirds of their aggregate EU-wide turnover within one and the same Member State. The aggregate Union-wide turnover of each of the undertakings concerned is more than EUR 100 million. The notified concentration therefore has an EU dimension.

## **3. COMPETITIVE ASSESSMENT**

- (7) The transaction is primarily of a vertical nature. RTI is a supplier of melted and milled titanium input products, whereas Alcoa purchases such titanium products as inputs for its casting and forging activities. RTI also has some downstream activities in machining and extrusions, and Alcoa has limited production of melted titanium input products.

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<sup>4</sup> Turnover calculated in accordance with Article 5 of the Merger Regulation and the Commission Consolidated Jurisdictional Notice (OJ C 95, 16.4.2008, p. 1).

- (8) Although both RTI and Alcoa are active in the production of melted titanium input products, their combined market shares are limited (around [10-20]%) under any plausible product market definition. The proposed transaction therefore does not lead to horizontally affected markets.

### **3.1. Market definition**

- (9) There are three distinct stages in the manufacturing of titanium products. The value chain consists of: (i) supply of raw materials (upstream), which exist in the form of titanium sponge and recycled titanium scrap; (ii) production of input products (midstream), namely melted and milled products; and (iii) conversion of input products into near-net shape components via various manufacturing processes (downstream), including casting, forging, machined components and extrusion.

#### *3.1.1. Upstream products*

- (10) Neither Party is active in the production and sale of titanium sponge and titanium scrap.<sup>5</sup>The Notifying Party therefore submits that in the absence of overlaps between the Parties' activities, the relevant product market for the upstream products does not need to be defined.<sup>6</sup> As for the geographic scope, the Parties refer to the Commission decision in case M.6765 – Precision Castparts/Titanium Metals which found that the geographic market for titanium upstream products to be worldwide.<sup>7</sup>
- (11) The Commission considers that given the absence of any horizontal overlap or vertical relationship upstream, there is no need to define the exact scope of the product and geographic markets with regard to titanium sponge and recycled titanium scrap.

#### *3.1.2. Midstream markets*

- (12) Melted products exist in three main forms: (i) ingots; (ii) electrodes; and (iii) slabs and are inputs for the production of mill products as well as for the downstream processes, notably casting, and to a more limited extent, forging.
- (13) Mill products exist in three main forms: (i) long (billet and bar); (ii) flat (plate and sheet); and (iii) pipe. They are inputs for downstream processes that reshape the metal in solid form, notably forging, extrusion, and machining. Mill products are not used in casting.
- (14) The Commission previously considered that the product markets may need to be defined by at least the form of the product (e.g. long, flat) and potentially by

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<sup>5</sup> Both Alcoa and RTI produces titanium scrap which is used internally and make no sales to third parties. Although Alcoa, as a result of the recent acquisition of Firth Rixon, produces [...] metric tons of titanium scrap that [...].

<sup>6</sup> The upstream markets were analysed in the case M.6765 – Precision Castparts/Titanium Metals.

<sup>7</sup> M.6765 – *Precision Castparts/Titanium Metals*.

grade/alloy (rotating vs. non-rotating), but left the precise market definition open.<sup>8</sup> The Notifying Party submits that same should apply to the notified transaction.

- (15) The replies from customers and competitors which the Commission received in the market investigation indicated that titanium melted products could be further segmented into ingots and slabs<sup>9</sup> from both a demand and a supply side perspective.<sup>10</sup> Respondents to the investigation also consider that a significant degree of differentiation between various grades of titanium or titanium alloys exists. Generally titanium melted products can be distinguished based on (a) customer type (aerospace, industrial, medical etc.), (b) whether they will be used to produce mill products (wrought grades: plates, bars etc) or castings,<sup>11</sup> (c) whether they will be used for rotating grade products (such as rotating hot gas aerospace engine components),<sup>12</sup> (d) titanium purity and type of alloy (the most widespread alloy being titanium 6-aluminum 4-vanadium alloy).<sup>13</sup>
- (16) From the demand-side perspective, the choice for certain type of melted titanium product is based on the product requirements determined by the end application.<sup>14</sup> Thus, grades produced to meet certain product requirements are not easily substitutable from the point of view of intended use.<sup>15</sup> In terms of supply volumes, the main distinction appears to be between titanium for aerospace end use and titanium for other applications (industrial, medical etc.). In particular the aerospace industry generally requires a higher titanium purity level of the titanium grade compared to other industries.<sup>16</sup> Each aerospace OEM requires producers to undergo complex and lengthy qualification procedures before they are accepted as an approved source of titanium materials. According to one aerospace OEM, switching from qualified to unqualified is *"not easily done because aerospace / airworthiness authorities require lengthy and expensive test programmes to be carried out to confirm that un-qualified product can be qualified."*<sup>17</sup>

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<sup>8</sup> M.6765 – *Precision Castparts/Titanium Metals*, para. 25.

<sup>9</sup> Electrodes were described as intermediate product in the production of ingots or slabs.

<sup>10</sup> Reply to Q2-Questionnaire to Customers, question 7 and reply to Q1-Questionnaire to Competitors, question 6.

<sup>11</sup> Reply to Q2-Questionnaire to Customers, questions 7 and 8.

<sup>12</sup> Reply to Q2-Questionnaire to Customers, question 12 and reply to Q1-Questionnaire to Competitors, question 13.

<sup>13</sup> Reply to Q2-Questionnaire to Customers, question 11 and reply to Q1-Questionnaire to Competitors, questions 7 and 8.

<sup>14</sup> An aerospace OEM customer observed: *"Melt process (type and number of re-melts) and input stock are major elements that define pedigree and applicability of ingot material. Premium Quality (PQ) melted ingots are required for aerospace applications such as rotors. Characteristics that differentiate pedigrees of ingot materials include chemistry control, segregation, microstructure control and ultrasonic inspectability in post ingot processing form..."*. Reply to Q2-Questionnaire to Customers, question 8.2.

<sup>15</sup> Higher quality titanium may also be used for applications with less strict product requirements, but only if this is commercially sensible.

<sup>16</sup> Reply to Q2-Questionnaire to Customers, questions 7 and 8.

<sup>17</sup> Reply to Q2-Questionnaire to Customers, question 11.1.

- (17) Rotating grade titanium melted products constitute an important sub-category of melted titanium product for the aerospace industry. According to a customer, *"[r]otating grade titanium (often referred to as Premium Quality (PQ)) requires control and maintenance of input material and process traceability. Control of inspectability and processing methods to ensure elimination of melt related defects is a requirement for PQ applications. Lifting analysis is strongly linked to material quality, defect probability, and inspection probability of detection; all of these are required features for critical rotating components."*<sup>18</sup>
- (18) From the supply-side perspective, switching production from one type of melted product (ingots, slabs) to another may be, depending on the type of melting furnace, rather difficult due to high investment costs involved.<sup>19</sup> More generally, for all forms of melted product, the majority of the Parties' competitors also support the Commission's view that for producers not yet active in the aerospace sector, it is difficult to reposition themselves towards aerospace customer, notably due to the complex, lengthy and costly qualification processes for both the specific product as well as production processes and facilities.<sup>20</sup> A customer explained that *"[i]f a producer has no aerospace qualifications, it can be costly and time consuming to get qualified. In addition, the qualification process for non-rotating grade aerospace products is less stringent than the qualification process for rotating grade aerospace products. Additionally, the OEM must be willing to qualify a new source. This holds true for both melted and mill products."*<sup>21</sup> The replies during the market investigation suggests that the same is true for the suppliers' switching to rotating grade products: *"[r]otative grades require much longer qualification. Stability of technology and internal quality and homogeneity of material is key issue. Prices is slightly higher"*.<sup>22</sup> A customer explained that *"all producers of rotating grades are active in the aerospace industry."*<sup>23</sup>
- (19) As the majority of the respondents confirmed that titanium melted products are intermediate products in the production (for example, rolling) of milled products such as plates, sheet, bars, billets, pipes and wire<sup>24</sup>, substitutability considerations for titanium melted products are equally applicable to titanium mill products. In addition, the results of the market investigation also showed that suppliers of mill products may be specialised in different type of mill products (flat, long).<sup>25</sup>
- (20) On the whole, the Commission concludes on the basis of the replies from the market investigation that the market for titanium input products can be segmented

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18 Reply to Q2-Questionnaire to Customers, question 12.

19 Reply to Q1-Questionnaire to Competitors, question 6 and reply to Q2-Questionnaire to Customers, question 7.

20 Reply to Q1-Questionnaire to Competitors, questions 11 and 12. See also COMP/M.6765 – *Precision Castparts/Titanium Metals*, paragraphs 64-66.

21 Reply to Q1-Questionnaire to Competitors, question 12.

22 Reply to Q1-Questionnaire to Competitors, question 13.

23 Reply to Q2-Questionnaire to Customers, question 12.3.

24 Reply to Q1-Questionnaire to Competitors, question 9 and reply to Q2-Questionnaire to Customers, question 10.

25 Reply to Q1-Questionnaire to Competitors, questions 8.1 and 10.

into melted and mill, and possibly further segmented by the form of melted product (ingots, slabs), the form of milled product (long, flat, pipes) and end use. However, as the notified transaction is unlikely to significantly impede effective competition under any plausible market definition, the question of the exact scope of the relevant product market for input products can be left open.

- (21) As for the geographic scope, the Notifying Party contends that the relevant markets for titanium melted products are world-wide in scope. This is in line with the Commission decision in case M.6765 – Precision Castparts/Titanium Metals<sup>26</sup>, and was confirmed by the responses received in market investigation. From a demand-side perspective, titanium melted and milled products are sourced globally while transport costs and trade barriers are minimal. From a supply-side perspective, the same competitors are active globally and the conditions of supply are homogeneous worldwide. However there may be some limitations due to export control and other laws that limit where supplies can be purchased.<sup>27</sup> Taking into account these factors, the Commission considers that the markets for titanium melted and milled products is worldwide in scope.

### 3.1.3. Downstream markets

- (22) Various manufacturing techniques may be used to convert titanium input product into components: (i) casting is the process of producing parts by re-melting the input product and pouring the liquid metal into a mould, (ii) forging is the shaping of solid metal using localized compressive forces, typically via presses or hammers powered by compressed air, electricity, hydraulics or steam, (iii) machined components are produced by subtractive manufacture (cutting and drilling) and forming, primarily from sheet and plate, (iv) extrusions are formed by pushing long mill products (typically billets) through a die, which produces lengths with a specific 2D profile that may be cut to size.
- (23) The Notifying Party submits that in the present case, the product market definition for the downstream activities does not need to be defined. As for the geographic scope, the Parties agree with the Commission's previous decisional practice which found that the geographic market for titanium components products to be at least EEA-wide or more likely worldwide.<sup>28</sup>
- (24) The demand- and supply-side substitutability considerations concerning the aerospace customers, including for rotating grade products, as discussed in paragraphs (16) to (18) are also relevant on the downstream markets for components.<sup>29</sup> Notably, to qualify as a supplier to aerospace OEMs, a supplier of components must fulfil the requirements related both to the upstream titanium input material and its own manufacturing processes.

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<sup>26</sup> M.6765 – *Precision Castparts/Titanium Metals*, paragraph 28.

<sup>27</sup> Reply to Q1-Questionnaire to Competitors, question 20 and reply to Q2-Questionnaire to Customers, question 19.

<sup>28</sup> M.1919 – *Alcoa/Cordant*, paras. 12, 19 and 27; M.6765 – *Precision Castparts/Titanium Metals*, para. 47; M.7342 – *Alcoa/Firth Rixson*, para. 32., M.4561 – *GE/Smiths Aerospace*, para. 23.

<sup>29</sup> Replies to Q1-Questionnaire to Competitors, questions 15-17 and reply to Q2-Questionnaire to Customers, questions 15 and 16.

- (25) As regards titanium based investment casting products, the Commission previously considered that separate markets could be defined for: (i) aerospace airfoil casting; (ii) aerospace engine structural casting; and (iii) aerospace airframe structural casting.<sup>30</sup>
- (26) As regards, titanium based forged products, the Commission considered whether additional segmentations should be made between aerospace (which is subject to rigorous certification criteria<sup>31</sup>) and other uses, and among specific applications within aerospace applications.<sup>32</sup> In this respect, separate markets could be defined for (i) castings for medical and military end-use applications; (ii) rotating engine components; (iii) non-rotating engine components; (vii) airframe structures; (viii) aerostructures; and (ix) fasteners<sup>33</sup>.
- (27) The results of the market investigation are inconclusive as to whether titanium based casting products, titanium based forged products, machined components and extrusions should be further segmented based on characteristics, demand or supply-side considerations.<sup>34</sup> A broad majority of the respondents confirmed that components for aerospace applications do not compete with components for other end-uses due to specific aircraft and certification requirements in the aerospace industry. Similarly, rotating grade components constitute a separate market from non-rotating grade components both from a supply and demand-side perspective.<sup>35</sup> As for fasteners, the results of the market investigation indicated that no further segmentation is needed by grades or end-use.<sup>36</sup>
- (28) On this basis, having regard to the Parties' activities, forged titanium components could be further sub-divided into rotating engine components, non-rotating engine components, airframe structures, aerostructures, and fasteners. Likewise, titanium castings could be further sub-divided into aerospace engine structural castings, aerospace airframe structural investment castings, and investment castings for defence and other applications.<sup>37</sup>
- (29) As for the geographic scope of the markets, the Commission's finding in previous decisions was that the geographic market for titanium components products is

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<sup>30</sup> M.1919 – *Alcoa/Cordant*, related to the aluminium sector, M.6765 – *Precision Castparts/Titanium Metals*.

<sup>31</sup> COMP/M.6765 – *Precision Castparts/Titanium Metals*, paras. 64 to 68.

<sup>32</sup> COMP/M.7342–*Alcoa/Firth Rixson*, paras. 26 and 27 and COMP/M.6765–*Precision Castparts/Titanium Metals*, paras. 39 to 43.

<sup>33</sup> M.6765 – *Precision Castparts/Titanium Metals*, para. 43.

<sup>34</sup> Replies to Q1-Questionnaire to Competitors, question 15 and reply to Q2-Questionnaire to Customers, question 14.

<sup>35</sup> Replies to Q1-Questionnaire to Competitors, questions 16 and 17 and reply to Q2-Questionnaire to Customers, questions 15 and 16.

<sup>36</sup> Replies to Q1-Questionnaire to Competitors, question 19 and reply to Q2-Questionnaire to Customers, question 18.

<sup>37</sup> M.6765 – *Precision Castparts/Titanium Metals*, paragraph 43.



likely to be at least EEA-wide or more likely worldwide.<sup>38</sup> The market investigation results support that finding.

- (30) For the purpose of this decision, it is not necessary to conclude on the exact product and geographic market definition as the proposed transaction does not give rise to serious doubts as to its compatibility with the internal market under any plausible market definition set out at above.

### **3.2. Vertical effects**

#### *3.2.1. Competition effects of a vertical merger*

- (31) A vertical merger may potentially give rise to input foreclosure or customer foreclosure.

- (32) 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.<sup>39</sup> Customer foreclosure may occur when a supplier integrates with an important customer in the downstream market. 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. In turn, this may raise downstream rivals' costs by making it harder for them to obtain supplies of the input under similar prices and conditions as absent the merger.<sup>40</sup>

- (33) In order for input or customer foreclosure to be a concern, three conditions need to be met post-merger: (i) the merged entity needs to have the ability to foreclose its rivals; (ii) the merged entity needs to have the incentive to foreclose its rivals; and (iii) the foreclosure strategy needs to have a significant detrimental effect on competition on the downstream market (input foreclosure) or on consumers (customer foreclosure). In practice, these factors are often examined together since they are closely intertwined.<sup>41</sup>

#### *3.2.2. Vertical relationships: titanium melted products (ingots) as input for Alcoa's downstream forging and casting activities*

- (34) Both Parties are active in the production and sale of ingots. A portion of RTI's and Alcoa's ingots is used for downstream manufacturing and the remainder is sold on the market. RTI uses the ingots for its machined components and extrusions, while Alcoa uses ingots for its forging and casting activities.

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<sup>38</sup> Replies to Q1-Questionnaire to Competitors, question 20 and reply to Q2-Questionnaire to Customers, question 19.

<sup>39</sup> See, for instance Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 265, 18.10.2008, p. 6 ('Non-Horizontal Guidelines'), paragraph 31.

<sup>40</sup> See, for instance Non-Horizontal Guidelines, paragraph 58.

<sup>41</sup> See, for instance Non-Horizontal Guidelines, paragraphs 32 and 59.

- (35) The Parties estimate that the total worldwide merchant market for ingots is 90.7kt. RTI produced [...]kt and Alcoa [...]kt of ingots in 2014, and together representing a market share of [10-20]%. In the production of ingots, the Parties face competition from VSMPO ([...]kt), Baoji Titanium Industry ([...]kt), PCC-Timet ([...]kt), ATI ([...]kt) and Toho Titanium ([...]kt). At the worldwide level, up to 80% of ingot is pre-sold to OEMs, such as Boeing, UTC, and Rolls Royce under Long Term Agreements (LTAs).
- (36) The majority of customers in the market investigation raised no competition concerns with respect to the ability of the merged entity to foreclose its competitors on the markets for titanium components. Although one customer indicated that in the long-term increasing levels of vertical integration could weaken its ability to negotiate competitive prices, the proposed transaction will not have a negative impact in the medium term due to the LTAs currently in place which allow for a degree of protection until the forthcoming expiry of the supply contract with one of the Parties to the transaction.<sup>42</sup>
- (37) The Commission considers that the Parties are unlikely to have the incentive and the ability to foreclose competitors' access to titanium melted products in order to strengthen their position on the downstream markets for components for the following reasons:
- a. the Parties only have a limited market share for titanium input products (overall [10-20]%). Even if the product markets were limited to specific titanium alloys, the Parties' market shares would remain moderate. Concerning standard 6 Aluminium - 4 Vanadium alloys, RTI's sales represent [...]% and Alcoa less than [...]% of the total sales. For other specialty subtypes of the 6 Alluminium – 4 Vanadium alloy (ELI and Ru), RTI's and Alcoa's sales represent respectively [...]% and [...]% of the overall sales. Similarly, while RTI accounts for approximately [...]% of the sales of the Beta C alloy, Alcoa's output is insignificant.
  - b. the Parties face a number of significantly larger competitors. In the market investigation, the majority of customers indicated that the main suppliers of titanium melted products (notably ingots and slabs), whether for aerospace, non-aerospace or rotating grade are ATI, PCC/Timet, VSMPO and RTI. The number of qualified suppliers for titanium melted products for aerospace uses only ranges from 3 to 10 and switching suppliers is relatively easy provided that the alternative supplier is already qualified for aerospace application. Overall, customers perceive the level of competition in titanium melted products (either aerospace, non-aerospace or rotating grade) as moderate.<sup>43</sup>
  - c. customers and competitors generally consider that RTI does not have any significant advantage over other titanium input suppliers to the aerospace

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<sup>42</sup> Replies to Q2-Questionnaire to Customers, question 51.

<sup>43</sup> Replies to Q2-Questionnaire to Customers, questions 23, 24, 25 and 30 and reply to Q1-Questionnaire to Competitors, question 26.

industry. On the contrary, some consider that RTI is disadvantaged due to its smaller scale and lack of integration.<sup>44</sup>

- d. RTI presently only sells small quantities of input products outside the LTAs. Moreover, large aerospace OEMs put in place directed buy arrangements, whereby the OEM agrees with the titanium input supplier the terms of titanium input supplies to its suppliers of components.<sup>45</sup> Such arrangements can be seen as an expression of buyer power by large OEMs and may defeat the Parties' attempts to foreclose downstream rivals.
  - e. the investigation has confirmed that there is significant spare capacity in the market.<sup>46</sup> This is consistent with Alcoa's forecast that at the current level of production capacity, the utilisation rate would increase from the current rate of [60-80]% by 2018.<sup>47</sup>
- (38) Customer foreclosure, whereby the Parties would use their downstream position as important buyers / components suppliers to foreclose its rivals' supplies of titanium melted products, is equally unlikely. Although Alcoa has a significant position in certain downstream segments, such as defence and other non-aerospace castings in the EEA (market share of [30-40]% in 2014), it does not purchase significant volumes of titanium melted product. Alcoa's ingot requirement for the last three years was on average [...]kt for casting and [...]kt for forging, representing only [...]% of the total demand for ingots. Therefore, the Parties do not appear to represent an important sales outlet for any of the significant upstream players.
- (39) The majority of customers consider that the merged entity will not be able to use its market position on the upstream market for melted products to foreclose its competitors for titanium components and none of the customers raised competition concerns about the ability of the merged entity to engage in a foreclosing strategy in the opposite scenario (use its downstream position in the supply of components to foreclose its rivals for titanium melted products).<sup>48</sup>
- 3.2.3. *Vertical relationships: titanium mill products as inputs for Alcoa's downstream forging and activities*
- (40) RTI is active in the production of long (billet) and flat (plate and sheet) milled products which Alcoa uses downstream for its forging activities. RTI has limited downstream presence in forging, as well as in extrusions and machined components.
- (41) In 2014, Alcoa had a relatively significant position in the sub-segments for forged non-rotating engine components (market share of [30-40]%) and fasteners (market share of [30-40]%).

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<sup>44</sup> Replies to Q2-Questionnaire to Customers, question 28.

<sup>45</sup> See, for example, Response to Questions on 2<sup>nd</sup> draft Form CO dated 24 March 2015, question 4.

<sup>46</sup> Replies to Q2-Questionnaire to Customers, question 21 and reply to Q1-Questionnaire to Competitors, question 22.

<sup>47</sup> Annex 5.4 documents, "Sufficient capacity also exists at melt and mill products...", p. 6.

<sup>48</sup> Replies to Q2-Questionnaire to Customers, question 52.

- (42) However, the Parties are unlikely to engage in input or customer foreclosure post-merger.
- (43) The Commission considers that the Parties are unlikely to have the incentive and the ability to foreclose competitors' access to titanium mill products in order to strengthen their position on the downstream markets for components for the following reasons:
- a. RTI only has a limited market share on any of the possible market segments for the relevant input products – [0-5]% for rotating mill products (overall demand 18kt), less than 5% on both the segment of long non-rotating mill products (overall demand 62.7kt) and of flat non-rotating mill products (overall demand 42.2kt);
  - b. the Parties will face many strong rivals in the supply of milled titanium products, notably PCC, ATI and VSMPO;<sup>49</sup>
  - c. none of the customers and competitors considered that RTI has any significant advantage over other titanium input suppliers to the aerospace industry;<sup>50</sup>
  - d. the investigation has confirmed that there is significant spare capacity in the market;<sup>51</sup>
  - e. Alcoa's internal documents demonstrate that while the notified transaction was expected to improve the utilisation rate to around [...] % by 2018, this would not be at the expense of existing outlets, even taking into account Alcoa's requirements and the demand growth. The open capacity would remain available to downstream parts, directed buy etc.<sup>52</sup>
- (44) The majority of customers raised no competition concerns as regards the possibility that the merged entity would use its market position on the upstream market for milled products to foreclose its competitors for titanium components.<sup>53</sup>
- (45) With respect to customer foreclosure, it is unlikely that the merged entity will foreclose its upstream rivals by restricting access to an important customer. Notably, there is a broad customer base for mill products, which includes aerospace OEMs either directly or through directed buy agreements (where the subcontractors for OEMs source titanium input products under terms agreed by the OEM and the titanium supplier). The Parties represent only a small portion of the overall demand for mill products.

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<sup>49</sup> Replies to Q1-Questionnaire to Competitors, question 32.

<sup>50</sup> Replies to Q1-Questionnaire to Competitors, question 38 and Q2-Questionnaire to Customers, question 34.

<sup>51</sup> Replies to Q1-Questionnaire to Competitors, question 32.

<sup>52</sup> Annex 5.4 documents "While the industry is under-utilized...", p. 7.

<sup>53</sup> Replies to Q2-Questionnaire to Customers, question 51.

- (46) The market investigation supports the Commission's view that the Parties would face significant competitors in the casting, forging and fasteners segment (aerospace), such as PCC.<sup>54</sup> None of the customers raised competition concerns about the ability of the merged entity to use its downstream position as a purchaser of mill input product for the production of components to foreclose the titanium milled products supplies by its upstream rivals.<sup>55</sup>
- (47) One respondent raised competition concerns regarding the existing cooperation arrangements between Alcoa and VSMPO, which could be extended to RTI post merger. The Commission understands these arrangements to consist [...].<sup>56</sup> Based on the available information, this arrangement does not lead to a merger-specific horizontal overlap or vertical relationship with RTI activities.

#### 3.2.4. *Conclusion on vertically linked markets*

- (48) In view of the above, it is highly unlikely that the merged entity will engage in any customer or input foreclosure in relation to any of the vertically linked markets. The vertical aspects of the notified transaction therefore do not raise serious doubts as to the transaction's compatibility with the internal market on any of the plausible relevant markets.

### 3.3. **Conglomerate effects**

- (49) According to the Non-Horizontal Guidelines<sup>57</sup>, conglomerate mergers are mergers between firms that are in a relationship which is neither purely horizontal (as competitors in the same relevant market) nor vertical (as supplier and customer). In practice, the focus is on mergers between companies that are active in closely related markets (e.g. mergers involving suppliers of complementary products or of products which belong to a range of products that is generally purchased by the same set of customers for the same end use). It is acknowledged that conglomerate mergers in the majority of circumstances will not lead to any competition problems.
- (50) The main concern in the context of conglomerate mergers is that of foreclosure. The combination of products in related markets may confer on the merged entity the ability and incentive to leverage a strong market position from one market to another by means of tying or bundling or other exclusionary practices. Tying and bundling as such are common practices that often have no anticompetitive consequences. Companies engage in tying and bundling in order to provide their customers with better products or offerings in cost-effective ways. Nevertheless, in certain circumstances, these practices may lead to a reduction in actual or potential rivals' ability or incentive to compete. This may reduce the competitive pressure on the merged entity allowing it to increase prices.

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<sup>54</sup> Replies to Q2-Questionnaire to Customers, questions 37, 39, 41

<sup>55</sup> Replies to Q2-Questionnaire to Customers, question 52.

<sup>56</sup> Reply to question 2 of the request for information dated 12 May 2015.

<sup>57</sup> Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 265, 18.10.2008, p. 6 ('Non-Horizontal Guidelines'), paragraph 91-94.

- (51) In assessing the likelihood of such a scenario, the Commission examines, first, whether the merged entity would have the ability to foreclose its rivals, second, whether it would have the economic incentive to do so and, third, whether a foreclosure strategy would have a significant detrimental effect on competition, thus causing harm to consumers. In practice, these factors are often examined together as they are closely intertwined.
- (52) Alcoa is a major supplier of aluminium ([...]), and its merger with a titanium input supplier could lead to a possible bundling and tying of aluminium products with titanium products. The market investigation<sup>58</sup> indicated that the merged entity may have the ability to bundle its aluminium and titanium offering. The Commission considers that this ability does not, however, raise competition concerns for the following reasons:
- a. the pool of customers buying both aluminium and titanium products is narrow and typically limited to aerospace OEMs, which are highly sophisticated companies with significant buyer power.<sup>59</sup> A customer explained that *“there are only few buyers which could buy in significant quantities. Alcoa’s leverage would be ineffective due to the buying power of these customers”*;<sup>60</sup>
  - b. most of the current purchase relationships are structured through LTAs that run up to 10 years, therefore the volumes and prices are guaranteed for the medium term at least.
  - c. Alcoa is already active, to some extent, in titanium input products and has not previously engaged in any bundling strategy. Likewise, there are other titanium suppliers that have product capability similar to the merged entity and do not engage in bundle offerings.
- (53) Concerning the Parties’ possibility to bundle different products from its titanium portfolio, the competitors and customers clearly supports the Commission’s view that there are other existing viable suppliers that can already match the offer resulting from the combined portfolios of Alcoa and RTI, namely ATI, PCC and VSMPO. Should the merged entity engage in bundling and tying of their products, these rivals would be able to react to the offer of the merged entity.<sup>61</sup> Furthermore, as already mentioned above, all major suppliers strive for economies of scope, a strategy generally endorsed as advantageous by customers (due to, for example, streamlined sourcing, administration, lower cost, discounts).<sup>62</sup>

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<sup>58</sup> Replies to Q2-Questionnaire to Customers, question 50 and Q1-Questionnaire to Competitors, question 52.

<sup>59</sup> See Guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings, OJ C 265, 18.10.2008, p. 6 (‘Non-Horizontal Guidelines’), paragraph 100.

<sup>60</sup> Minutes of phone call on 29 April 2015.

<sup>61</sup> Replies to Q2-Questionnaire to Customers, question 49 and Q1-Questionnaire to Competitors, question 51.

<sup>62</sup> Replies to Q2-Questionnaire to Customers, question 48 and Q1-Questionnaire to Competitors, question 50.

3.3.1. *Conclusion*

(54) In conclusion, conglomerate effects as defined by the guidelines on the assessment of non-horizontal mergers under the Council Regulation on the control of concentrations between undertakings are very unlikely.

**4. CONCLUSION**

(55) For the above reasons, the Commission has decided not to oppose the notified operation and to declare it compatible with the internal market and with the EEA Agreement. This decision is adopted in application of Article 6(1)(b) of the Merger Regulation and Article 57 of the EEA Agreement.

*For the Commission*

*(signed)*

*Věra JOUROVÁ*

*Member of the Commission*