



**COMPETITION TRIBUNAL OF SOUTH AFRICA**

**CT CASE NO: IM013May15**

**In the matter between:**

|  |                  |
|--|------------------|
| IMERY'S SOUTH AFRICA (PTY) LTD         | First Applicant  |
| ANDALUSITE RESOURCES (PTY) LTD         | Second Applicant |
| and                                    |                  |
| COMPETITION COMMISSION OF SOUTH AFRICA | Respondent       |

***In re* the intermediate merger between:**

|                                |                        |
|--------------------------------|------------------------|
| IMERY'S SOUTH AFRICA (PTY) LTD | Primary Acquiring Firm |
| and                            |                        |
| ANDALUSITE RESOURCES (PTY) LTD | Primary Target Firm    |

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Panel : Yasmin Carrim (Presiding Member)  
: Mondo Mazwai (Tribunal Member)  
: AW Wessels (Tribunal Member)

Heard on

- 05 October 2015 to 09 October 2015;
- 12 October 2015 to 15 October 2015;
- 21 October 2015;
- 16 February 2016 to 18 February 2016;
- 29 February 2016 to 01 March 2016;
- 10 March 2016;
- 30 March 2016;
- 01 April 2016;
- 05 April 2016;
- 22 June 2016 to 24 June 2016; and
- 01 August 2016 and 02 August 2016

Last submission received on : 24 August 2016  
Order Issued on : 21 September 2016  
Reasons Issued on : 31 October 2016

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**Executive summary**

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1. This matter involves an intermediate merger, notified to the Competition Commission (“Commission”) in January 2015. In terms of the proposed transaction, Imerys South Africa (Pty) Limited (“Imerys”) intended acquiring the entire issued share capital of Andalusite Resources (“AR”).
2. Imerys, controlled by French company Imerys Refractory Minerals Glomel SA, is involved in the mining, processing and sale of andalusite. So too is AR.
3. Imerys and AR are the only miners and suppliers of andalusite in South Africa. More specifically, both Imerys and AR, mine and supply fine- and medium-grade (0 to 3 mm) andalusite, which they supply to producers of refractories both in South Africa and internationally.
4. There are currently two main andalusite deposits being mined in South Africa, one near Burgersfort in eastern Limpopo and the other at Thabazimbi in western Limpopo. Imerys has mines and plants at both of these ore deposits (Annesley at Burgersfort and Rhino at Thabazimbi); AR has a mine and plant at the Thabazimbi deposit (Maroeloesfontein). Both Imerys and AR also have pending mining rights applications regarding additional andalusite reserves.
5. Andalusite forms part of the alumina-silicate group of compounds. Alumina-silicates possess heat-resistant properties and are widely used in the production of refractories for high-temperature industrial processes. Refractories are not off-the-shelf type of products but have to be chemically manufactured to provide appropriate heat resistance for particular applications. In the metallurgical industry, refractories are used in applications where a supporting furnace structure must be protected from the temperature required for the metallurgical process, or where heat loss must be limited. Refractories therefore are of importance to *inter alia* our local steel production industry. Two thirds of refractories internationally are used in the steel industry.

6. Andalusite in particular is used as an aggregate for refractories mainly in steel production in Europe and South Africa. The local availability of andalusite has conferred a benefit to local refractorists who would otherwise have to rely on imported aggregates such as bauxite at much higher prices.
7. Customers that testified confirmed that they cannot easily switch between andalusite-based refractories and refractories containing other raw materials in their production processes and that switching would involve high costs, including off-line independent evaluations as well as on-plant or “in-line” trials in specific applications. Furthermore, the refractorists that testified confirmed that their customers are reluctant to switch from andalusite-based products with good technical performance to other products containing other raw materials.
8. Imerys is a vertically integrated firm, present in both the upstream andalusite mining and processing market and in the downstream refractory market. AR is present only in the upstream market of andalusite mining and processing.
9. During its investigation the Commission received numerous concerns from both producers and end-users of andalusite-based refractories regarding the effects of the proposed merger. In particular, producers and users were concerned that, as a result of the proposed merger, they would be deprived of a competitive choice between Imerys and AR for andalusite, and that the merged entity would increase the price of andalusite and divert andalusite sales from South Africa to export markets.
10. The Commission concluded that the proposed acquisition raises significant competition and public interest concerns and prohibited its implementation on 16 April 2015.
11. The merging parties on 04 May 2015 referred the matter to the Tribunal requesting the consideration of the prohibited merger. The hearing took place over several months in 2015 and 2016 over a period of 24 days. We received the merging parties’ last submissions, regarding proposed remedies, on 24 August 2016. During this time the merging parties tendered a succession of behavioural remedies in an attempt to address the anti-competitive concerns; these tendered remedies kept altering, but in the end still fell short of addressing the competition and public interest concerns arising from the proposed acquisition.
12. In the proceedings before the Tribunal, the merging parties sought to defend the proposed acquisition mainly on the ground of the relevant counterfactual absent the

proposed transaction. Initially the merging parties contended that there were technical and economic substitutes for andalusite and that the merger would not lead to unilateral effects. However, after days of hearing evidence on the potential technical substitutability of andalusite with other raw materials the merging parties and the Commission agreed that it was no longer necessary for the Tribunal to decide the issue of substitution. The economic experts narrowed the dispute to certain counterfactual scenarios and agreed on the anti-competitive effects associated with each counterfactual situation. It then became common cause between the Commission and the merging parties that the determination of the relevant counterfactual was central to the question whether or not the proposed merger is likely to have anti-competitive effects and, if so, the extent to which the remedies proposed by the merging parties would be sufficient to address those effects.

13. The merging parties contended that absent the proposed merger both Imerys and AR will imminently become capacity constrained and would accordingly raise their andalusite prices to export parity levels, with the result that the merger would not have any effect on their market power. The Commission however submitted that there was no factual basis for the alternative counterfactual contended for by the merging parties and said that the relevant counterfactual is the *status quo*, namely one in which at least one or both of the merging parties will not be capacity constrained absent the proposed transaction.
14. Neither Imerys nor AR is currently capacity constrained. Furthermore, AR's factual witness' testimony was clear that AR is always in a growth and expanding frame of mind. We have furthermore specifically considered the life of mine of both Imerys' and AR's andalusite deposits in South Africa, including pending applications for additional andalusite mining rights in our analysis of the relevant counterfactual.
15. We have ultimately not accepted the merging parties' counterfactual argument for a number of reasons. In the first place the merging parties' suggested alternative counterfactual was supported with extremely sparse evidence of a very limited duration and was not at all supported by evidence over the lengthy life of mine period for which Imerys and AR have andalusite reserves in South Africa.
16. Given the nature of the alleged alternative counterfactual to the *status quo*, i.e. the binding production capacities of both the merging parties, and the un-foreseeability and volatility of the factors that affect and determine that as well as the limited information of

short duration put up by the merging parties, read together with the lengthy life of mine of the merging parties' andalusite operations, the merging parties' counterfactual could not pass muster. In stark contrast to the short foreseeable period for which we had evidence with regard to the factors that would determine if capacities would bind and remain bound, the life of mine of Imerys' and AR's andalusite operations in South Africa has a lengthy span extending potentially to [...]¹ or even [...] years. We found no evidence that both Imerys' and AR's capacities to produce andalusite will be bound over this lengthy period.

17. We therefore conclude that the relevant counterfactual is the *status quo*, i.e. a situation where at least one or both of Imerys and AR will not (permanently) be capacity constrained. It was common cause that if the relevant counterfactual is that domestic andalusite prices will not rise permanently to export parity levels, because one or both of the merging parties will not become permanently capacity constrained, the proposed merger will give rise to anti-competitive effects.
18. Hence from a competition perspective, the proposed acquisition of AR by Imerys represents a so-called "two to one" merger, i.e. it would lead to a monopoly in the mining, processing and sale of andalusite in South Africa and also a near-monopoly in the global sale of andalusite. AR's estimated market share for 2014 and 2015 in the mining and supply of fine- and medium-grade andalusite in South Africa (based on sales volumes) is approximately [54-59]% and Imerys' estimated market share is approximately [41-46]%. Internationally, Imerys and AR are also by far the largest suppliers of andalusite, together accounting for at least [...]% of the global sale of andalusite.
19. The merging parties own internal strategic documents have revealed that AR has become a formidable competitor to Imerys in the mining and sale of andalusite in South Africa and that it has taken significant market share away from Imerys in recent years. These documents further show that Imerys was very concerned about this as well as overcapacity that existed in the mining and sale of andalusite and it devised strategies to limit that overcapacity. The acquisition of AR forms part of that strategy. Not only has Imerys reduced its andalusite production capacity by closing down its Krugerspost mine in South Africa, it has also closed its Yilong mine in China and now intends taking over its only competitor in South Africa, AR.

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¹ Certain information claimed as confidential by the merging parties has been removed from the public version of our Reasons for Decision.

20. Furthermore, barriers to entry in the mining, processing and sale of andalusite in South Africa are high and there is no realistic prospect of new entry in the foreseeable future in this area.
21. Given the prohibitive barriers to entry into the South African andalusite market and the monopoly situation that would be created, the proposed merger represents a permanent structural change in the andalusite market in South Africa that would endure indefinitely into the future.
22. The proposed transaction involves a permanent structural shift in the andalusite market reducing the number of players in South Africa from two to one thereby removing AR as an effective competitor in the market and resulting in a substantial prevention or lessening of competition.
23. The anti-competitive effects of the proposed transaction relate to both price and non-price competition. This again is clear from the merging parties' own strategic documents as well as from the factual testimony of refractorists that use andalusite in their production processes and their customers. The non-price elements of competition include not only innovation in the form of new products and applications, but also product quality, service levels, customer assistance and the like.
24. We have furthermore concluded that the proposed transaction also raises significant public interest concerns.
25. Given that this is a "two to one" merger where an effective competitor will be removed from the market and the anti-competitive effects of that, the proposed acquisition will deprive the users of andalusite and andalusite-based refractories in South Africa of the unique functional and price benefits of a scarce natural domestic resource that has historically benefited them in the respective local and international markets in which they compete. Furthermore, these South African users will also, post-merger, be deprived of the non-price benefits of innovation, quality, service levels, customer assistance and the like that they have historically enjoyed as a result of the effective competition between Imerys and AR in the relevant market.
26. Thus this is not simply a matter of the merging parties' ability to compete in the various andalusite export markets, as advanced by the merging parties, but also a matter of the ability of refractorists in South Africa and their customers, including South African steel producers, to compete in the various (local and international) markets in which they are

active. South African customers pre-merger have locally available andalusite from two suppliers, one of which is not vertically integrated (AR), that are effectively competing on both price and non-price elements of competition, which gives refractorists the ability and incentive to invest in the technical development and enhancement of specifically andalusite-based products with obvious benefits for their downstream customers such as steel producers in South Africa.

27. We have found that the proposed merger will have a negative impact on the entire andalusite supply chain in South Africa, and particularly on smaller firms that lack the capacity, resources and bargaining power of their larger competitors to respond to the significant anti-competitive effects of the proposed merger.
28. Although the merging parties proposed certain behavioural conditions in an attempt to address the competition concerns resulting from the proposed transaction, these proposed conditions in our view are inadequate and do not address the structural market change resulting from the proposed transaction.
29. Furthermore, the merging parties' proposed behavioural conditions are impractical from a monitoring and compliance perspective and would be unduly onerous on the Commission to effectively monitor. More specifically, we concluded that expecting the Commission to fulfill a price regulator function i.e. to monitor and enforce an extremely complex pricing, non-price and volume remedy in perpetuity, is inappropriate and would unduly burden the Commission.
30. Accordingly the only appropriate and effective remedy was a prohibition.

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## Reasons for Decision

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### Prohibition

[1] On 21 September 2016, the Competition Tribunal (“Tribunal”) prohibited the proposed acquisition by Imerys South Africa (Pty) Limited (“Imerys”) of Andalusite Resources (Pty) Limited (“AR”).

[2] The reasons for prohibiting the proposed transaction follow.

### Parties to proposed transaction

#### *Primary acquiring firm*

[3] The primary acquiring firm is Imerys, a company incorporated in accordance with the laws of South Africa. Imerys is 73.95% controlled by Imerys Refractory Minerals Glomel SA (“IRMG”), formerly known as Damrec SAS. The remaining shares in Imerys are held by the Employee Share Ownership Plan, which holds 6.04% of the shares in Imerys and a black economic empowerment vehicle called Ticamode (Pty) Ltd (“Ticamode”), which holds 20.01% of the shares in Imerys.

[4] IRMG is controlled by Imerys S.A. (“Imerys S.A.”), a multinational industrial minerals group. Imerys S.A. is listed on the Paris Stock Exchange and registered in terms of the laws of France. It is active in over 50 countries across Africa, including South Africa, Asia, Europe and North America.

[5] In South Africa the Imerys group, through IRMG, controls the following firms:

- Imerys;
- Eccca Holdings (Pty) Ltd;
- Rhino Minerals (Pty) Ltd;
- Calderys South Africa (Pty) Ltd (“Calderys”). Calderys provides refractory solutions and services. Imerys therefore is vertically integrated since it is active in both the mining and production of andalusite and the downstream manufacturing of refractory products; and
- Samrec (Pty) Ltd.



**Primary target firm**

[6] The primary target firm is AR. AR is 64.3% controlled by Andalusite Holdings (Pty) Ltd (“SAAH”). The remaining shareholders of AR are Simang Holding (Pty) Ltd, holding 26% of the shares, and Pilvest Equity (Pty) Ltd, holding 9.7% of the shares.

[7] SAAH is 100% controlled by Andalusite Investments (Pty) Ltd (“Andalusite Investments”). Andalusite Investments is in turn 60.8% controlled by Main Street 939 (Pty) Ltd. Investec Bank Limited holds the remaining 39.2% of the shares of Andalusite Investments.

[8] AR does not control any other firm.

**Background**

[9] The proposed transaction was notified to the Commission in terms of section 13A of the Competition Act, 89 of 1998 (“the Act”) as a so-called intermediate merger in January 2015.

[10] During its investigation the Commission received numerous concerns from both producers and end-users of andalusite-based refractories regarding the anti-competitive effects of the proposed merger. In particular, producers and users were concerned that they, as a result of the proposed merger, would be deprived of a competitive choice between Imerys and AR for andalusite and that the merged entity would increase the local price of andalusite and divert andalusite sales from South Africa to export markets.

[11] The Commission ultimately concluded that the proposed acquisition will result in significant unilateral effects in the market for the mining and supply of fine- and medium-grade (0 to 3 mm)<sup>2</sup> andalusite in South Africa (the “relevant market”) and that it therefore is likely to substantially prevent or lessen competition. On 16 April 2015 the Commission issued a certificate in terms of section 14(1)(b)(iii) of the Act prohibiting the implementation of the proposed acquisition.

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<sup>2</sup> Fine- and medium-grade andalusite refers to andalusite grains measuring 0 to 3 mm, including straddles.

[12] In its Reasons<sup>3</sup> the Commission, in summary, found *inter alia* the following:

- (i) Imerys' and AR's activities overlap in respect of the mining and supply of fine- and medium-grade andalusite, which the merging parties supply to producers of refractories both in South Africa and internationally. AR, unlike Imerys, does not mine coarse-grade (3 to 8 mm) andalusite;
- (ii) the merging parties are the only parties active in the mining and supply of andalusite in South Africa;
- (iii) with the exception of andalusite and chamotte, all other alumina-silicates used in the production of refractories are not found in South Africa and accordingly would have to be imported by local refractory producers;
- (iv) the merging parties' customers in South Africa do not regard any other alumina-silicates as viable substitutes for andalusite in the manufacture of refractories;
- (v) Andalusite is significantly cheaper in South Africa than other alumina-silicates that would have to be imported;
- (vi) there have not been any imports of andalusite into South Africa and andalusite imports would be significantly more expensive than locally available andalusite;
- (vii) there have been no imports of andalusite-based refractories into South Africa;
- (viii) Imerys and AR are close (and indeed the only) competitors in the mining and supply of fine- and medium-grade andalusite in South Africa and accordingly the proposed merger will result in the removal of an effective competitor in the relevant market;
- (ix) customers do not have countervailing power to discipline the merged entity if it behaved anti-competitively post-merger;
- (x) there are high barriers to entry into the relevant market including access to andalusite deposits, regulatory requirements, capital requirements, technical know-how and access to a customer base;
- (xi) the anti-competitive effects of the proposed merger are not outweighed by any efficiency or other public interest benefits of the proposed merger. The Commission established that Imerys and AR are already effective competitors both domestically and internationally and the Commission was unable to ascertain whether the efficiencies claimed by the merging parties were real, verifiable and would eventually be passed on to andalusite customers;
- (xii) the proposed merger is likely to have negative public interest effects on the producers and users of andalusite-based products; and

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<sup>3</sup> See Commission's Reasons for Decision, 16 April 2015 (Pleadings, pages 17 to 27).

- (xiii) during its investigation process the Commission considered a 2- to 3-year supply condition tendered by the merging parties but after canvassing this proposed remedy with customers concluded that it was insufficient to address the permanent structural change that would be brought about by the proposed transaction.<sup>4</sup>

[13] Following the prohibition of the proposed acquisition by the Commission, the merging parties on 04 May 2015 referred the matter to the Tribunal in terms of section 16(1)(a) of the Act requesting consideration of the prohibited merger.

[14] The merging parties' case before the Tribunal was centered on what the relevant counterfactual will be absent the proposed transaction and certain remedies tendered based on their alleged counterfactual. The merging parties contended that absent the proposed merger both Imerys and AR would imminently become capacity constrained and would, as a result of this, raise their local andalusite prices to export parity pricing ("EPP") levels, with the result that the proposed merger would not have any effect on their market power (the "counterfactual argument").

[15] The merging parties argued that when the proposed merger is considered in the light of the relevant counterfactual as they contend for, and the behavioural conditions tendered by them, it poses little risk of substantially preventing or lessening competition in the relevant market and gives rise to no relevant public interest concerns.

[16] The merging parties' counterfactual argument was based on a number of factors:

- (i) the merging parties' joint maximum capacity to produce andalusite on a sustainable basis is a volume of between [...] to [...] KT of andalusite per year, but the likelihood is that the maximum volume is towards the lower end of this range;
- (ii) the export demand for andalusite will grow by between 2.5% and 4.5% per year for the foreseeable future;
- (iii) based on the above, capacity constraints would bind the merging parties towards the beginning of a period ranging from 2.1 to 5.7 years; and
- (iv) given that, absent the merger, the andalusite production capacities will bind, domestic prices would end up at EPP, where prices are constrained by competition in the andalusite export markets.

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<sup>4</sup> Commission's Reasons for Decision, paragraphs 44 to 46 (Pleadings, pages 26 and 27).

[17] Based on the above the merging parties submitted that the Tribunal should approve the proposed transaction subject to tendered behavioural conditions that in their view sufficiently address any likely competition concerns in the relevant market. During the hearing the merging parties suggested remedy packages that kept changing as the process went on, including the remedies set out in Exhibit 84, subject to the determination by the Tribunal of the time period “Y”<sup>5</sup>. They, however, after closing arguments, submitted a revised, hybrid set of proposed remedies (that we will discuss in detail below).<sup>6</sup>

[18] The Commission ultimately submitted that the Tribunal should prohibit the proposed merger on the grounds that it is likely to give rise to substantial anti-competitive and public interest effects. The Commission argued that there is no factual basis for the merging parties’ suggested alternative counterfactual and that the relevant counterfactual therefore is the *status quo*. Furthermore, the Commission was of the view that the merging parties’ tendered behavioural remedies are problematic, impractical, burdensome and do not address the competition and public interest concerns caused by the proposed transaction.

[19] Given the above, the issues that we had to determine broadly fell into the following two categories:

- (i) the relevant counterfactual absent the proposed transaction - based on the available evidence and what is foreseeable; and
- (ii) whether or not the merging parties’ proposed behavioural remedies adequately address any potential anti-competitive effects as well as any potential public interest concerns resulting from the proposed transaction and whether or not such remedies are practically suitable (in terms of their nature, complexity and duration) and effectively enforceable by the Commission.

[20] We next provide background information to andalusite and its industrial uses.

## **Andalusite production and its uses**

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<sup>5</sup> The date on which both the merging parties’ andalusite production capacities would bind. The merging parties argued that it should be at the lower end of the range between 2.1 and 5.7 years.

<sup>6</sup> See letter addressed to the Tribunal by Edward Nathan Sonnenbergs Inc (“ENS”) dated 05 August 2016.

- [21] Andalusite exists in different sizes and is sorted into different sizes in the production process – for instance, there is andalusite that occurs in a fine crystal size and andalusite that occurs in a coarser crystal size. The finer andalusite products are supplied in various sizes typically ranging from 0 to 3 mm (fine- and medium-grade) and from 3 to 8 mm (coarse-grade), although finer fractions of 100 mesh are also available.<sup>7</sup> Imerys and AR both mine and supply fine- and medium-grade andalusite in South Africa.
- [22] Andalusite forms part of the alumina-silicate group of compounds and has an alumina content of approximately 60%. As such, it is situated within the category of alumina-silicates that contain between 55% and 70% alumina.
- [23] Alumina-silicates possess heat-resistant properties and are widely used in the production of refractories for high-temperature industrial processes. It is used, both domestically and abroad, as a primary raw material as an aggregate in refractory products (“refractories”). Refractories are materials that are resistant to change at elevated temperatures.
- [24] Refractories are widely used in the metallurgical industry in applications where a supporting furnace structure must be protected from the temperature required for the metallurgical process or where heat loss must be limited. It was common cause that in service, a refractory lining is subjected to a combination of mechanical, thermal and chemical stresses, which a refractory product must be designed to withstand.
- [25] The andalusite-based refractories can broadly be categorised into (i) brick (shaped); and (ii) monolithic (unshaped) products.
- [26] The merging parties submitted that there is a vast array of sub-categories of different andalusite-based products (especially among monolithics), each of which is specifically formulated and produced by highly-skilled refractory product manufacturers (“refractorists”) for use in the various linings of vessels designed for specific “applications” (such as ladles, runners and furnaces) in high temperature industries (such as steel, aluminium and cement) where molten metal and other materials are manufactured. Andalusite therefore is not an “off-the-shelf” type of product.

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<sup>7</sup> Webb (see paragraph 31 below) Witness Statement, paragraph 25 (page 225).

[27] It was further common cause that two thirds of refractories internationally are used in the steel industry. Accordingly, the international demand for steel is an important driver of refractory (and accordingly of andalusite) demand.<sup>8</sup> Refractories therefore are of significance to *inter alia* our local steel production industry.

### Witnesses called

[28] The merging parties and the Commission, respectively, called a number of factual and expert witnesses, as set out below.

[29] The merging parties called the following factual witnesses:

- Mr Alan Parte (“Parte”), the Strategy and Business Development Manager in the High Resistance Minerals Business Group within Imerys Societe Anonyme (the holding company of IRMG);
- Mr Colin Bain (“Bain”), the Financial Director of AR;
- Mr Richard Craig Kaldon (“Kaldon”), the Manager, Technical Services for Resco Products Inc (“Resco”). Resco is a refractory producer; and
- Mr Albertus Theodor Julius Teessen (“Teessen”), the General Manger and a director of Verref Elgin. Verref Elgin produces primarily monolithic refractory products.

[30] The merging parties also called the following expert witnesses:

- As technical expert, Mr Jerome Frederic Soudier (“Soudier”), the Research and Development Manager for Calderys. As indicated above, Calderys is part of the Imerys group of companies and provides refractory solutions and services;
- As further technical expert, Dr Michel Andre Jean Rigaud (“Rigaud”), Professor Emeritus, University of Montreal; and
- As economics expert, Mr Richard Murgatroyd (“Murgatroyd”), a Partner at RBB Economics.

[31] The following factual witnesses testified on behalf of the Commission:

- Mr Patrice de Hemptinne (“De Hemptinne”), the General Counsel, Steel and Foundry Business: Vesuvius plc (“Vesuvius”). Vesuvius is producer of *inter alia* refractories and is a customer of both Imerys and AR;

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<sup>8</sup> Trial Bundle page 465; Exhibit 48, Mncube’s Slide 16; Murgatroyd Transcript page 2306, lines 2 to 9.

- Mr Ruan Webb (“Webb”), the Marketing and Sales Manager, Advanced Refractories at Vesuvius South Africa (“VSA”). VSA is a wholly owned subsidiary of Vesuvius and is engaged in the supply of refractories for use in the iron, steel and other industries;
- Ms Maria Johanna Du Preez (“Du Preez”), the Technical Director of Magdol Furnace Supplies (“Magdol”). Magdol is a manufacturer and supplier of monolithic refractory products used in the foundry, iron, aluminium, platinum, gold, copper, petro-chemical and other industries;
- Mr Johan Andries Terblanche (“Terblanche”), the Principal Specialist, Refractories at ArcelorMittal South Africa (“ArcelorMittal”). ArcelorMittal is a steel and iron producer and a user of refractory materials; and
- Mr Sizwe Lloyd Msibi (“Msibi”), the Refractories Manager of Scaw Union Junction (“Scaw”) Scaw is also a user of refractory materials.

[32] The Commission also called the following expert witnesses:

- As technical expert, Mr Ronald Algar Parry (“Parry”) of Cannon and Hancock CC: Consulting Refractory Technologists; and
- As economics expert, Dr Liberty Mncube (“Mncube”), the Chief Economist at the Commission.

### **Proposed transaction and rationale**

[33] In terms of the proposed transaction, Imerys intends to acquire the entire issued share capital of AR.

[34] According to the merging parties the principal rationale for the proposed merger, as described in their merger filing, is to enhance the merging parties’ ability to compete more effectively in the various export markets in which they sell andalusite. The merging parties, more specifically, contended that the merged entity’s ability to compete more effectively in these export markets will be enhanced through *inter alia* the sharing of know-how and expertise, the sharing of fixed costs and operational efficiencies and the optimisation of sales channels.<sup>9</sup>

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<sup>9</sup> Form CC4(2), paragraph 11.4 (Record page 29); Parte Witness Statement, paragraph 5 (pages 3 to 4); Parte Transcript page 46, lines 8 to15.

- [35] Parte in his witness statement said that, notwithstanding that andalusite exports from South Africa have declined in volume terms since 2007, the global demand for refractories (and thus in turn for andalusite) is expected to grow in the future,<sup>10</sup> and that the (alleged) efficiencies generated by the merger “*will enable the merged entity to sustainably secure a greater proportion of this growing demand*”.<sup>11</sup>
- [36] However, the Commission raised various concerns with and identified certain specific flaws and discrepancies in the merging parties’ claimed rationale for the intended merger, including the nature and extent of the alleged efficiencies themselves and their substantiation by the merging parties.
- [37] First, the Commission pointed out that it was not clear if and to what extent the merging parties’ export-competitiveness would in fact be enhanced as a result of the proposed merger.
- [38] We share the above concern. It was common cause throughout the proceedings that andalusite exports already account for the [...] majority of both Imerys’ and AR’s sales and that the merging parties are already, by far, the largest suppliers of andalusite in the global market, together accounting for at least [...]% of the global sale of andalusite.<sup>12</sup> Parte confirmed “*Our focus is in the export markets, so we do export actually [...]% of our volumes*”.<sup>13</sup> Murgatroyd also confirmed that the “*overwhelming majority*” of both AR’s and Imerys’ andalusite is exported.<sup>14</sup>
- [39] A further important issue that we had to consider was if greater andalusite exports were indeed made possible as a result of the proposed merger, where would that leave the local South African andalusite customers and downstream andalusite-based refractory users that require andalusite / andalusite-based refractories in their respective production processes? When considering this issue one has to bear the merging parties’ contention in mind that both Imerys and AR will imminently become capacity constrained in the mining / production of andalusite in South Africa.
- [40] The merging parties’ claim that the proposed acquisition would permit them to obtain a greater percentage of international andalusite sales undermines their contention that

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<sup>10</sup> Parte Witness Statement, paragraph 8 (page 4).

<sup>11</sup> Parte Witness Statement, paragraph 8 (page 4).

<sup>12</sup> See Exhibit 48, Mncube’s Slide 76; Exhibit 3; Patterson Witness Statement, paragraph 10 (pages 209 and 210).

<sup>13</sup> Parte Transcript page 46, lines 8 to 11.

<sup>14</sup> Murgatroyd Transcript page 2256, lines 3 to 7.



both Imerys and AR will imminently and permanently be capacity constrained in the mining / production of andalusite. If both Imerys and AR were in fact imminently to reach their andalusite production capacity, there would be little, if any, scope for the merging parties to grow their global andalusite sales as a result of the proposed merger - unless they foreclose local customers.<sup>15</sup>

[41] Therefore, insofar as the proposed merger allegedly would enable the merging parties to increase their export andalusite sales from South Africa (read in the above context) that would have negative public interest effects on the local users of andalusite and andalusite-based refractories in South Africa. In particular, in the context of the merging parties' argument that they will imminently be capacity constrained in South Africa and that more andalusite would allegedly be exported by them from South Africa, less andalusite would accordingly be available for the South African consumers of andalusite.

[42] Parte acknowledged that if the proposed transaction would not allow (export) volumes to grow, then it would enhance the profits of the merged entity. He stated: "*whether the volumes grows [sic] or whether the volume is stable, if volume is stable, you are on the same tonnage, you are making more profit and if volume grows you are more competitive.*"<sup>16</sup>

[43] Given the serious misgivings over the merging parties' claimed rationale for the proposed transaction during and since the merger notification period, we have given weight to the merging parties' own strategic documents in understanding the real rationale for the proposed transaction.

[44] We next consider what Imerys' own strategic documents, before and during the negotiations of the proposed transaction, reveal about *inter alia* the changing local and international market circumstances / conditions for andalusite production and sales, the merging parties' andalusite capacity (and specifically overcapacity in the market), the extent of competition between Imerys and AR in the local and international andalusite markets and the reasons for the transaction.

[45] As set out below, this closer scrutiny of the merging parties' internal documents reveal that Imerys and AR have competed aggressively with each other in both the South

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<sup>15</sup> Parte Transcript page 332 line 5 to page 335 line 22.

<sup>16</sup> Parte Transcript page 335, lines 4 to 9.

African and global andalusite markets since at least 2009. We also consider Parte's factual evidence on this score.

- [46] The record confirms that Imerys had initially approached AR as early as [...] regarding a potential acquisition.<sup>17</sup> Parte also confirmed that AR was already on Imerys' list of potential acquisition opportunities when he joined the company in August 2012.<sup>18</sup>
- [47] Parte explained that market circumstances changed and that the market for andalusite had weakened and that there was general overcapacity in the andalusite production market, leading to price pressure on Imerys.<sup>19</sup>
- [48] According to an Imerys Andalusite Review dated 16 July 2012, the global andalusite market was at only 66% of Imerys' capacity at the time, which it regarded as "*not sustainable in these market conditions*".<sup>20</sup> Imerys also understood AR as having excess andalusite production capacity at the time.<sup>21</sup> Thus overcapacity in the production of andalusite was clearly an issue that concerned Imerys at the time that it became interested in acquiring AR.
- [49] Parte explained that there are two ways for a firm to reduce industry overcapacity, namely (i) to reduce one's own capacity (as we will see below Imerys in fact did); and/or (ii) to acquire a competitor and reducing the capacity of the merged firm.<sup>22</sup> It is evident that Imerys decided to pursue both of these strategies.
- [50] Imerys' Andalusite 2013 Budget<sup>23</sup> shows that one of its main objectives for 2013 included not only the restructuring of Imerys' mining operations in South Africa, but also to "*conclude investigations on industry consolidation*" through acquisitions of competitors.<sup>24</sup> Parte acknowledged that the latter strategy may also have anti-competitive benefits:

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<sup>17</sup> Imerys South Africa Board Minutes, 07 May 2010, paragraph 4.4 (Record page 1918 at 1919); Parte Transcript page 144, lines 7 to 22.

<sup>18</sup> Parte Transcript page 39, lines 9 to 14.

<sup>19</sup> Parte Transcript page 67 line 16 to page 69 line 3.

<sup>20</sup> Andalusite Q2 2012 Review, 16 July 2012, Trial Bundle page 273 at 295; Parte Transcript page 207, lines 1 to 20.

<sup>21</sup> Imerys 2013 Budget: Minerals for Refractories, 20 November 2012, Trial Bundle page 339 at 358; Parte Transcript page 211 line 7 to page 212 line 9.

<sup>22</sup> Parte Transcript page 214 line 18 to page 215 line 4.

<sup>23</sup> Dated 20 November 2012.

<sup>24</sup> Imerys 2013 Budget: Andalusite, 20 November 2012, Trial Bundle page 397 at 399; Parte Transcript page 215 line 5 to page 216 line 18.

*“MR PARTE: Well we were suffering aggressive competition on a lot of different fronts and we would not have been able to buy all of them. So there was a question of overcapacity and the way to consult ... to address that overcapacity is to consolidate the industry in a general term either by taking ... one of your plants or merging with someone else who has extra capacity.*

*ADV WILSON: And that of course has the added benefit that you then don't suffer price competition from them anymore?*

*MR PARTE: Well, if they're a part of what a constraint on your price, yes.”<sup>25</sup>*

- [51] Parte further acknowledged that the opportunities identified by Imerys for its andalusite industry consolidation purposes included AR.<sup>26</sup>
- [52] A draft Strategic Review document prepared by Parte in the latter part of 2012 reflects that Imerys was facing [...] as a result of various factors, including “*fiercer competition*” from *inter alia* AR in its “*core*” andalusite markets.<sup>27</sup> In order to achieve its ambition of doubling its size and increasing its current operating income, Parte identified four pillars, including the defense of its “*core markets*”, including South Africa.
- [53] One of the ways Parte identified to achieve this was to “*adjust capacity / consolidate if desirable / feasible*”<sup>28</sup> by both restructuring Imerys’ own mines in South Africa and also pursuing a consolidation with AR. Parte noted in that regard that both Imerys and AR were suffering from “*low capacity utilization*”; that Imerys was in an “*increasingly weak position on the market for Krugerite and Purusite*”<sup>29</sup> products due to competitive disadvantage compared to ARM”; and accordingly that Imerys should “*push for industry consolidation partnership with ARM in Andalusite*”.<sup>30</sup>
- [54] Parte elaborated in this regard that AR “*were competitive in general, because they had a lower cost base and then the most comparable products to ARM, to marlusite*”<sup>31</sup> is the purusite because it’s on the same geological vein”.<sup>32</sup> Imerys’ strategic documents

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<sup>25</sup> Parte Transcript page 216, lines 9 to 18.

<sup>26</sup> Parte Transcript page 219, lines 8 to 22.

<sup>27</sup> Imerys Strategic Review, 25 January 2013, Trial Bundle page 944 at 963.

<sup>28</sup> Trial Bundle page 966; Parte Transcript page 222, lines 1 to 21.

<sup>29</sup> An andalusite product produced at Imerys’ Rhino mine.

<sup>30</sup> Trial Bundle pages 969, 990 and 993; Parte Transcript page 223 line 16 to page 228 line 18.

<sup>31</sup> AR supplies its andalusite product under the brand name *Marlusite*.

<sup>32</sup> Parte Transcript page 227, lines 14 to 17.

reflect it as having “*high costs compared to competition*” and describe this as a “*competitive disadvantage compared to ARM*”.<sup>33</sup>

[55] Parte further acknowledged that it is an industry consolidation “*partnership*” with AR that is the subject matter of the present merger proceedings.<sup>34</sup>

[56] With reference to 2012 Parte testified to “*the fact that Andalusite Resources had improved apparently the quality of their product and had taken a large account away from Imerys*.”<sup>35</sup> He confirmed that this account was that of VSA - “*the biggest customer in South Africa*”.<sup>36</sup> He further confirmed that this was related not only to the local business but “*we lost the global [Vesuvius] account*”.<sup>37</sup> He described this as a “*big blow*” to Imerys<sup>38</sup> and further conceded “*we lost a big account and obviously we saw them as a serious player in the alumina silicate markets as a competitor*”<sup>39</sup> (our emphasis).

[57] Parte also testified that after losing the Vesuvius contract Imerys went as far as to try and count the number of trucks that were leaving the AR premises for one month.<sup>40</sup>

[58] The state of overcapacity in the andalusite market (at the time) is again reflected in another document that Parte prepared.<sup>41</sup> A “*Turn-around Plan*” dated 23 April 2013 shows that in order to “*turn around*” Imerys’ financial performance in the face *inter alia* of an “*overall global decrease in market demand*” and “*fiercer competition*” in the andalusite market,<sup>42</sup> a key initiative was to “[...]”<sup>43</sup> in order to reduce the “[...]” in the global andalusite market.<sup>44</sup>

[59] The Imerys internal options identified by Parte in that regard included the mothballing of Imerys’ Krugerspost mine in South Africa as well as its Yilong mine in China.<sup>45</sup> It was common cause that Imerys subsequently implemented both of these internal restructuring options, mothballing its Krugerspost mine in 2013 and reducing the

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<sup>33</sup> See *inter alia* Trial Bundle page 993 under “*Key issues and Strategic orientations*”.

<sup>34</sup> Parte Transcript page 228, lines 16 to 18.

<sup>35</sup> Parte Transcript page 67 line 21 to page 68 line 2.

<sup>36</sup> Parte Transcript page 68, lines 4 to 7.

<sup>37</sup> Parte Transcript page 68 line 11.

<sup>38</sup> Parte Transcript page 174, lines 7 and 8.

<sup>39</sup> Parte Transcript page 352, lines 1 and 2.

<sup>40</sup> Parte Transcript page 230 line 19 to page 231 line 20.

<sup>41</sup> Imerys “*Turn around*” Plan, 23 April 2013, Trial Bundle page 1060.

<sup>42</sup> *Ibid*, Trial Bundle page 1062.

<sup>43</sup> *Ibid*, Trial Bundle page 1071.

<sup>44</sup> *Ibid*, Trial Bundle page 1088.

<sup>45</sup> *Ibid*, Trial Bundle pages 1089 to 1095; Parte Transcript page 255 line 1 to page 259 line 1.

production of its Yilong mine in 2015 (which the merging parties submitted has subsequently been closed).<sup>46</sup>

- [60] Bain, in his evidence, explained what effect the abovementioned closure of the Krugerspost mine by Imerys had on the andalusite market. He said that because of this reduction in andalusite production capacity “*the pressure on prices appears to be [...]*” and that “*AR has been able to [...]*”.<sup>47</sup>
- [61] It is furthermore clear from Imerys’ internal documents that the acquisition of AR also formed part of Imerys’ overall “*turn around*” effort (although Parte stated that his “*official*” turn-around plan excluded acquisitions because of their uncertainty).<sup>48</sup> This was confirmed by Parte when he was asked to explain the reference in Imerys’ offer letter dated 14 June 2013 to the proposed transaction being “*an excellent fit with [Imerys’] stated strategy to [...] the Andalusite market*”<sup>49</sup> (our emphasis). Parte further explained that the proposed merger would achieve this strategy “*because we are able to [...] ...*”<sup>50</sup> (our emphasis).
- [62] A further Imerys strategic document, its South Africa Business Review document dated 28 March 2013, identifies one of the main business topics as to “*obtain JV or buy ARM to [...] on the markets*”<sup>51</sup> (our emphasis).
- [63] Parte did not seek to explain away or justify this clear indication by Imerys’ senior South African management of the anti-competitive objectives of the proposed merger. All he could say was that it did not constitute the reason why the transaction was ultimately approved in Paris.<sup>52</sup> Significantly, however, Parte did acknowledge that AR was “*a significant constraint in the market*” and that the proposed merger “*would increase your [i.e. Imerys’] leverage on the market ...*”<sup>53</sup>
- [64] Although Parte attempted to distance the Imerys board’s strategic rationale for approving the proposed transaction from Imerys’ various strategies, objectives and statements in its own strategic documents (as discussed above), this was not remotely

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<sup>46</sup> Ibid, Trial Bundle pages 1089 to 1095; Parte Transcript page 255 line 1 to page 259 line 1.

<sup>47</sup> Bain Transcript page 547, lines 9 to 21.

<sup>48</sup> Imerys Q2 Business Review, July 2013, Trial Bundle page 1181 at 1184; Parte Transcript page 261 line 11 to page 262 line 22.

<sup>49</sup> Third indicative offer letter, 14 June 2013, Discovery page 7.

<sup>50</sup> Parte Transcript page 269 line 11 to page 270 line 9.

<sup>51</sup> Andalusite South Africa Business Review, 28 March 2013, Trial Bundle page 1000 at 1049.

<sup>52</sup> Parte Transcript page 244 line 20 to page 246 line 22.

<sup>53</sup> Parte Transcript page 252 line 18 to page 253 line 2.

credible: “*Well first of all, we face a lot of competition in all of our minerals and Imerys, and the answer to competition can obviously [sic] in acquisitions. So competition is normal and if you go and you present such a case to the strategic committee and supposing ... I say ... there is this small player in South Africa that’s coming and that’s hurting me and can you please sign me a big cheque so that I can be more comfortable and I don’t have to work so much? I don’t think from a strategic board level that that would be perceived very well.*”<sup>54</sup>

[65] First, AR is not a “*small player*” in the andalusite market, but a formidable and effective competitor, as borne out by Imerys’ own strategic documents. We shall, below, further consider what the merging parties’ internal documents reveal about the closeness of competition between Imerys and AR in the mining and sale of andalusite in South Arica. Second, the true rationale for the proposed acquisition is clear from the numerous strategic documents quoted above.

[66] We conclude that it is abundantly evident from Imerys’ own strategic documents and the testimony of Parte that its real motivation for acquiring AR is the fierce competition that Imerys is facing from AR in the South African and global andalusite markets and Imerys’ desire to consolidate and reduce capacity in the mining and sale of andalusite.

[67] It is in the above context that the effects of the proposed merger on competition, the merging parties’ alleged alternative relevant counterfactual and the public interest considerations should be assessed.

[68] We next consider the impact of the proposed transaction on competition, including market shares, barriers to entry, potential future entry, the closeness of competition between Imerys and AR, whether or not the proposed transaction results in the removal of an effective competitor and customers’ views of the proposed transaction. We also consider the relevant counterfactual.

## **Impact on competition**

### ***Merging parties’ activities and product overlap***

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<sup>54</sup> Parte Transcript page 47, lines 3 to 14.

- [69] As stated above, the merging parties mine, process and sell andalusite and there are currently two main andalusite deposits being mined in South Africa, one near Burgersfort in eastern Limpopo and the other at Thabazimbi in western Limpopo.
- [70] Imerys currently has three andalusite mines in South Africa, two of which are currently in operation (Annesley near Burgersfort and Rhino at Thabazimbi) and the third of which (Krugerspost), as indicated above, has recently been mothballed.<sup>55</sup> Imerys also has andalusite mines in Glomel, France (which produces the *Kerphalite* brand) and in Yilong, China (which produced the *Yilongite* brand). Imerys however informed us that they closed the Yilong mine in July 2015.<sup>56</sup>
- [71] AR owns the Maroeloefontein mine at the Thabazimbi andalusite deposit (located adjacent to Imerys' Rhino mine).
- [72] As also indicated above, the merging parties' activities overlap in respect of the mining and supply of fine- and medium-grade (0 to 3 mm) andalusite. Imerys' Annesley mine produces fine-, medium- and coarse-grade andalusite. The ore body at the Thabazimbi deposit is however not capable of producing coarse grades. AR's Maroeloefontein mine (like Imerys' neighbouring Rhino mine located on the same geological seam) only produces fine- and medium-grade andalusite.<sup>57</sup>
- [73] Imerys entered the South African market in 1994 through its acquisition of the Krugerspost Mine from Cullinan Minerals Limited and was the monopoly producer until the entry of AR in 2003.<sup>58</sup> AR commenced construction of its andalusite mine in 2002 and commenced sales in early 2003.<sup>59</sup>
- [74] The local brands of Imerys' andalusite products are *Durandal* and *Randalusite* (from the Annesley mine) and *Purusite* (from the Rhino mine).<sup>60</sup> AR supplies its andalusite products under the brand name *Marlusite*.<sup>61</sup>

### **Market shares**

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<sup>55</sup> Parte Witness Statement, paragraph 18 (page 8); Webb Witness Statement, paragraph 17 (page 223).

<sup>56</sup> Parte Witness Statement, paragraph 25 (page 10).

<sup>57</sup> Parte Witness Statement, paragraph 17 (pages 7 and 8). Parte Transcript page 66, lines 11 to 18.

<sup>58</sup> Webb Witness Statement, paragraphs 15 and 16 (pages 222 and 223).

<sup>59</sup> Bain Witness Statement, paragraph 10 (page 23).

<sup>60</sup> Webb Witness Statement, paragraph 18 (page 223).

<sup>61</sup> Webb Witness Statement, paragraph 19 (page 223).

- [75] Imerys and AR are the only two firms that mine and supply andalusite in South Africa. Bain confirmed that Imerys is AR's only competitor in the local market.<sup>62</sup>
- [76] According to the Commission's findings, AR's estimated market share for 2014 and 2015 in the mining and supply of fine- and medium-grade andalusite in South Africa (based on sales volumes) is approximately [54-59]% and Imerys' market share is approximately [41-46]%.<sup>63</sup>
- [77] Internationally, Imerys and AR are also by far the largest suppliers of andalusite, together accounting for at least [...]% of the global sale of andalusite.<sup>64</sup>
- [78] Given the above, the proposed merger involves a so-called "two to one" merger, i.e. to a monopoly position, in the mining and sale of andalusite in South Africa and a merger to near-monopoly in the global market. Andalusita S.A. ("Andalusita"), a Peruvian based company, is the only other producer of andalusite in the world worth mentioning (there are also certain, what we understand to be, small Chinese producers).
- [79] We next discuss barriers to entry in the relevant market.

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<sup>62</sup> Bain Transcript page 565, lines 12 and 13.

<sup>63</sup> Exhibit 48, Mncube's Slide 42; also see Table 18 of the Commission's Report.

<sup>64</sup> See Exhibit 48, Mncube's Slide 76; Exhibit 3; Patterson Witness Statement, paragraph 10 (pages 209 and 210).



**Barriers to entry**

- [80] The evidence confirmed that barriers to entry into the mining and sale of andalusite are very high. These barriers include, foremost, access to andalusite deposits and various regulatory requirements, but furthermore extend to *inter alia* capital requirements, technical know-how, products of a good and consistent quality and access to a customer base.
- [81] Bain confirmed that the barriers to entry into the South African andalusite market are high.<sup>65</sup> He stated that the smallest feasible entry-level andalusite plant would have to have a minimum annual capacity of 50 000 tons, in circumstances where there is no evidence of any available new deposits of that size in South Africa and where there is insufficient international demand for andalusite to make such a new investment commercially feasible.<sup>66</sup>
- [82] High entry barriers into the andalusite market are further confirmed by AR's own experience when entering the market in 2002. The merging parties themselves submitted that AR's initial entry into the market was difficult.
- [83] For a number of years AR struggled to address certain impurity problems and to produce a consistent quality of andalusite product. To overcome its product quality issues, AR had to make significant capital investments. The evidence furthermore was that a large customer, Vesuvius, played a major role in AR addressing and ultimately overcoming its quality problems and increasing its andalusite production capacity. A mutually co-operative arrangement was entered into with Vesuvius in terms of which Vesuvius committed to providing AR with "*regular feedback on questions of quality, in all its facets, through the constant monitoring of iron levels, impurity levels, particle size distribution, alumina levels and various other trace elements, for example, Goethite (iron oxide), which could have a negative impact on the performance of the andalusite in the products being manufactured*".<sup>67</sup> In exchange for the technical assistance Vesuvius was "[...]"<sup>68</sup> Bain's evidence was that Vesuvius gave it a base load and therefore it received a favourable price (as discussed below).

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<sup>65</sup> Bain Transcript page 532, lines 1 to 3.

<sup>66</sup> Bain Witness Statement, paragraph 26 (page 3).

<sup>67</sup> Bain Witness Statement paragraphs 15, 25 and 26 (pages 6, 7, 30 and 31). See also De Hemptinne Transcript pages 997 and 998.

<sup>68</sup> Bain Witness Statement paragraphs 15, 25 and 26 (pages 6, 7, 30 and 31). See also De Hemptinne Transcript pages 997 and 998.

- [84] De Hemptinne testified that “we [Vesuvius] developed Andalusite Resources ... We have been a very important partner of Andalusite Resources to enable them to solve some of their quality issues moving forward with the andalusite they were producing in mining. We’ve also helped them to raise their capacities. We actually have also at some point in time also helped them through more difficult periods by lending them a loan of R... million at some point in time. So, we basically have developed this second supplier in South Africa ...”.<sup>69</sup> Webb of VSA also explained that it assisted AR with “certain very important aspects of the Andalusite with regards to impurities” and the testing of the andalusite as well as “specific sizing in ... formulations”.<sup>70</sup>
- [85] De Hemptinne later confirmed that after this initial and ongoing assistance the “child [AR] has grown up”.<sup>71</sup>
- [86] AR’s experience shows that significant technical know-how is required in the production and sale of andalusite and that it can take an extensive period of time in order to sell andalusite of an acceptable quality to customers. Bain confirmed that AR, even with the very considerable assistance provided to it by Vesuvius, took approximately ten years to resolve all of the quality issues associated with its andalusite.<sup>72</sup>
- [87] Bain furthermore testified to the turnaround of the AR business after “[...]”.<sup>73</sup> He explained that there was a [...].<sup>74</sup> However, he also explained that should the proposed transaction not materialize AR would [...].<sup>75</sup>
- [88] De Hemptinne confirmed that, as a result of the high barriers to entry into the andalusite market, there had been no new entrants since AR in 2002 and that there furthermore is no prospect of new entry.<sup>76</sup>

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<sup>69</sup> De Hemptinne Transcript page 997, lines 11 to 21.

<sup>70</sup> Webb Transcript page 1488 line 20 to page 1490 line 2.

<sup>71</sup> De Hemptinne Transcript page 1071, lines 2 to 4.

<sup>72</sup> Bain Witness Statement, paragraphs 10 and 11 (pages 23 and 24).

<sup>73</sup> Bain Transcript page 727, lines 1 to 5.

<sup>74</sup> Bain Transcript page 727, lines 6 to 11.

<sup>75</sup> Bain Transcript page 727, lines 17 to 22.

<sup>76</sup> De Hemptinne, Transcript page 1002 line 1 to page 1003 line 2; also see Patterson Witness Statement, paragraphs 12 and 13 (pages 210 and 211).

[89] Thus we conclude that barriers to entry are high in the production and sale of andalusite in South Africa and that there is no realistic prospect of new entry in the relevant market in the foreseeable future.

[90] We next discuss the closeness of competition between Imerys and AR in the relevant market.

***Closeness of competition between Imerys and AR***

[91] Although the merging parties initially sought to contend that they do not compete closely with each other in the mining and supply of andalusite in South Africa, this allegation did not find support in the evidence before us. As discussed above under the rationale for the proposed transaction, the merging parties' own internal documents clearly show that they have been engaged in aggressive competition in the relevant market. We have however furthermore considered numerous other internal strategic documents of the merging parties that clearly show that AR is an effective, and indeed the only, competitor to Imerys in the mining and sale of andalusite in South Africa.

[92] Imerys' Quarterly Review for Q2 2009<sup>77</sup> states that AR "*are still very active on the market and are gaining market shares*" with [...] prices because "*customers are more and more willing to compromise on quality as they are under pressure from their own customers to reduce costs*".<sup>78</sup> This illustrates not only that there is competition but also, from a customer perspective, the importance of price competition in the andalusite market.

[93] The same document reflects that Imerys engaged in both price and non-price competition to "[...]"<sup>79</sup> (our emphasis). These efforts included "[...]".<sup>80</sup> As we have indicated above, andalusite is not an "off-the-shelf" type of product and the above shows Imerys' attempts to differentiate its products from that of its competitor, AR.

[94] Imerys' 2010 Budget refers to "*strong competition from Andalusite Resources*" [...].<sup>81</sup>

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<sup>77</sup> Dated 24 July 2009.

<sup>78</sup> Imerys Quarterly Review Q2 2009, 24 July 2009 (Discovery page 2175 at 2182); Parte Transcript page 118 line 1 to page 123 line 8.

<sup>79</sup> Ibid, Discovery page 2207; Parte Transcript page 124, lines 15 to 20.

<sup>80</sup> Ibid, Discovery page 2183; Parte Transcript pages 123 line 9 to page 124 line 9.

<sup>81</sup> Imerys Budget 2010, 22 November 2009 (Discovery page 2256 at 2262); Parte Transcript page 126 line 13 to page 129 line 9.

- [95] The minutes of an Imerys South Africa board meeting dated 08 December 2009 reflect that AR was gaining market share from Imerys on price and it was suggested that as a response, “[...]”<sup>82</sup> (also see paragraph 218 below).
- [96] Furthermore, Parte conceded that the above was a competitive response from Imerys to AR:
- “ADV WILSON: Yes, but [...]. This is as a competitive response to their gaining market share.
- MR PARTE: Yes, it seems so. Yes, it seems so.”<sup>83</sup>
- [97] Imerys’ Q1 2010 Quarterly Review<sup>84</sup> again records that it was engaging in “*innovation initiatives*” to regain market share from AR, including through the “[...]”.<sup>85</sup> Parte confirmed that Imerys differentiated between high and lower quality grades to enhance differentiation and “*to adapt to customer demands*”.<sup>86</sup> This is clearly also a competitive response from Imerys to its competitor, AR.
- [98] A 2011 Imerys Forecast document refers to “*fierce pricing*” from AR on fine grades which had caused Imerys to [...].<sup>87</sup>
- [99] An Imerys South Africa board minute dated 30 September 2011 records that [...] “*Andalusite Resources who are our competitors are offering [...] for fine products to the market*”<sup>88</sup> (our emphasis).
- [100] An Imerys budget document dated 27 October 2011 confirms that Imerys was bundling fine grades with coarse grades and making spot offers in order to “[...]” in South Africa<sup>89</sup> (our emphasis).

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<sup>82</sup> Minutes of Imerys South Africa board meeting, 8 December 2009, paragraphs 7.1.1 and 7.1.7 (Record pages 1912 and 1913); Parte Transcript page 132 line 6 to page 134 line 8.

<sup>83</sup> Parte Transcript page 133, lines 5 to 7.

<sup>84</sup> Dated 22 April 2010.

<sup>85</sup> Andalusite Q1 2010 Review, 22 April 2010 (Discovery page 2342 at 2348); Parte Transcript page 136 line 16 to page 138 line 8.

<sup>86</sup> Parte Transcript page 138, lines 1 to 8.

<sup>87</sup> Andalusite Forecast Q4 & FY 2011 (Discovery page 2496 at 2498); Parte Transcript page 139 line 5 to page 140 line 13.

<sup>88</sup> Minutes of Imerys South Africa board meeting, 30 September 2011, paragraph 6.2.3, line 4 (Record page 1970 at 1974).

<sup>89</sup> Budget 2012, 27 October 2011 (Discovery page 2548 at 2560); Parte Transcript page 159, lines 1 to 12.

- [101] The minutes of an Imerys South Africa board meeting dated 15 February 2012 reflect that “our Andalusite Competitor, ARM, continues to be aggressive with [...] customers being [...], and is also offering prices that are [...] ours”<sup>90</sup> (our emphasis).
- [102] An Imerys 2012 Review document<sup>91</sup> reflects that it had suffered a “collapse” of its South African market, primarily due to “strong price action” from AR, which had resulted in Imerys losing 1.5 KT at Vesuvius and 0.6 KT at Verref (resulting in a significant market share loss)<sup>92</sup> (our emphasis).
- [103] The same document records that, as a result of these losses, “*RSA price increase at 2.1% lower than budget due to competition*” and that Imerys’ sales action plan would be focussed on regaining and protecting its market share from AR through a range of pricing, product bundling and new product initiatives<sup>93</sup> (our emphasis).
- [104] The minutes of an Imerys South Africa board meeting dated 21 June 2012 record that competition from AR had resulted in a 23% reduction in local sales, and that “the main priority for the year is to be aggressive in taking back the market share that was lost to Andalusite Resources”<sup>94</sup> (our emphasis).
- [105] A 2012 Imerys forecast document records that whilst it had “*taken back*” Verref and Intocast from AR, it expected its market share loss to AR to continue in South Africa and that one of its priorities was to “pursue counter strike actions vs competition to get back andalusite share”<sup>95</sup> (our emphasis).
- [106] An Imerys Review document dated July 2012 records that as a result of competition from AR, [...]. Imerys recorded further that, in order to address this, it had prepared new offers [...].<sup>96</sup>

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<sup>90</sup> Minutes of Imerys South Africa board meeting, 15 February 2012, paragraph 1.3.5.4 (Record page 1976 at 1980); Parte Transcript page 167 line 11 to page 168 line 5.

<sup>91</sup> Dated 16 April 2012.

<sup>92</sup> Andalusite Q1 2012 Review, 16 April 2012 (Discovery page 2595 at 2598 and 2599); Parte Transcript page 177 line 5 to page 180 line 21.

<sup>93</sup> Ibid, Discovery pages 2603 and 2604; Parte Transcript page 168 line 9 to page 169 line 18; Transcript page 181 line 15 to page 182 line 22.

<sup>94</sup> Minutes of Imerys South Africa board meeting, 21 June 2012, paragraphs 3.3.2 and 3.5.8 (Record pages 1987 and 1988); Parte Transcript page 194 line 1 to page 197 line 2.

<sup>95</sup> Andalusite Forecast H2 & FY 2012 (Discovery pages 2671 and 2672); Parte Transcript page 198 line 13 to page 201 line 5.

<sup>96</sup> CODIR BU Andalusite, July 2012 (Discovery page 1634 at 1652); Parte Transcript page 202, lines 7 to 20.

- [107] An Imerys Review document dated 16 July 2012 again shows the importance of non-price competition in the andalusite market. It refers to various “*innovation highlights*”, including the marketing of reactive andalusite and work on various new applications. That document also records that innovation had contributed almost 9% to new andalusite product sales in FY2011 and was budgeted to make a similar contribution to sales in FY2012.<sup>97</sup>
- [108] An Imerys South African Business Review document dated 28 March 2013 records that AR was expected to “*continue to put pressure on price*” and to take advantage of Imerys’ delivery difficulties and that Imerys should accordingly look to the market share it had recovered “*with frequent contacts and technical assistance*”.<sup>98</sup> Parte testified that he assumes that this relates to “*making sure that your product is in spec so that the customer does not have a quality issue.*”<sup>99</sup>
- [109] As indicated above, the same document identified one of the main business topics as being to “*obtain JV or buy ARM to increase our leverage on the markets*”<sup>100</sup> (our emphasis). Parte acknowledged in this regard that AR was “*a significant constraint in the market*” and that the proposed merger “*would increase your leverage on the market*”.<sup>101</sup>
- [110] An Imerys Business Review document dated April 2013 records that AR had kept full business with Vesuvius and was looking for other smaller customers in a “*price fight*” (our emphasis). Parte confirmed in this regard that AR had always targeted smaller andalusite customers and that this was simply a continuation of AR’s previous conduct.<sup>102</sup>
- [111] In a “*Turn-around Plan*” prepared by Parte in 2013, he recorded that Imerys had been suffering margin pressure driven by decreasing volumes since 2007 as a result of *inter alia* “*fiercer competition*” in the andalusite market<sup>103</sup> (our emphasis).

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<sup>97</sup> Andalusite Q2 2012 Review, 16 July 2012 (Trial Bundle page 273 at 300 and 301); Parte Transcript page 207 line 21 to page 209 line 17.

<sup>98</sup> Andalusite South Africa Business Review, 28 March 2013 (Trial Bundle page 1000 at 1018); Parte Transcript page 238 line 7 to page 239 line 22.

<sup>99</sup> Parte Transcript page 239, lines 1 to 4.

<sup>100</sup> Trial Bundle page 1049.

<sup>101</sup> Parte Transcript pages 252 line 18 to page 253 line 2.

<sup>102</sup> Refractories South Africa Q1 Business Review, April 2013 (Discovery page 1819 at 1823); Parte Transcript page 254, lines 9 to 18.

<sup>103</sup> “*Turnaround Plan*” (Trial Bundle page 1062); Parte Transcript page 255, lines 12 to 17.

[112] As discussed above, one of the mechanisms identified by Imerys to improve its financial performance was the acquisition of AR.

[113] Parte also confirmed that AR is a lower cost producer than Imerys:

*CHAIRPERSON: ... From the documents that we have had a look at, it appears that Andalusite Resources is the [...] producer in the world. I mean, it is from your own documents from Project Dias*<sup>104</sup>.

*MR PARTE: Yes, absolutely.*

*CHAIRPERSON: Would you have an understanding of why they are such a [...]?*

*MR PARTE: They have quite an [...] ...*<sup>105</sup> (our emphasis).

[114] Parte explained andalusite yield (in the context of the entry requirements for the mining and sale of andalusite) as follows: “... you would need to find the reserves and the mining rights and then you build. It is basically a separation type process. So, the different processes you put in is a process in which you start with a ton of ore. In the end there is only 6%. If the yield is 6% there is only 6% of commercial quality andalusite. The rest is earth. It is things you want to get rid of, impurities.”<sup>106</sup>

[115] The abovementioned *Project Dias* document, prepared by Parte for the proposed acquisition, under “*Other key facts & figures*” states that AR has “[...]”.<sup>107</sup>

[116] The *Project Dias* document further describes AR as “a growing and profitable company” which “benefits from a good quality product” and “a [...] in South Africa”<sup>108</sup> (our emphasis). Parte also testified that before 2012 Imerys did not “*have any reason to believe that they [AR] were very profitable*”, but that that situation has since changed.<sup>109</sup>

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<sup>104</sup> Document prepared for Imerys’ proposed acquisition of AR, dated 09 December 2013 (commences at Record page 422 as well as at Trial Bundle page 1403). We note that this was drawn up pre the due diligence.

<sup>105</sup> Transcript, page 390 line 20 to page 391 line 7.

<sup>106</sup> Parte Transcript page 402, lines 12 to 17.

<sup>107</sup> Record page 427.

<sup>108</sup> Record page 423.

<sup>109</sup> Parte Transcript page 44 line 17 to page 45 line 3.

- [117] The *Project Dias* document also states that AR “*With the [...]*”<sup>110</sup> (our emphasis). The document goes on to state “[...]”<sup>111</sup> (our emphasis). The document considers the period 2005 to 2013 and records AR’s volume growth during this time as “[...]%”.<sup>112</sup>
- [118] The above picture of aggressive, ongoing competition between Imerys and AR in the relevant market – in terms of price as well as on non-price elements of competition - is mirrored in the internal strategic documents of AR and the testimony of Bain.
- [119] AR identifies Imerys as its “*main competitor*” in its 2008 - 2009 Business Plan.<sup>113</sup> It again, in its 2009 - 2014 Budget and Business Plan, refers to Imerys as its “*main competitor*”.<sup>114</sup>
- [120] In its 2013 - 2014 Strategic Plan, AR records that it imposed its [...], whereas Imerys, its “*main competitor*”, had kept its [...], with the result that AR’s [...] were brought on par with Imerys’ K57 and Purusite, “*which are the two main products AR competes with*”.<sup>115</sup>
- [121] Bain candidly acknowledged in this regard that, in South Africa, Imerys was its only competitor. He stated, “*we are not faced or conscious of any other competing product that we can directly say that we’ve competed against*”.<sup>116</sup>
- [122] In the same document as above, AR records that its local market strategies are focused on retaining market share based on various price and non-price aspects of competition, including “[...]”.<sup>117</sup> Bain confirmed that all these non-price elements of competition are important to obtaining and retaining market share in the production and sale of andalusite.<sup>118</sup>

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<sup>110</sup> Record page 428.

<sup>111</sup> Record page 443.

<sup>112</sup> Record page 443.

<sup>113</sup> Exhibit 9, Andalusite Resources Business Plan, 2008 - 2009, page 5; Bain Transcript page 529 line 16 to page 530 line 11.

<sup>114</sup> Exhibit 11, Andalusite Resources Budget & Business Plan 2009 - 2014, page 12; Bain Transcript page 533, lines 1 to 10.

<sup>115</sup> Andalusite Resources Strategic Plan 2013 – 2014, Trial Bundle page 458 at 473; Bain Transcript page 495, lines 14 to 21.

<sup>116</sup> Bain Transcript page 495, lines 7 to 10.

<sup>117</sup> Andalusite Resources Strategic Plan 2013 – 2014, Trial Bundle page 458 at 469; Bain Transcript page 494, lines 14 to 22.

<sup>118</sup> Bain Transcript page 494, lines 14 to 22.



- [123] Again, in its 2014 - 2015 strategic plan, AR's local market strategies are recorded as being focused on retaining its market share based on the same price and non-price initiatives.<sup>119</sup>
- [124] AR's engagement in non-price competition with Imerys is also reflected in its financial statements for the year ended 29 February 2012, where it lists as one of its strategic initiatives a focus on the development of "*new products*" [...].<sup>120</sup>
- [125] In a Financial and Operating Report dated 20 March 2013, AR records that in February 2013 Imerys had "*tried very hard to take away the [...] contract*" but that "*AR has managed to negate this attack*". Bain explained that he did so by undercutting Imerys on price.<sup>121</sup>
- [126] Bain further explained that, in the last two years, the only constraint on AR's price increases is the threat that the customers will place their andalusite requirements with Imerys. "[...]."<sup>122</sup> That constraint would be removed as a result of the proposed merger.
- [127] The above internal strategic documents of both Imerys and AR and the testimony of Parte and Bain make it abundantly clear that Imerys and AR are close competitors in the mining and sale of andalusite in South Africa, that AR is an effective competitor to Imerys, and furthermore that they compete in the relevant market both on price and on non-price elements of competition.

### ***Lack of evidence of economic substitution***

- [128] The merging parties initially challenged the Commission's decision to prohibit the proposed transaction on the basis of the technical substitution of andalusite with other raw materials such as calcined bauxite and chamotte. They averred that andalusite is not the only raw material that is technically suitable for use as a raw material in the formulation of refractories. They argued that this is most starkly illustrated by the fact that while andalusite is widely used in applications in the South African steel industry, almost no andalusite is utilised in the American refractories market and andalusite-based refractories only account for a very small proportion (0.5%) of the refractories

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<sup>119</sup> Trial Bundle page 1695; Bain Transcript page 548 line 19 to page 549 line 8.

<sup>120</sup> Andalusite Resources Financial Statements for the year ended 29 February 2012 (Discovery page 4435); Bain Transcript page 558 line 14 to page 559 line 14.

<sup>121</sup> Financial & Operating Report February 2013, dated 20 March 2013, page 5 (Discovery page 4944); Bain Transcript page 570, lines 10 to 17.

<sup>122</sup> Bain Transcript page 621, lines 15 to 20.

market in China. Days of evidence were devoted to the issue of technical substitution and we heard technical experts on both sides. However, it soon became evident that the important issue in this matter is not technical but economic substitution. This narrowed the debate.

- [129] Although there is no need for us to deal with technical substitution in these Reasons we note that the potential technical substitution between andalusite and other raw materials was contested by the Commission's technical expert, Parry (to some extent), as well as by refractory producers and their South African customers in relation to specific and crucial applications.
- [130] We further stress that the merging parties submitted that the economic substitutability debate was rendered irrelevant by the conclusion of the economic experts' agreement.<sup>123</sup> We shall below in detail discuss what agreement the economic experts reached in relation to the economics of this case, specifically in relation to various counterfactual scenarios and their implications for the competition analysis. This agreement is contained in Exhibit 53.
- [131] From an economic substitution perspective, the question is, hypothetically speaking, if the merged entity post-merger increases its andalusite prices by a small but significant non-transitory amount of say 5% to 10%, would customers be able to switch to imported potential substitutes for andalusite such as chamotte and calcined bauxite?<sup>124</sup>
- [132] The Commission's technical expert, Parry, specifically disputed that andalusite is economically substitutable with other materials, particularly in the South African market pointing to the fact that (with a few notable exceptions such as chamottes), many of the potential alternative refractory raw materials are not produced in South Africa and are, or would have to be, imported.
- [133] We have specifically considered the testimony of customers in the andalusite value chain in South Africa in regard to economic substitution. The customers that testified indicated that potential alternatives for andalusite cannot economically be imported for what they regard as "critical" applications. They further pointed out that when

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<sup>123</sup> Exhibit 53.

<sup>124</sup> The so-called SSNIP test (i.e. a Small but Significant Non-transitory Increase in Price).

andalusite is replaced in a product, the product matrix must be changed which has further cost complications that must be taken into account.

[134] Customers in the andalusite value chain said the following:

[135] Webb of VSA testified that “*if you want the same performance, you will have to import a very high level of raw materials, the tabular alumina’s that I explained and that’s imported from Europe. So you can import that at 6, 7 times the price, 5, 6 times the price. Well, it changes as the exchange rate changes, so it might be different tomorrow*”; “*... bauxite is expensive, alright. We’ve got ... Imerys is also a miner of the chamotte, local chamotte in South Africa, which is not of a very superior quality. So if you combine those two, you won’t get the same performance as Andalusite in certain of these critical vessels that I explained ... Like the torpedo’s, like the blast furnaces, like the stoves, like these casting ladles*” and “*Other applications, non-critical applications, I don’t see a problem with that, but again you’re going to pay more*”<sup>125</sup> (our emphasis).

[136] Webb further testified that generally speaking monolithics are not imported into South Africa because of its short shelf or usable life. He said that the shelf life of a monolithic is typically only 3 months and “*to get it from India or China, typically it takes 8 weeks, so then you only have 4 weeks available use of that product left. So now it’s in Durban harbour, by the time it reaches the customer it’s out of its useable life ...*”<sup>126</sup>

[137] Du Preez of Magdol indicated that the first and main reason why Magdol cannot replace andalusite with bauxite is price. She said “*bauxite is imported and it is much more expensive than Andalusite*” (our emphasis). She went on to say that there are different qualities and types of bauxite and therefore “*it’s not all the same price, but it is significantly more expensive*”<sup>127</sup> (our emphasis).

[138] In relation to hypothetical imports in five years from now (in light of the 5-year remedy put up by the merging parties) Du Preez highlighted that “*the problem that will always be with us is that a lot of the alternative raw materials are imported and the Rand is as you all know, not reliable, the value of the Rand.*”<sup>128</sup>

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<sup>125</sup> Webb Transcript page 1592 line 1 to page 1593 line 4.

<sup>126</sup> Webb Transcript page 1594, lines 1 to 15.

<sup>127</sup> Du Preez Transcript page 1608 line 17 to page 1609 line 20.

<sup>128</sup> Du Preez Transcript page 1632, lines 12 to 17.

- [139] She further in relation to potential economic substitution said “*There’s just no easy way to substitute Andalusite and the South African market is tumble because our customers are not going to be even able to afford products with changed recipes, because of the imported raw materials.*”<sup>129</sup>
- [140] In relation to potentially substituting andalusite specifically with chamotte, Du Preez testified that that would also not be feasible because “... *the chamotte will be inferior in the amount of alumina that’s in it. So it will ... you will have to compensate for that with having to add something with a higher alumina value in your matrix, to make it to compensate for that and that’s also imported stuff that’s very expensive. And also the density of the chamotte is lower again, than the Andalusite and there’s a lot of other properties that’s different. So it definitely changes the characteristics of the products and lots of times your customers are buying the product for the current characteristics that it has, because that’s why it works for them and that’s why it works well in their application*”<sup>130</sup> (our emphasis).
- [141] Terblanche of ArcelorMittal stated that South Africa does not have any raw material that can be used for the manufacture of refractories, except chamotte and andalusite. He said that “*Any magnesia based product or high alumina, you know, with high alumina more than 50% alumina has to be imported.*”<sup>131</sup>
- [142] When asked if there currently are any alternative products that are not andalusite-based that could be used and that would give the same performance as the andalusite-based products at the same cost, Terblanche indicated that this was unlikely from a cost point of view. He explained: “... *let’s assume it is technically possible to make a blend with no impact. To upgrade chamotte to that acceptable level, you have to use bauxite which is imported, which has to be treated and comes in Dollars. So it’s impossible to get it landed for the same price. I would assume the price difference would be in the order of 30% plus if not closer to double and from our experience and trials we did, unlikely you will get any performance increase*”<sup>132</sup> (our emphasis).
- [143] Terblanche further specifically quantified the difference in price between a calcined bauxite based brick and one based on Andalusite as “*between 30% and factor 2, if you consider it landed in South Africa and then there are two added complexities. The first*

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<sup>129</sup> Du Preez Transcript page 1635, lines 19 to 22.

<sup>130</sup> Du Preez Transcript page 1637 line 11 to page 1638 line 2.

<sup>131</sup> Terblanche Transcript page 1656, lines 14 to 18.

<sup>132</sup> Terblanche Transcript page 1716, lines 1 to 19.

*one is is [sic] obviously the weakening of the Rand, which means importing any raw material at the current exchange rate is a catastrophe for South African industries and the other reality is that the Chinese government, which owns the mines, slots an export duty on any refractory alumina or magnesia based product, which means looking at the raw material delivered in South Africa, you pay a 20 to 30% penalty purely because of export tax duties from China.*<sup>133</sup>

[144] Msibi of Scaw testified that they have done a trial with imported products to replace andalusite but that it was a “catastrophic failure”. He stated “... we even embarked on trialling bauxite and other alternatives, but it was a bit of a challenge at the wheel plant’s side, because of that trial that I conducted and it was a catastrophic failure”.<sup>134</sup>

[145] Furthermore, Webb testified to the high switching costs that will be incurred if andalusite has to be replaced with other raw materials and products have to be re-engineered. He said that these costs will be “astronomical” and would involve “*trials to see how these new raw materials actually, through the process of producing these bricks, what reactions take place, how will their sizing be. So, it’s not only the die costs. It’s all the costs involved in testing and trialling each one of those individual bricks. So, it will be astronomical.*”<sup>135</sup> He also said that this testing would take at least 12 months per application.<sup>136</sup>

[146] Du Preez explained that the customers (of refractorists) are not receptive to changes in product recipes, specifically if a product technically performs well in their applications. She said “*if they [customers] are happy with the product that you are making and they find it works well and all that, they are going to give you a very hard time as to why do you want to change something that works. They are not all open for change. If something works, they will just basically try to stick to it, especially if it’s cost-effective and works well.*”<sup>137</sup>

[147] She also explained the difficulties associated with the essential trialling of any new product and customers’ resistance to that: “*it’s not always easy to do a trial, depending on what the application is. If it’s ladles, it’s easier, because they can cast different ladles with different materials, but it’s not all applications that are easy to put a trial of a small*

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<sup>133</sup> Terblanche Transcript page 1650, lines 3 to 16.

<sup>134</sup> Msibi Transcript page 1853, lines 1 to 7.

<sup>135</sup> Webb Transcript page 1586, lines 1 to 14.

<sup>136</sup> Webb Transcript page 1586 line 18 to page 1587 line 6.

<sup>137</sup> Du Preez Transcript page 1612 line 15 to page 1613 line 5.

*quantity in. So, in applications where small quantities aren't feasible for trials, they are more resistant to trials. They don't want to change materials and customers are even intolerant just if there is a colour change in the product, You can even use the same type of raw material, but just from a different source and it can yield a different colour, they will just tell you straight out it's not the same product or it's not performing the same, even if it is. They are just very resistant to change.*"<sup>138</sup>

[148] Terblanche explained why a product that has already been developed and trialled in another overseas steel mill, even in an overseas ArcelorMittal mill, cannot simply be used in a particular mill in South Africa. He said that "*operational conditions may vary significantly*"<sup>139</sup> and elaborated as follows: "*[t]here are different strategies, completely different strategies between the international parent companies, because operational conditions differ, input material differs, process requirements are different*";<sup>140</sup> "*I've got a unique plant layout. Very few plants in the world has got a layout like mine*";<sup>141</sup> and "*[l]ogistical aspects change totally, raw material, quality changes differently, the way to control or manage your process and your cycle times and your efficiency, it's totally different*".<sup>142</sup>

[149] From an andalusite technical performance and switching perspective Terblanche testified that ArcelorMittal in 20 years have not seen the need to switch from andalusite. He attributed this to both the comparative technical performance as well as the local price of andalusite.<sup>143</sup>

[150] We further note that the merging parties did not seek to suggest that substitution effects for andalusite by potential alternative refractory raw materials would be a significant feature of the market at prices below EPP. As indicated below local andalusite prices are currently, on average, significantly below EPP.

[151] Importantly, Murgatroyd conceded on the merits that until such time as both Imerys and AR are capacity constrained, the proposed merger is likely to give rise to unilateral anti-competitive effects.<sup>144</sup> Thereby implicitly conceding that the merging parties are

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<sup>138</sup> Du Preez Transcript page 1613, lines 6 to 18.

<sup>139</sup> Terblanche Transcript page 1696, lines 10 to 14.

<sup>140</sup> Terblanche Transcript page 1697, lines 19 to 22.

<sup>141</sup> Terblanche Transcript page 1698, lines 8 to 10.

<sup>142</sup> Terblanche Transcript page 1698, lines 12 to 14.

<sup>143</sup> Terblanche Transcript page 1726, lines 4 to 14.

<sup>144</sup> See Exhibit 53.

close competitors in the relevant market and that there is no likelihood of the economic substitution of andalusite with other raw materials in South Africa.

[152] In conclusion, there is no evidence before us that should the merged entity post-merger increase prices by a small but significant amount, say 5 to 10%, that andalusite customers and/or andalusite-based refractory customers could viably switch to (imported) potential substitute materials / products.

[153] We next consider the views of the users of andalusite and andalusite-based refractories of the effects of the proposed transaction on competition.

### ***Customers' views of proposed transaction***

[154] VSA highlighted the changes that the proposed acquisition will bring about in the andalusite market in South Africa and the concern associated with that. It said that the proposed transaction would “*significantly alter the market structure in South Africa from a duopoly to a monopoly position*” and “*The lack of viable alternatives, the high entry barriers and the lack of potential entrants mean that the merged entity will have no competitive constraint post-merger to discipline its behaviour – making the likelihood of unilateral effects extremely high.*”<sup>145</sup>

[155] De Hemptinne testified “*actually we have competition in South Africa on this market since we developed Andalusite Resources*”.<sup>146</sup> He explained why Vesuvius in the first place developed AR as an alternative supplier to Imerys and explained the effects of the proposed acquisition on competition in that context: “*So, we basically have developed this second supplier in South Africa and this has been beneficial to Vesuvius, because it has enabled us to get better prices than what Samrec was offering us. If you look at the history of our offtakes from Samrec and from Andalusite Resources, you will see that most of Andalusite Resources have been shifted gradually to Andalusite Resources, because the pricing was more convenient. So yes, it has been a situation of competition, which has been beneficial to us”<sup>147</sup> (our emphasis).*

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<sup>145</sup> VSA submission dated 5 February 2015, paragraph 4.1 (Trial Bundle page 2926) and paragraph 5.2 (Trial Bundle page 2929); De Hemptinne Transcript page 1014 line 1 to page 1018 line 13.

<sup>146</sup> De Hemptinne Transcript page 997, lines 11 to 14.

<sup>147</sup> De Hemptinne Transcript page 997 line 20 to page 998 line7.

- [156] Terblanche of ArcelorMittal,<sup>148</sup> Du Preez of Magdol<sup>149</sup> and Msibi of Scaw<sup>150</sup> all raised similar concerns regarding the anti-competitive effects of the proposed transaction.
- [157] Du Preez of Magdol referred to Imerys' pricing as "*prohibitively high*" and said that the difference between Imerys' and AR's pricing "*can be as much as up to 20 to 30, even sometimes more than 30% difference in the price*".<sup>151</sup>
- [158] Teessen of Verref Elgin, a witness called by the merging parties, also confirmed that the merging parties are currently constraining each other's prices. Verref submitted "*When AR started coming into the market, [Imerys] started becoming cautious of their prices. They became price sensitive. The price would be probably higher if AR had not entered the market*".<sup>152</sup> Teessen further confirmed that AR is "*keeping a cap*" on Imerys prices.<sup>153</sup> He elaborated that the reason for this is that there is competition between Imerys and AR and that "*competition is normally good*".<sup>154</sup>
- [159] Terblanche of ArcelorMittal explained the competitive benefits of having both Imerys and AR in the andalusite market as follows: "*My strategy is I want multiple suppliers. I am not in favour of a monopolistic or a one supplier. My strategy is to say I have two suppliers and I want on every product two suppliers performing at the peak, making sure they stay ahead of technology, make sure they drive the efficiencies, they drive the costs in line with me. I have [to] compete with Chinese guys. I have to cut my costs*"<sup>155</sup> (our emphasis).
- [160] Based on the merging parties' own strategic documents, as discussed above, and the testimony of customers in the andalusite value chain there is no question that Imerys and AR are currently engaged with each other in price as well as non-price competition in the relevant market and that they are materially constraining each other's conduct. This rivalry would be permanently lost post-merger.

### ***Export volumes and local vs export pricing***

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<sup>148</sup> Terblanche Witness Statement, paragraphs 52 to 54 (pages 279 and 280).

<sup>149</sup> Du Preez Witness Statement, paragraph 30 (page 256).

<sup>150</sup> Msibi Witness Statement, paragraphs 20 to 23 (pages 540 and 541).

<sup>151</sup> Du Preez Transcript page 1603 line 18 to page 1604 line 2; also see Du Preez Witness Statement, paragraph 22 (page 253) in relation to the pricing of grog.

<sup>152</sup> Minutes of meeting with Verref Elgin, 05 February 2015 (Record page 802 at 806); Teessen Transcript page 882, lines 16 to 21.

<sup>153</sup> Teessen Transcript page 882 line 22 to page 883 line 1.

<sup>154</sup> Teessen Transcript page 893, lines 11 to 15.

<sup>155</sup> Terblanche Transcript page 1711 line 10 to page 1712 line 5.



[161] It was common cause that the overwhelming majority of the andalusite produced by Imerys and AR is exported.

[162] From a pricing perspective, the merging parties submitted that for some time, since at least mid-2013, the ex-works prices achieved by respectively Imerys and AR domestically have, on average, been [...] than those achieved in export markets.<sup>156</sup>

[163] Parte further confirmed that Imerys' domestic andalusite prices are (on average) [...] EPP because it still has excess capacity:

*“ADV WILSON: Alright, but that’s not ... I mean, your position is not that you are currently ramping up to EPP.*

*MR PARTE: Right now, no, we are not ramping up, ja.”<sup>157</sup>*

[164] Murgatroyd also confirmed that there are [...] between the domestic and export prices of both AR and Imerys for the major products supplied in the relevant market.<sup>158</sup> He furthermore observed that the andalusite prices charged to [...] are not rising towards EPP levels. He however indicated that [...] were already paying EPP.<sup>159</sup>

[165] It is important to note, as pointed out by Mncube, that there is not a single export price for andalusite from South Africa but a range of EPPs.<sup>160</sup>

[166] It was put to Murgatroyd by the Commission's counsel that there is on his own conceptualisation a range of EPP prices, with lower EPPs and higher EPPs. Murgatroyd did not dispute this.<sup>161</sup> He later testified that the “[...] *are already and have always been paying prices that are [...]*”<sup>162</sup> (our emphasis). In relation to these [...], he also agreed that during the period 2012 to 2015 within the EPP price range, i.e. percentiles, their pricing had been [...].<sup>163</sup>

[167] In relation to AR's pricing in the local market, we note that Bain explained that South Africa is an important region to AR in reference to both the volume of andalusite sold

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<sup>156</sup> See Exhibit 47, Murgatroyd Slide 4. For the purposes of this comparison, export prices are converted into “ex works” prices. There is no dispute regarding these facts.

<sup>157</sup> Transcript page 354, lines 6 to 8.

<sup>158</sup> Murgatroyd Transcript page 2253 line 16 to page 2256 line 2.

<sup>159</sup> Murgatroyd Transcript page 2504 line 18 to page 2505 line 8.

<sup>160</sup> Mncube Transcript page 2787, lines 5 to 18.

<sup>161</sup> Murgatroyd Transcript page 2505 line 9 to page 2508 line 21.

<sup>162</sup> Murgatroyd Transcript page 2519, lines 15 to 18.

<sup>163</sup> Murgatroyd Transcript page 2520 line 16 to page 2521 line 3.

into the local market and prices achieved in that market. Bain said that [...] going forward.<sup>164</sup> He also said that the prices for the [...] customers are important because they give AR a [...].<sup>165</sup>

[168] In relation to likely post-merger prices, the Tribunal enquired about the extent to which the merged entity, as a monopoly in the relevant market, would be able to price. Mncube's explanation was instructive on this. He explained that in the pre-merger situation one has two competitors charging different prices. However, post-merger the situation is one of internal coordination between these two players. He further pointed out that there is *"a big price difference between the two firms ... what we can say for certain is that the price is going to increase ... after the merger ... you ... have one dominant supplier who doesn't face constraints anymore in terms of pricing whose price can, whose prices becomes the monopoly price and there are no pegs as well to what is that monopoly price"*.<sup>166</sup>

[169] As we have indicated above, the evidence was that pre-merger local ex-works prices have on average been significantly below EPP and furthermore there is a range of EPPs and not just one single price. From the evidence of local customers in the andalusite value chain it was clear that the only post-merger potential constraint on the merged entity, as a monopolist, would be imports of potential substitutes for andalusite or andalusite-based refractories but which are currently not viable from an economic substitution perspective. Thus the only likely constraint on the merged entity's domestic andalusite prices would be potential imports and therefore the merged entity post-merger could charge up to a level of (or just below) import parity in the local market.

[170] Importantly, the merging parties' economic expert conceded that, save for the question of the relevant counterfactual (which we shall discuss below), the proposed merger is likely to give rise to significant anti-competitive effects in the mining and sale of andalusite in South Africa.<sup>167</sup>

[171] Given all of the above, absent the consideration of the relevant counterfactual (as we do below), we conclude that the proposed acquisition is likely to substantially prevent or lessen competition in the relevant market.

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<sup>164</sup> Bain Transcript page 496, lines 1 to 5.

<sup>165</sup> Bain Transcript page 699 line 11 to page 700 line 3.

<sup>166</sup> Transcript page 3025 line 13 to page 3026 line 10.

<sup>167</sup> See Exhibit 53.

[172] We next consider the relevant counterfactual.

## **Relevant counterfactual**

### ***Background***

[173] The merging parties submitted that the primary issue that the Tribunal must determine in this matter is the likely counterfactual in circumstances where they seek to persuade the Tribunal to accept a forward-looking counterfactual and not simply the current state of affairs or *status quo*.

[174] The differences between the merging parties' and the Commission's economic expert regarding the relevant counterfactual can be summarized as follows: the merging parties contended for a counterfactual where both Imerys and AR will imminently, or at a future date to be determined by the Tribunal, become capacity constrained in the mining / production of andalusite. The Commission contended that the appropriate counterfactual is that both the merging parties will not be capacity constrained should the proposed acquisition not take place and therefore the appropriate counterfactual is the *status quo*.

[175] As background to how the economic experts' counterfactual contentions came about, we note that the Tribunal suggested that the merging parties and the Commission meet in order to narrow the issues between them that are in dispute. The result of this was Exhibit 53, which is a theoretical economic framework for the effects of the proposed acquisition on competition depending on various potential counterfactual scenarios. The merging parties and the Commission submitted that this framework and approach would narrow the issues to ultimately be decided by the Tribunal and both parties presented their cases on that basis.

[176] Exhibit 53 postulates four theoretical counterfactual scenarios:

- (i) Neither Imerys nor AR is capacity constrained absent the proposed transaction (scenario 1);
- (ii) One party (i.e. either Imerys or AR) is capacity constrained absent the proposed transaction, but the other is not (scenario 2);
- (iii) Both Imerys and AR are capacity constrained absent the proposed transaction (scenario 3). This was the scenario relied on by the merging parties' economics expert, Murgatroyd; and

- (iv) Both Imerys and AR are capacity constrained, but the market is characterised by “strategic buyers” (scenario 4), as initially advanced by the Commission. However, the Commission ultimately did not persist with scenario 4 and therefore we shall not discuss this scenario any further in these Reasons.

[177] The above categorisation reflects the economic experts’ theoretical consensus that when one or both firms have spare capacity to mine / produce andalusite, there remains an incentive to compete and win sales, whereas when capacity constraints bind both of the merging parties and there is no spare capacity, there is no longer any ability or incentive to compete with one another for domestic andalusite customers.

[178] Counsel for the merging parties summarised the implications of Exhibit 53 for the hearing and the issues to be decided as follows: “... *the economists agree that in effect you can determine the competition issues in this case on the basis of which of these scenarios you believe is the correct scenario to use for the counterfactual. The economists are also in agreement as to why that is the case. So, their reasons, as they say, are as follows: If scenario 1 or 2 were to be the case, then the experts are agreed that unilateral effects are likely to arise as a result of the merger.*”<sup>168</sup>

[179] As indicated above, the merging parties contended that, absent the proposed transaction, the counterfactual scenario 3 is likely to emerge in the foreseeable future i.e. that both Imerys and AR will be capacity constrained and that domestic andalusite prices would end up at EPP as a result of the limited spare capacity and rising export demand over time. Mncube confirmed<sup>169</sup> that if and when the relevant counterfactual scenario is scenario 3, then “*the proposed remedies [i.e. parts A and B of remedy package 1] are appropriate subject to monitoring and enforcement considerations*”.<sup>170</sup>

[180] Applying a growth rate in the global andalusite demand of between 2.5% and 4.5% and that the merging parties’ total available capacity is between [...] KT and [...] KT, the merging parties contended that, absent the proposed transaction, both Imerys and

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<sup>168</sup> Unterhalter Transcript page 2348, lines 10 to 21.

<sup>169</sup> Mncube Transcript page 2761 line 9. This also appears from Exhibit 53, but only to the extent that the relevant period is less than five years. This was because the period initially proposed for the supply condition in Part 1 of Remedy Package 1 was five years.

<sup>170</sup> Mncube Transcript page 2982, lines 23 to 24.

AR are likely to face binding capacity constraints within a period of between 2.1 and 5.7 years from the beginning of 2016.<sup>171</sup>

[181] The merging parties further submitted that the counterfactual position must “*be considered prospectively*” in the sense that “*imminent or reasonably predictive changes to the status quo must also be considered in establishing the counterfactual*”.<sup>172</sup>

[182] Mncube, for the Commission, submitted that the merging parties’ “*contention on the counterfactual is not foreseeable*”<sup>173</sup> and the Commission ultimately argued that it is not reasonably probable that both Imerys and AR will become capacity constrained within a five year period after the merger or indeed at any other point in the foreseeable future.

[183] Furthermore, the Commission submitted that even if joint capacity constraints were to bind at some point in the future, there is no reason to suppose that such a scenario would be a permanent and enduring one, given the variable nature of the demand drivers for andalusite.

[184] As pointed out above, Murgatroyd conceded on the merits that until such time as both Imerys and AR are capacity constrained, the proposed merger is likely to give rise to unilateral anti-competitive effects.<sup>174</sup> Thus, if the relevant counterfactual is that domestic andalusite prices will not rise permanently to EPP levels because one or both of Imerys and AR will not become permanently capacity constrained then the proposed merger will give rise to anti-competitive effects.

### **Assessment**

[185] The determination of the likely counterfactual absent a proposed merger is a common analytical tool used in merger analysis. This means that the likely competitive situation

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<sup>171</sup> We note that these figures include the so-called “Yilong adjustment” in terms of which the merging parties allocated half of the volumes previously produced by Imerys’ Yilong mine in China to their operations in South Africa. We note that Mncube of the Commission disputed the assumption that the Yilong volumes will accrue to Imerys.

<sup>172</sup> Sutherland & Kemp Competition Law of South Africa Looseleaf, 2015 (LexisNexis: Durban), paragraph 10.2, page 10-4.

<sup>173</sup> Mncube Transcript page 2663, lines 24 and 25.

<sup>174</sup> See Exhibit 53.

after the implementation of the merger is compared with the likely position absent the merger, which is referred to as “the relevant counterfactual scenario”.<sup>175</sup>

[186] In *Life Healthcare*, the Tribunal noted that “*In merger cases, the assessment of the relevant counterfactual is an essential part of the analysis. Essentially, this involves a comparison of market outcomes; the market that would prevail without the merger, usually taken as the status quo, compared with the scenario that is likely to prevail post-merger. The difference between the two scenarios informs the threshold question raised by section 12A(1) of the Act viz – whether the merger would lead to a substantial prevention or lessening of completion. Usually the status quo serves as the proxy for what the market would be like absent the merger, while the post-merger future requires a predictive analysis*”<sup>176</sup> (our emphasis).

[187] The above approach, i.e. that - usually - the *status quo* serves as the proxy for the market conditions absent the merger, mirrors best practice in merger analysis. Competition authorities the world over generally regard the competitive conditions prevailing at the time of a specific contemplated merger, or the *status quo*, as constituting the relevant situation for evaluating the effects of the merger on competition. They do however consider claimed future changes to the market conditions where those are foreseeable and can reasonably be predicted. This assessment must be done on a case-by-case basis considering *inter alia* the nature of the counterfactual advanced and the various factors that influence that counterfactual.

[188] For instance, the *EU Guidelines on the Assessment of Horizontal Mergers* identify the *status quo* as the most commonly used counterfactual to be applied save in specific circumstances: “*In assessing the competitive effects of a merger, the Commission compares the competitive conditions that would result from the notified merger with the conditions that would have prevailed without the merger. In most cases the competitive conditions existing at the time of the merger constitute the relevant comparison for evaluating the effects of a merger. However, in some circumstances, the Commission may take into account future changes to the market that can reasonably be predicted* [See, e.g. *Commission Decision 98/526/EC in Case IV/M.950 — Hoffmann La Roche/Boehringer Mannheim*, OJ L 234, 21.8.1998, p. 14, point 13; *Case IV/M.1846*

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<sup>175</sup> Sutherland & Kemp (above) paragraph 10.6, page 10-21.

<sup>176</sup> *Life Healthcare Group (Pty) Ltd / Joint Medical Holdings Limited* [2013] 1 CPLR 227 (CT) at paragraph 20.

— *Glaxo Wellcome/SmithKline Beecham*, points 70-72; *Case COMP/M.2547 — Bayer/Aventis Crop Science*, points 324 et seq.] ...<sup>177</sup> (our emphasis).

[189] The UK follows a similar approach: “*In practice, the OFT generally adopts the prevailing conditions of competition (or the pre-merger situation in the case of completed mergers) as the counterfactual against which to assess the impact of the merger. However, the OFT will assess the merger against an alternative counterfactual where, based on the evidence available to it, it considers that the prospect of prevailing conditions continuing is not realistic (eg because the OFT believes that one of the merger firms would inevitably have exited from the market) or where there is a realistic prospect of a counterfactual that is more competitive than prevailing conditions*”<sup>178</sup> (our emphasis).

[190] The UK Merger Assessment Guidelines go on to state: “... *the CC may examine several possible scenarios, one of which may be the continuation of the pre-merger situation; but ultimately only the most likely scenario will be selected as the counterfactual*”<sup>179</sup> (our emphasis).

[191] The Competition Appeal Court (CAC) has also held that the relevant counterfactual scenario is “*the likely one*” in the sense of being the scenario that is “*probable*”.<sup>180</sup>

[192] The CAC has furthermore recognised that the Act in relation to mergers “*enjoins the Tribunal to forecast a likely possibility; that is, it makes a predictive judgment, based on evidence which has been placed before it*”.<sup>181</sup>

[193] The *UK Merger Assessment Guidelines* then further explain that only likely and foreseeable aspects and developments will be considered in the determination of the relevant counterfactual: “*However, the CC will typically incorporate into the counterfactual only those aspects of scenarios that appear likely on the basis of the facts available to it and the extent of its ability to foresee future developments; it seeks*

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<sup>177</sup> The European Community *Guidelines on the Assessment of Horizontal Mergers under the Council Regulation on the Control of Concentrations between Undertakings* OJ [2004] C 31/5, paragraph 9.

<sup>178</sup> *Merger Assessment Guidelines* of the UK Office of Fair Trading and Competition Commission (2010), paragraph 4.3.5.

<sup>179</sup> *Merger Assessment Guidelines* of the UK Office of Fair Trading and Competition Commission (2010), paragraph 4.3.6.

<sup>180</sup> *Competition Commission v South African Breweries Limited and others* [2014] 2 CPLR 339 (CAC) at paragraph 63.

<sup>181</sup> *Mondi Ltd and Kohler Cores and Tubes (a division of Kohler Packaging Ltd) v Competition Tribunal* [2003] 1 CPLR 25 (CAC) at paragraph 38.

to avoid importing into its assessment any spurious claims to accurate prediction or foresight. Given that the counterfactual incorporates only those elements of scenarios that are foreseeable, it will not in general be necessary for the CC to make finely balanced judgments about what is and what is not the counterfactual<sup>182</sup> (our emphasis).

[194] As regards the time period over which the counterfactual must be assessed, the *UK Merger Assessment Guidelines* provide that this is affected by the extent to which events and circumstances and their consequences are foreseeable and explicitly state that this period may be relatively short: “*The description of the counterfactual is affected by the extent to which events or circumstances and their consequences are foreseeable, enabling the Authorities to predict with some confidence. The foreseeable period can sometimes be relatively short*”<sup>183</sup> (our emphasis).

[195] In relation to evidential onus, the Commission argued that when a party - either the merging parties or the Commission - wants to rely on a counterfactual other than the *status quo* then there is an evidential onus on that party who wants to depart from the *status quo* to put up that evidence. That party must demonstrate to the satisfaction of the Tribunal on a balance of probabilities that the advanced alternative counterfactual is indeed likely. The Commission’s Counsel argued that “*it can never be for the Commission to effectively knock down every conceivable alternative counterfactual in the world*”.<sup>184</sup>

[196] We concur with the Commission that if a party (whether the merging parties or the Commission - in this case the merging parties) wants to contend for a counterfactual other than the *status quo* then that party must put up evidence on a balance of probabilities of the likelihood of the alternative relevant counterfactual.

[197] In view of the economic experts’ agreement on the economic theory regarding the relevant counterfactual (read with the merging parties’ tendered behavioural conditions) we had to decide what the relevant counterfactual would be absent the proposed merger. Specifically we were asked to decide whether or not the merging parties’ counterfactual, i.e. that both Imerys’ and AR’s capacities will bind, is likely to

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<sup>182</sup> *Merger Assessment Guidelines* of the UK Office of Fair Trading and Competition Commission (2010), paragraph 4.3.6.

<sup>183</sup> *Merger Assessment Guidelines* of the UK Office of Fair Trading and Competition Commission (2010) paragraph 4.3.2.

<sup>184</sup> Transcript, page 3326 line 16 to page 3327 line 17.



occur in the future, and if so, when this will happen. The further issue is if any potential binding of capacities will be a permanent situation over the life of mine, as explained below.

[198] Whether or not, absent the proposed transaction, the merging parties' andalusite production capacities will bind and remain bound depend largely on two factual issues:

- (i) the probable extent of Imerys' and AR's future andalusite production capacities over the life of mine. This will in turn depend *inter alia* on the future yields of Imerys' and AR's andalusite deposits and the efficiency of their mining / production processes;
- (ii) the probable rate of growth in the future international demand for andalusite. This will, as explained above, largely depend on future steel production levels which to a large extent drive the demand for andalusite (see paragraph 27 above).

[199] Before we assess the relevant counterfactual in more detail, and specifically what is foreseeable in this case, we need to place in context the time period, absent the proposed transaction, over which Imerys and AR will produce andalusite in South Africa. We do this by reference to the anticipated life of mine of respectively AR's and Imerys' andalusite operations in South Africa.

#### *Life of mine of AR and Imerys*

[200] We first consider AR's anticipated life of mine and then that of Imerys.

[201] In regard to AR's estimated life of its andalusite reserves its *Andalusite Revised Strategic Plan 2010 to 2016* states "*having established [...] at a monthly production volume.*"<sup>185</sup> Bain confirmed the expected life of mine of AR's andalusite operations in South Africa as follows:

*"ADV WILSON: ... Can I just understand, in terms of your projections of life of mine, is it still around [...] (years)?"*

*MR BAIN: I have received varying forecasts from varying geologists and it varies between anything between [...] to [...] years*<sup>186</sup> (our emphasis).

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<sup>185</sup> Exhibit 10: AR's Andalusite Revised Strategic Plan 2010 - 2016.

<sup>186</sup> Bain Transcript page 532, lines 8 to 11.

[202] Bain later in his testimony again confirmed AR's anticipated life of mine for andalusite:

*"ADV WILSON: ... You talk about "the company currently having over [...] years of proven ore resources, but you've got more applications in the works." And you say in the final sentence of 1686 that "you have little doubt that all of the above will prove to be successful rendering life of mine in excess of [...] years at current production rates." I think that's consistent with what you told me earlier, that you're getting estimations between [...] and [...]?"*

*MR BAIN: Yes, that's correct"<sup>187</sup> (our emphasis);*

and

*"ADV WILSON: ... given that in your financial statements that go to shareholders and the like, you would have been pretty confident when you estimated [...] years in each of those financial statements.*

*MR BAIN: Yes, we've had qualified geologists give us estimates that support that"<sup>188</sup> (our emphasis).*

[203] The anticipated life of mine of AR's andalusite operations in South Africa was also put to Parte with reference to a due diligence performed by Deloitte and Touche for the proposed transaction:

*"ADV WILSON: And you will see there in the fourth bullet the operation has an annual production capacity in excess of [...] tons. Do you see that?"*

*MR PARTE: Yes.*

*ADV WILSON: At this rate the production of a mine's reserve life is around [...] years. Just to get more specific about what excess above [...] is entailed, please turn over to 2533. The box with the writing "forecast increase in production and sale volume", do you see that?"*

*MR PARTE: Yes"<sup>189</sup> (our emphasis).*

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<sup>187</sup> Bain Transcript page 543 line 16 to page 544 line 3.

<sup>188</sup> Bain Transcript page 554, lines 11 to 16.

<sup>189</sup> Parte Transcript page 319, lines 1 to 9.

[204] Furthermore, the aforementioned *Project Dias* document<sup>190</sup> (drawn up for the proposed transaction) in regard to the overall andalusite deposits in South Africa reflects the following:

- “*Portion of the Thabazimbi deposit locked by Andalusite Resources*”;<sup>191</sup>
- AR has “*Current reserves of approximately [...] years with proper authorisations*”; and
- AR is “*Currently applying for mining rights for an additional [...] years of reserves*”.<sup>192</sup>

[205] The *Project Dias* document further shows the portions of the farm Maroeloesfontein at Thabazimbi which AR owns and the portions for which AR has existing mining rights or existing prospecting rights.

[206] In relation to the abovementioned *additional [...] years* of AR reserves that are the subject of applications for mining rights, Parte stated that he could not comment on this figure since “... *We [Imerys] don’t know, because we didn’t do any drillings there ... We didn’t asses [sic] that part. ... We haven’t drilled. We can’t even drill if we don’t have mining rights ...*”.<sup>193</sup>

[207] He further testified that AR may already have obtained some of those additional mining rights:

“ADV WILSON: *What about the “currently applying for mining right for an additional [...] years of reserves”? Is there any more recent information on that?*

MR PARTE: *Those are the portions I was mentioning where they didn’t have mining rights at the time. I think they have secured some of those mining rights in the meantime, ...*”.<sup>194</sup>

[208] With regard to AR’s abovementioned *current reserves of approximately [...] years with proper authorisations*, Parte testified that those numbers were given to Imerys by AR’s management.<sup>195</sup> We have dealt with Bain’s evidence on this score above where he

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<sup>190</sup> Document prepared for Imerys’ proposed acquisition of AR, dated 09 December 2013. We note that this was drawn up pre the due diligence.

<sup>191</sup> *Project Dias* document, Trial Bundle page 1454. (Document commences at Trial Bundle page 1403.)

<sup>192</sup> *Project Dias* document, Trial Bundle page 1454.

<sup>193</sup> Parte Transcript page 415, lines 9 to 16.

<sup>194</sup> Parte Transcript page 414, lines 13 to 18.

<sup>195</sup> Parte Transcript page 414 line 5.

indicates that AR received varying forecasts from qualified geologists that vary between [...] to [...] years and that AR was confident enough to disclose the [...] year figure to shareholders in its financials.

[209] Parte however testified that Imerys' estimate of AR's current reserves was [...] than the [...] years as advanced by AR's management. He said that when Imerys did the due diligence "*there were different segments depending on the quality, I think, in terms of the reserves. We gave that report, I think, in part of the discovery, if my memory doesn't ... it should be more of less [...] [sic] of reserves and then there were some estimations on maybe depending on the quality there might be some more in the northern portions, but I think that those portions didn't have mining rights.*"<sup>196</sup>

[210] Thus, in the absence of the proposed transaction, one has to consider the lengthy period over which AR will mine and sell andalusite from its South African reserves. This period on Bain's evidence is at the very least [...] years and perhaps as long as [...] years. Although Parte questioned AR's current reserves with authorisations as estimated at [...] years by AR's management and confirmed in AR's financials, and said this could be around [...] years he, however, had no sound basis to disagree with the estimated additional [...] years of reserves that are the subject of mining rights applications by AR, since Imerys could do no verification of that.

[211] For Imerys' site in Annesley (at Burgersfort), Parte testified that it has sufficient reserves at the current level of production to last in an order of magnitude of [...] years.<sup>197</sup>

[212] Parte further testified that for its Rhino andalusite mine (neighbouring AR's andalusite mine), Imerys has approximately [...] to [...] years of andalusite reserves left. He however also pointed out that Imerys has applied for additional mining rights for Rhino which are still pending.<sup>198</sup> He elaborated on this, after questions from the Tribunal, as follows: "*... we apply for mining rights for instance for [...].*"<sup>199</sup>

[213] During his exchange with the Commission's counsel, Parte further confirmed the following in relation to Imerys' mining operations at Thabazimbi:

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<sup>196</sup> Parte Transcript page 414, lines 6 to 12.

<sup>197</sup> Parte Transcript page 389, lines 1 to 4.

<sup>198</sup> Parte Transcript page 388 line 19 to page 389 line 1.

<sup>199</sup> Parte Transcript page 390, lines 14 to 18.

*“ADV WILSON: ... it says here is “current reserves of approximately [...] years, which is approximately [...] years at Tygerkloof and [...] years proven at Buffelshoek and a further [...] years not proven in the Kumba iron ore areas” where I see you have applications pending. You are awaiting mining right applications. I’m trying to reconcile that with your [...] to [...] years at the Rhino mine and [...] years at Annesley.*

*MR PARTE: Yes, so the Tygerkloof area is the area at which we are currently trying to get mining rights to extend. So, the [...] years that you have here are actually not reserves. So, it’s a mistake, I guess, in the document, but they are not reserves in the strict sense of the term, because we don’t have our mining rights on them.*

*ADV WILSON: But you’ve applied for rights.*

*MR PARTE: Yes.*

*ADV WILSON: And you are awaiting approval on those.*

*MR PARTE: Yes”.*<sup>200</sup>

[214] Parte also confirmed that the abovementioned [...] years proven at Buffelshoek (at the time that the document was drawn up) relate to the Thabazimbi mine, but that now there was “[...] years left of proven reserves” and “the rest would be Tygerkloof and in this case Buffelshoek, which are awaiting mining rights”<sup>201</sup> (our emphasis).

[215] The aforementioned *Project Dias* document confirms that Imerys has pending mining right applications for the farms *Buffelshoek 351 KQ* and *Grootfontein 352 KQ* and that it has “submitted extension” regarding the farm *Tygerkloof 354 KQ*.<sup>202</sup>

[216] Regarding the abovementioned *further [...] years not proven in the Kumba iron ore areas* Parte said that it relates to “estimations made by geologists” and “it’s not proven” which means that “I won’t be able to go into more detail on that ...”.<sup>203</sup>

[217] Thus, in the absence of the proposed transaction, we know that for Imerys’ site in Annesley there are sufficient reserves at the current level of production to last in an order of magnitude of [...] years. However, future mining rights applications may be brought by Imerys for Annesley closer to the expiry of this [...] year period, we cannot foresee this. For Imerys’ Thabazimbi mining operations, the evidence suggests that

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<sup>200</sup> Parte Transcript, page 412, lines 2 to 17.

<sup>201</sup> Parte Transcript page 413, lines 4 to 6.

<sup>202</sup> Trial Bundle page 1453.

<sup>203</sup> Parte Transcript page 413, lines 9 to 12.

there are [...] years left of proven reserves and currently pending mining rights applications relating to an additional [...] years.

[218] Furthermore, as already mentioned above (see paragraph 95), Imerys' strategic documents confirm that there is also competition between Imerys and AR at an andalusite mining right level. The Minutes of the Imerys South Africa Board Meeting of 07 June 2011 reflect "*The DMR has accepted our application for a mining right at Maroeloesfontein 366KQ farm even though Andalusite Resources have applied for a prospecting right in the same farm and they were first in line ...*"<sup>204</sup> (our emphasis).

[219] The above life of mine periods of AR and Imerys are important for the assessment of the relevant counterfactual. As can be seen from the testimonies of Bain and Parte these are lengthy periods of anything from at the very minimum [...] years to [...] years.

#### *Issues to decide*

[220] Against the above background, what do we have to decide in this matter? First we have to decide the extent to which relevant future events or circumstances and their consequences are foreseeable - in the context of the nature of the counterfactual advanced by the merging parties and the abovementioned lengthy life of mine period absent the proposed transaction. That the relevant counterfactual needs to be foreseeable was common cause between the economic experts. Murgatroyd acknowledged this: "*I think the key kind of deciding element in a lot of all this is to say well, the counterfactual at the very least needs to be something foreseeable*"<sup>205</sup> (our emphasis).

[221] Murgatroyd also acknowledged that the time period over which one would have to predict the relevant counterfactual is an important consideration: "*Now the key issue in the case, or key debate in this case is what period of time we're looking at. I think that's an obvious discussion, you know, are we evaluating a counterfactual over the next one year, 2 years, 5 years, 10 years?"<sup>206</sup> As is evident from our above discussion of life of mine, the relevant period (absent the proposed transaction) that we need to*

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<sup>204</sup> See paragraph 4.2 of the Minutes, Record page 1963.

<sup>205</sup> Murgatroyd Transcript page 2249, lines 19 to 21.

<sup>206</sup> Murgatroyd Transcript page 2249, lines 6 to line 9.

consider reaches far beyond Murgatroyd's stated 10 years, potentially to [...] or even [...] years.

[222] Murgatroyd also acknowledged that one would need sufficient information on which to base the relevant counterfactual. He said: "*You know, you need to have sufficient information to be able to make insights and determinations about what's going to happen*".<sup>207</sup>

[223] We ultimately have to decide, based on what is foreseeable and on a balance of probabilities, if we are confident that both Imerys' and AR's capacities will bind and, importantly, remain bound over the life of mine period.

[224] It is important to stress that, in order for the merging parties to establish their alternative counterfactual, it is not sufficient that only one of the merging parties become and remain capacity constrained. Murgatroyd agreed with Mncube that in order for domestic andalusite prices to rise to EPP levels, both of Imerys and AR must be capacity constrained. In Murgatroyd's words: "*actually a point of agreement between myself and the Commission's expert that where you've got a one-sided capacity constraint, let's call it that, you know, you would expect to observe some ... you would still have some competition taking place in respect of that important customer*".<sup>208</sup>

[225] This is so for the reasons illustrated in Slide 10 of Mncube's presentation.<sup>209</sup> As reflected on that slide, if one of the merging parties is capacity constrained, then that firm would still be subject to competition from the other merging party and would accordingly be incentivised to continue competing with it. It is only when both of the merging parties are (permanently) capacity constrained that there is no longer any incentive for them to compete with each other, as reflected in Slide 11 of Mncube's presentation.<sup>210</sup>

[226] Murgatroyd also agreed with Mncube that neither Imerys nor AR is currently capacity constrained.<sup>211</sup> The only question is whether, absent the proposed transaction, one or

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<sup>207</sup> Murgatroyd Transcript page 2249 line 21 to page 2250 line 2.

<sup>208</sup> See Exhibit 53; Murgatroyd Transcript page 2628, lines 6 to 14.

<sup>209</sup> Exhibit 48, Mncube's Slide 10.

<sup>210</sup> Exhibit 48, Mncube's Slide 11.

<sup>211</sup> Murgatroyd Transcript page 2628, lines 2 to 5; and Transcript page 2630, lines 6 to 14.

both of AR and Imerys will become capacity constrained in the future and if so, when - and furthermore whether that would be a permanent situation.

[227] In the section that follows we shall further analyse and evaluate the relevant counterfactual. However, we note certain fundamental concerns with the counterfactual contended for by the merging parties and the evidence in support of that. As will be indicated below, the main factors that determine whether or not the merging parties' alternative counterfactual is likely, i.e. future (investment in improving) andalusite production capacities (including future yields) and future global andalusite demand, are not static in nature, but are characterised by significant volatility. Furthermore, the merging parties only put up evidence over a very short period of time. In contrast to this, as indicated above, the life of mine of the merging parties' operations in South Africa is a lengthy period of potentially [...] to [...] years. Thus, even if the merging parties were correct in alleging that both merging parties' capacities would bind at a specific date in the foreseeable future, there is no evidence to suggest that this will be a permanent situation over the life of mine period. On this basis alone the counterfactual contended for by the merging parties cannot succeed. Put differently, over the longer term the merging parties' alleged counterfactual is totally speculative.

[228] The limited evidence / data of short duration put up by the merging parties aside, we next discuss the main factors that influence whether or not Imerys' and AR's capacities are likely to bind and remain bound over the life of mine. As we have indicated above, these factors are:

- (i) AR's and Imerys' future andalusite production capacities, influenced by *inter alia* future investments to increase capacities and future yields of their andalusite deposits; and
- (ii) the growth in the future international demand for andalusite, including potential growth from increased demand for andalusite-based refractories and potential growth from increased penetration of andalusite in substitution of other refractory raw materials.

*Merging parties' future production capacities absent the merger*

[229] As indicated above, the merging parties' economics expert, Murgatroyd, applied a total available andalusite production capacity of between [...] KT and [...] KT (being the



combined production capacities of Imerys and AR) in his assessment of when the merging parties' capacities are likely to bind.

[230] We shall first consider the production capacity of Imerys and then the (past, current and future predicted) production capacity of AR.

[231] It was common cause that Imerys' Rhino and Annesley andalusite mines in South Africa are currently not capacity constrained. Parte confirmed this in his evidence<sup>212</sup> and this is also evident from the capacity figures he provided. Murgatroyd also confirmed his understanding that Imerys' mines in South Africa are not currently capacity constrained.<sup>213</sup>

[232] According to Parte, the Rhino mine has a maximum capacity of [...] KT per annum, whilst Annesley has a maximum capacity of [...] KT per annum; thus combined [...] KT.<sup>214</sup>

[233] It was further common cause that Imerys' maximum theoretical capacity of [...] KT should be adjusted downwards with a "sustainability"<sup>215</sup> adjustment of 5% to 10%.<sup>216</sup> Parte testified that, in view of the unplanned production interruptions which regularly occur in the mining industry, it is necessary to maintain "spare" capacity of approximately 5% to 10%. As such, the total "sustainable capacity" of the Rhino and Annesley mines is between 90% and 95% of the total maximum of [...] KT per annum, which translates into a lower bound capacity of [...] KT per annum and an upper bound of [...] KT per annum.<sup>217</sup>

[234] Of this total sustainable capacity, the production from both mines in calendar year 2015 was [...] tons per annum.<sup>218</sup> It is thus evident that, on Parte's own numbers, the sustainable spare capacity at Imerys' South African andalusite mines is currently between approximately [...] KT and [...] KT per annum.

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<sup>212</sup> Parte Transcript page 363, lines 3 to 5.

<sup>213</sup> Murgatroyd Transcript page 2462, lines 3 to 6; and Transcript page 2628, lines 2 to 5.

<sup>214</sup> Parte Witness Statement, paragraph 22 (page 9).

<sup>215</sup> The sustainable capacity of a mine is what it is sustainably expected to produce having regard to unavoidable external factors such as water and electricity limitations, shutdowns, holidays and the like.

<sup>216</sup> Mncube Transcript page 2978, lines 3 to 12.

<sup>217</sup> Parte Witness Statement, paragraph 22 (page 9); Exhibit 48, Mncube's Slide 21.

<sup>218</sup> Exhibit 48, Mncube's Slide 24.

[235] We next briefly deal with the merging parties' adjustment for the closure of the Yilong mine (see paragraphs 59 and 70 above), although this has no material impact on the disputed issues and on our ultimate conclusion.

[236] Murgatroyd in assessing the future available spare capacity at the Rhino and Annesley mines made an adjustment for volumes that will be transferred from Imerys' recently closed Yilong mine in China.<sup>219</sup> We have, however, found this adjustment to be unjustified for the following reasons:

- (i) if the Yilong mine is closed [...], there is no evidence to suggest that other andalusite suppliers (including other Chinese producers or Andalucita in Peru),<sup>220</sup> could not win a significant proportion of this business away from Imerys; and
- (ii) given that the Yilong mine ceased production in September 2015, there should be evidence by now of which (if any) of Yilong's sales have been assumed by other andalusite suppliers, and by whom and in what proportions. However, Imerys provided no evidence of any previous Yilong customers that are now supplied from Imerys' South African mines. This evidence should have been put up.

[237] Furthermore, the merging parties' economics expert wants us to assume, absent the proposed transaction, that Imerys' production capacity will be static over its life of mine with no additional investments to increase capacity. However, we cannot assume this. On the contrary, Parte told us, as indicated above, that Imerys has applied for additional andalusite mining rights (with unforeseeable yields) and that "*we [Imerys] assume that as long as we have reserves that we will be able to grow as we hope.*"<sup>221</sup>

[238] For these reasons, Imerys' future andalusite production capacity over its life of mine is not foreseeable.

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<sup>219</sup> In particular, the merging parties contended that it is reasonable to assume that 100% of Yilong's 2015 sales of [...]KT per annum will be retained within the Imerys group, with 50% (i.e. [...] KT per annum) being allocated to Imerys' South African mines (Rhino and Annesley) and the other 50% to its Glomel mine in France.

<sup>220</sup> See Exhibit 3.

<sup>221</sup> Parte Transcript page 390, lines 14 to 18.

- [239] The above, in terms of the counterfactual scenarios postulated in Exhibit 53, means that scenario 2 applies - one party, i.e. Imerys, is not capacity constrained absent the proposed transaction over the life of mine.
- [240] We next discuss the various AR strategic documents that shed light on the past, current and predicted future andalusite production capacities of AR as well as the oral evidence of Bain in this regard.
- [241] The merging parties submitted that it is most probable that AR's actual maximum sustainable capacity is between [...] KT and [...] KT, thus suggesting a total combined capacity for the merging parties of between [...] KT and [...] KT. We note that the merging parties sought to place a lot of weight on AR's actual production up to now as a predictor of its future production capacities. We explain below why we regard this approach as incorrect.
- [242] The Commission submitted that, on a reading of Bain's evidence as a whole and of the relevant strategic documents before the Tribunal, AR's current sustainable capacity is at least in the range of [...] KT to [...]KT per annum and potentially up to [...] KT per annum if yield efficiencies can be improved. Given that AR's actual sales were only [...] tons per annum in 2015,<sup>222</sup> there is therefore still significant spare sustainable production capacity at the AR mine, according to the Commission.
- [243] We emphasize that what is relevant - in absence of the proposed transaction - is not past capacities achieved, but AR's likely future "sustainable<sup>223</sup>" andalusite production capacity. As also emphasized above, one would have to consider this with a longer-term perspective given AR's life of mine.
- [244] Bain explained that the relevant capacity for determining AR's andalusite pricing policy is not its actual andalusite production or capacity at any point in time, but rather "*what we perceive our capacity to be and that we are always in a growth or expanding frame of mind*"<sup>224</sup> (our emphasis).
- [245] The fact that AR is always in a growth and expanding frame of mind is further confirmed by the significant capacity increases that it has achieved since its entry into the

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<sup>222</sup> Exhibit 48, Mncube's Slide 32.

<sup>223</sup> Bain said that as "a rule of thumb" the AR andalusite mine generally performed at 80 to 85% of its theoretical capacity; Transcript page 432, lines 5 to 19.

<sup>224</sup> Bain Transcript page 607 line 22 to page 608 line 5.

andalusite market. It has made significant investments in this. The AR mine was originally designed to produce 2 500 tons of andalusite per month, which it achieved in FY 2008.<sup>225</sup> In FY 2010 and FY 2011, the AR shareholders [...] in order to increase capacity and to improve efficiencies at the mine.<sup>226</sup> AR's yield increases, as confirmed in the *Project Dias* document, have already been discussed above (see paragraph 115).

[246] The best source of AR's future anticipated sustainable production capacity is its own internal documents and the documents prepared specifically for the proposed acquisition. These documents and Bain's evidence, as set out below, confirm that AR has been selling all the andalusite that it has produced for a number of years, but further also show that it expects to in future increase its andalusite production to above its current output levels.

[247] As indicated above, it is AR's practice to set its andalusite pricing at a level that would permit it to sell that increased production in due course, rather than at a level which assumes that it is permanently capacity constrained. Bain explained: "*[W]e've seen in the documents that we have an aspiration to achieve [...] tons a month and that will correlate into an annual production of about [...] to [...] tons. We are [...]*"<sup>227</sup> (our emphasis).

[248] Murgatroyd agreed that what would be important in AR's future setting of its andalusite pricing, absent the proposed transaction, is its own anticipation of its future andalusite production capacity: "*I think that the balance of the evidence certainly suggests that there is some spare capacity in that AR mine ... indeed even if Mr Bain were in a world where he actually at any given point in time were producing as much as he could, you know, if that is not the end point for capacity, if there is some expectation going forward that there will be additional spare capacity, then he would effectively be pricing like there were spare capacity in the first place*"<sup>228</sup> (our emphasis).

[249] Thus what is relevant, absent the proposed transaction, is what AR in the future would believe its sustainable andalusite capacity to be, bearing in mind that AR is always in a growth and expanding frame of mind, according to Bain. It is clear from Bain's

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<sup>225</sup> Bain Witness Statement, paragraph 10 (page 23).

<sup>226</sup> Bain Witness Statement, paragraph 17 (page 26).

<sup>227</sup> Bain Transcript page 609 line 17 to page 610 line 6. See also Bain Transcript page 560 line 13 to page 561 line 7.

<sup>228</sup> Murgatroyd Transcript page 2630, lines 6 to 14.

evidence (and confirmed by Murgatroyd) that, absent the proposed transaction, if AR anticipates future capacity increases, it will consider that in its andalusite pricing. One therefore simply cannot in one's analysis consider only what andalusite production AR has achieved to date.

[250] In terms of future predicted capacities, Parte (and Bain) confirmed that Imerys received a budgeted level from AR of [...] KT of andalusite per annum and that this formed the basis of the initial negotiations between the parties.<sup>229</sup> The due diligence report prepared by Deloitte & Touche refers to an AR management forecast of [...] KT in FY2015, which management attributed to increased plant capacity arising from a R[...] in FY2014. This forecast production volume assumed a yield of [...] % compared to [...] % achieved in YTD 2014.<sup>230</sup>

[251] Bain's evidence was clear that, absent the proposed transaction, there is scope for further capacity increases by AR if further investments are made. He stated that a production capacity of (even beyond) [...] KT per annum, as reflected in certain documents, required further capital expenditure and explained that the AR shareholders decided in early 2014 to limit capital expenditure with the result that the necessary investments were not made to increase production capacity to the [...] KT per annum level.<sup>231</sup> He attributed the decision not to make the investment at the time to lower production which caused AR a cash flow issue and the gearing structure of AR.<sup>232</sup> As we have explained above, Bain testified that absent the proposed transaction AR's gearing issue could be resolved by introducing a new investor (see paragraph 87 above).

[252] The above is consistent with AR's strategic plan for 2014 - 2015 which was prepared in March 2014, at which time AR still budgeted to produce and sell [...] to [...] KT per annum during FY 2014/15.<sup>233</sup> Bain confirmed that, at the time that document was prepared, AR believed that the figure of [...] KT per annum was its sustainable productive capacity.<sup>234</sup>

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<sup>229</sup> See Parte Transcript page 272, lines 7 to 14; Transcript page 275, lines 12 to 17; and Transcript page 280, lines 11 to 21. See also Bain Transcript page 507 line 8 to page 508 line 9.

<sup>230</sup> Deloitte & Touche Final Due Diligence Report, 24 July 2014 (Trial Bundle page 2526 at 2533); Parte Transcript page 319, lines 10 to 20.

<sup>231</sup> Bain Transcript page 433 line 21 to page 434 line 20.

<sup>232</sup> Bain Transcript page 434, lines 11 to 20.

<sup>233</sup> AR Strategic Plan 2014 - 2015, created in March 2014 (Trial Bundle page 1682 at 1686 and 1692).

<sup>234</sup> Bain Transcript page 542 line 21 to page 543 line 3; and Transcript page 546 line 13 to page 547 line 4.

- [253] In AR's most recent strategic plan for the period 2015 - 2016, which was prepared on 03 June 2015 (i.e. while the merger proceedings were pending before the Tribunal), AR recorded that the total capacity of AR's mine was approximately [...] KT per annum and that whilst that "[...]"<sup>235</sup>
- [254] The same document reflects AR's strategic objective as "to grow production towards the [...] mts annual level, i.e. [...] mts per month" which the document states "[...]"<sup>236</sup> (our emphasis). This is also reflected in AR's production forecasts in the strategic plan, which show production increasing to approximately [...] KT per annum by FY 2018/19.<sup>237</sup>
- [255] Bain testified that AR's objective was to achieve [...] tons per annum and, importantly, that this could be done with "[...]"<sup>238</sup>
- [256] In his oral evidence, Bain further stated that the abovementioned [...] KT per annum figure was based on the belief of AR's technical manager that such a level was achievable, but that the technical manager was assuming a yield of approximately [...] % which AR has not (yet) achieved. According to Bain, AR's actual yield is in the range of [...] % to [...] %, <sup>239</sup> and he later confirmed that [...] % is a "*feasible yield*" that is achieved quite regularly.<sup>240</sup> For illustrative purposes: if a [...] % yield is applied to the estimate of [...] KT production per annum, it results in a sustainable capacity of [...] KT per annum.<sup>241</sup>
- [257] In his re-examination, Bain testified that there currently are two constraints on AR's ability to increase its production capacity, namely (i) [...]; and (ii) [...] and that AR was taking steps to address both of those problems.<sup>242</sup>

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<sup>235</sup> AR Strategic Plan 2015 - 2016, (final version) dated 3 June 2015 (Trial Bundle page 3093 at 3101). See also AR Management Accounts, June 2015 (Discovery page 6032 at 6034); and Bain Transcript page 586, lines 7 to 12.

<sup>236</sup> Trial Bundle page 1687.

<sup>237</sup> Trial Bundle pages 1692 and 1693.

<sup>238</sup> Bain Transcript page 488 line 18 to page 489 line 3.

<sup>239</sup> Bain Transcript, page 544 line 4 to page 545 line 7. See also Exhibit 54, ENS letter to the Tribunal dated 20 October 2015, paragraph 5.

<sup>240</sup> Bain Transcript page 573, lines 21 to 22.

<sup>241</sup> See Exhibit 66.

<sup>242</sup> Bain Transcript page 681 line 14 to page 683 line 9.

[258] Assuming the continued existence of those constraints, AR's current forecast of its sustainable capacity is approximately [...] to [...] KT per annum. In Bain's words: "[...]"<sup>243</sup> (our emphasis).

[259] However, AR has distinct plans to overcome its current [...] supply problems that are limiting its andalusite production at this stage, as explained by Bain:

[259.1] In relation to the [...] issue Bain said: "*there are [...].*"<sup>244</sup>

[259.2] In relation to AR's current [...] issue Bain said: "*Yes, we are currently [...].*"<sup>245</sup>

[260] As we have indicated above, what is relevant is not what AR's sustainable production capacity is today, but what it believes to be its future capacity at the time of setting its andalusite prices at any specific time over the life of mine.

[261] We note that Murgatroyd conceded that it is AR's capacity over the long-run that is important for our analysis. Furthermore, he could not explain why AR was not already pricing up to EPP if it already faced capacity constraints:

*"ADV WILSON: ... the clear evidence that we've heard from Mr Bain is they had been, every day of the year, we know [...], had been trying to [...].*

*MR MURGATROYD: Yes ... So, I suppose the key question or the key determination for the Tribunal is to actually work out, well, what is the actual level of capacity? Even if one accepts Mr Bain's version that he is not [...], which I think is the proposition that you put to him, that he is not [...], he is essentially running his plant [...], the ultimate output of that is still going to be a function of yields and of these other issues around production, you know, [...] and things like that. I guess the key determination for the Tribunal in that respect is to try and understand what is the long-run position going to be? You know, is the yield that's going to be achieved sustainable in the long run and what is the actual level of let's call it efficiency of the plant that is going to be achieved in the long run?"<sup>246</sup> (our emphasis).*

[262] Furthermore, as we have already indicated above, both Imerys and AR are in the process of applying for additional andalusite mining rights and the future yields of their

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<sup>243</sup> Bain Transcript page 678 line 21 to page 679 line 18.

<sup>244</sup> Bain Transcript page 681 line 14 to page 682 line 10.

<sup>245</sup> Bain Transcript page 682 line 11 to page 683 line 9.

<sup>246</sup> Murgatroyd Transcript page 2495 line 19 to page 2497 line 2.

respective additional andalusite reserves - and thus future production capacities - are unknown and unforeseeable. Parte acknowledged the uncertainty associated with (the yields of) reserves for which mining right have not been obtained. With reference to the aforementioned to be acquired additional AR reserves by Imerys, he explained that one cannot drill before you have mining rights: "*We can't even drill if we don't have mining rights. So, that's why there is such a level of uncertainty when you don't have mining rights*"<sup>247</sup> (our emphasis).

[263] In conclusion, we cannot in the long run (over the lengthy life of mine period) assume that - absent the proposed transaction – no additional investments would be made by AR's shareholders to increase its andalusite production capacity. There is no evidentiary basis for such an assumption and it would be wholly inconsistent with AR's track record of increasing its andalusite yields and its production capacity. Bain further confirmed that AR is always in a growth or expanding frame of mind and explained how AR intends to solve its current water and electricity problems that are curtailing production. Bain's evidence was furthermore that by introducing a new investor absent the proposed transaction, AR would address its current gearing issue. This would certainly make further investments in capacity a possibility.

[264] As we have emphasized above - absent the proposed transaction - it is AR's own perceived future andalusite production capacity that will continue to drive AR's pricing decisions. What is also clear from Bain's evidence is that the current production capacity can still significantly be improved with future capacity investment. This would obviously also depend on future yields, which as we have discussed above, are unforeseeable due to pending additional mining rights applications. Given the above, we have no reason to assume that AR will not achieve its own stated strategic objective to grow production towards the [...] mts annual level on a sustainable basis over its lengthy life of mine period.

[265] Considering AR on its own, the above in terms of the counterfactual scenarios postulated in Exhibit 53 means that scenario 2 applies - one party, i.e. AR, is not capacity constrained absent the proposed transaction over the life of mine.

[266] Considering both Imerys' and AR's future capacities, the above conclusions in terms of the counterfactual scenarios postulated in Exhibit 53 mean that scenario 1 applies -

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<sup>247</sup> Parte Transcript page 415, lines 14 to 16.



neither Imerys nor AR is capacity constrained absent the proposed transaction over the life of mine.

[267] We next consider the available evidence regarding the future international demand for andalusite.

*International demand for andalusite*

[268] The second major consideration in assessing the merging parties' alleged alternative counterfactual, is whether the future sustainable spare capacity at both of Imerys' and AR's mines (as discussed above) is likely to be taken up by the future global growth in andalusite demand and, if so, by when (if that can be determined).

[269] From the outset we note that there is no available indicator of the future global demand for specifically andalusite in the record before us. Furthermore, the growth indicators that are before us - that are not specific to andalusite - all predict growth for an extremely limited period of time.

[270] The merging parties have sought to rely on various high-level indicators in order to infer a future growth rate for andalusite, including historical growth figures and forecasts of limited duration for general refractory demand. Based on this, as indicated above, the merging parties' economics expert, Murgatroyd, contended for a growth rate in the global andalusite demand of between 2.5% and 4.5% for the "future". The merging parties contended that this is likely to apply at least until 2020 (the period of the Global Industry Analysis ("GIA") forecast, as discussed below), i.e. for a period of five years from the beginning of 2016.

[271] However, the merging parties submitted no evidence that this would apply to the period beyond 2020 and specifically over the aforementioned lengthy life of mine period. On this basis alone the merging parties' counterfactual argument is inapt since the future international demand for andalusite over the life of mine is not foreseeable. However, for the sake of completeness we discuss the limited evidence presented below.

[272] We next discuss the data / forecasts put up by the merging parties.

[273] The first evidence put up by the merging parties was a "strategic review" document dated 25 January 2013, which contained a forecast for a "mid-term" yearly average

growth for 55-70% alumina-silicates for the period 2015 to 2016 and which predicted a world growth of 1%.<sup>248</sup>

[274] However, the merging parties themselves dismissed this forecast. They submitted that the forecasts relied upon to produce this document expire in 2016 (i.e. prior to the period under consideration). When this document was put to Parte, he rejected it as a “*working document*” that should be considered in the context that it was an “*unfinished ... patchwork of things that I had put together*” but which was “*interrupted*” and was “*a presentation I was working on ... but there was never any official document*”.<sup>249</sup>

[275] The second document put up by the merging parties was a subsequent forecast of 2.4% world growth for the period 2014 to 2018 for alumina-silicates in the range of 55-70% alumina, contained in an Imerys Five-Year Plan dated 28 April 2014<sup>250</sup> and which, according to Parte, excluded penetration.<sup>251</sup> As highlighted, this plan contains a table reflecting the yearly growth of refractory material consumption by region and product segment for a limited period and does not contain any estimated growth rate for andalusite specifically; it forecasts a yearly growth rate of 2.4% for alumina-silicates in the range of 55-70% alumina, into which category andalusite falls.<sup>252</sup>

[276] There are a number of reasons why this figure too is unreliable:

[276.1] First, as indicated above, this 2.4% figure does not represent any forecast for andalusite specifically and there is no way to determine andalusite’s contribution to the forecasted average growth rate of 2.4% for all alumina-silicates in the 55-70% category.

[276.2] Second, the document was prepared as far back as 28 April 2014 and accordingly has not been updated to reflect any market developments since that date.<sup>253</sup> As indicated above, it was common cause that two thirds of andalusite internationally is used in the steel industry and that, accordingly, the international demand for steel is an important (albeit derived) indicator of the

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<sup>248</sup> Trial Bundle pages 955 and 956 (the document commences at page 944).

<sup>249</sup> Parte Transcript pages 220 and 221.

<sup>250</sup> Imerys Five-Year Plan 2014 - 2018, 28 April 2014 (Trial Bundle page 1865). Transcript page 373, lines 6 to 15.

<sup>251</sup> Trial Bundle page 1880 (the document begins at page 1865); Parte Transcript pages 308 and 309.

<sup>252</sup> Trial Bundle page 1880.

<sup>253</sup> Parte Transcript page 309, lines 14 to 17.

demand for andalusite.<sup>254</sup> The international demand for steel has however decreased significantly since the Imerys Five-Year Plan was drafted in April 2014. According to De Hemptinne, relying on publicly available information from the World Steel Association, steel production decreased by 2% year on year from 2014 to 2015, and there is accordingly “*a downward trend globally as far as steel consumption is concerned*”.<sup>255</sup>

[276.3] Third, this plan only purported to calculate a growth rate for a very limited time period, i.e. for the period 2014 to 2018. No attempt was made to calculate a growth rate for any period thereafter and there is no basis to conclude that the 2.4% number would represent the growth rate in any period after 2018, let alone over the life of mine period. This is particularly the case given the volatile nature of the demand drivers for andalusite which, as indicated above, would have a material impact even on the growth forecast for the 2014 to 2018 period itself.

[277] Mncube’s testimony was that one cannot draw any inference from this at all beyond 2018, which he referred to as “*guesswork without information*”<sup>256</sup>; he said “*It does not serve the Tribunal to look in the period after 2018 in the dark ...*”<sup>257</sup>

[278] We agree with Mncube that there is no reliable evidence from this source regarding any period beyond 2018. That would be pure speculation.

[279] We further note that Murgatroyd cautioned against extrapolating forecasts in relation to a period that is nearly completed into forecasts for a subsequent period.<sup>258</sup>

[280] Murgatroyd further acknowledged that “*historical actual figures are a very poor predictor of future performance*”<sup>259</sup> and further stated that historical information is a dangerous basis on which to predict due performance given that it is “*inevitably driven by things that happened in the past*”.<sup>260</sup> This is especially so in this case because (i) the historical sales of andalusite are volatile; and (ii) accordingly, any historical growth

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<sup>254</sup> Trial Bundle page 465; Exhibit 48, Mncube’s Slide 16; Murgatroyd Transcript page 2306, lines 2 to 9.

<sup>255</sup> De Hemptinne Transcript page 1005, lines 12 to 17.

<sup>256</sup> Mncube Transcript page 2694, lines 14 to 21.

<sup>257</sup> Mncube Transcript page 2695, lines 17 to 21.

<sup>258</sup> Murgatroyd Transcript page 2378, lines 3 to 13.

<sup>259</sup> Murgatroyd Transcript page 2554, lines 15 to 19.

<sup>260</sup> Murgatroyd Transcript page 2395, lines 11 to 20.

rates are highly sensitive to the start date chosen for one's analysis.<sup>261</sup> Moreover, in relation to steel production Murgatroyd acknowledged that historical steel production has been very volatile and is accordingly not a good indicator of steel demand in the future.<sup>262</sup>

[281] The danger of relying on historical forecasts, given the volatility in the drivers for andalusite demand, is best illustrated by comparing Imerys' own 2.4% forecast in April 2014 with its forecast of just over a year earlier in January 2013. In the earlier Imerys forecast, the mid-term yearly average growth of 55-70% alumina-silicates was estimated at 1%, i.e. considerably less than half of the forecast made for the same category of alumina-silicates the following year.<sup>263</sup>

[282] Another document in the record to which reference was made is the Roskill report.<sup>264</sup> This report, published in December 2012, stated that "*world production of steel is forecast to grow at a CAGR of 3.1% until 2017*".<sup>265</sup> This forecast has turned out to be highly inaccurate given that global steel demand is in fact now negative. This also illustrates the volatility in the global demand for steel. Furthermore, the Roskill forecast only purports to forecast the period until 2017. Thus, no reliance can be placed on the Roskill report for purposes of estimating the long-term future demand for andalusite.

[283] Parte also referred to an anticipated demand growth rate of 4.6% based on a refractories report that was prepared by GIA in May 2014.<sup>266</sup> The GIA report refers to the "*global market for refractories*" growing at an annual rate of 4.6% over the period 2013 to 2020.<sup>267</sup>

[284] Parte confirmed that the 4.6% figure referred to in paragraph 10 of his witness statement was simply taken from the GIA report. As he explained: "*I was just taking the last independent market report that we had. We did not have any more recent*

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<sup>261</sup> Murgatroyd Transcript page 2395 line 11 to page 2396 line 5; and Transcript page 2399, lines 14 to 16.

<sup>262</sup> Murgatroyd Transcript page 2313, lines 17 to 19.

<sup>263</sup> Imerys Strategic Review, 25 January 2013 (Trial Bundle page 944 at 956).

<sup>264</sup> Roskill, *Bauxite and Alumina: Global Industry Markets and Outlook*, December 2012 (Discovery page 7096).

<sup>265</sup> Roskill, *supra*, page 280 (Discovery page 7405).

<sup>266</sup> Global Industry Analysts Inc, *Refractories: A Global Strategic Business Report*, May 2014 (Trial Bundle page 1942ff). Also see Parte Witness Statement, paragraph 10 (page 6).

<sup>267</sup> GIA Report (Trial Bundle page 1977).

*market reports*".<sup>268</sup> He stated that he thought it was "*easier to have an independent report*".<sup>269</sup>

[285] Again, however, this report suffers from major drawbacks since it was prepared as far back as May 2014 and it relates to refractory demand as a whole (i.e. it is not separated by raw material type or by country of sale) and is accordingly an even less precise indicator of the estimated future demand for andalusite than the abovementioned Imerys Five-Year Plan.

[286] Murgatroyd confirmed that the GIA forecast deals with all non-clay refractories and not specifically andalusite-based refractories.<sup>270</sup> The following exchange is instructive:

*“ADV WILSON: ...are you able to indicate what percentage of whatever that denominator is of non-clay or other refractories is constituted by Andalusite-based refractories?”*

*MR MURGATROYD: No, I'm not able to do that. It's a forecast that's done at a higher level than Andalusite containing refractories*<sup>271</sup> (our emphasis)

and

*“the 4.6 is a very general number and it's a very general number for non-clay refractories, which would include, based on my understanding, Andalusite refractories, but we don't know what percentage of that”<sup>272</sup> (our emphasis).*

[287] Murgatroyd ultimately conceded that there are no forecasts specifically to andalusite-based refractories.<sup>273</sup>

[288] Parte further made reference to the penetration of andalusite in international markets where other materials than andalusite are used. When Parte was asked why he had referred to the abovementioned 4.6% forecast for all refractory products - which is less reliable - rather than the 2.4% figure which was at least specific to 55-70% refractory raw materials (i.e. alumina-silicates in the range of 55-70% alumina), he said that he thought the figure would be higher than 2.4% because the report did not take into

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<sup>268</sup> Parte Transcript page 310, lines 9 to 22.

<sup>269</sup> Parte Transcript page 313, lines 9 to 11.

<sup>270</sup> Murgatroyd Transcript page 2543, lines 13 to 15.

<sup>271</sup> Murgatroyd Transcript page 2546, lines 13 to 17.

<sup>272</sup> Murgatroyd Transcript page 2547, lines 15 to 19.

<sup>273</sup> Murgatroyd Transcript page 2555, lines 2 to 7.

account penetration. On that basis, Parte stated that, “so, in some sense I think the real projected growth would be closer to that 4.6%”.<sup>274</sup>

[289] The Commission’s economics expert, Mncube, testified that, on the limited available evidence, an appropriate global andalusite forecast growth rate range would be a “lower bound” of 1% and an “upper bound” of 2.4%.<sup>275</sup>

[290] It was suggested to Mncube in cross-examination that the 4.6% figure referred to by Parte represents a self-standing quantification by Parte of the future growth for andalusite, including penetration effects. However, that is incorrect. At no point did Parte suggest that the 4.6% figure had been separately estimated by him as an andalusite growth forecast (nor are there any data or calculations to support such an estimate). It is clear from Parte’s witness statement, and also from his oral evidence, that the 4.6% figure came directly from the GIA report. In any event, Parte was in no position to provide a reliable forecast of andalusite demand. As he candidly acknowledged, he has no expertise in the area of forecasting and simply bases his views on “external sources”.<sup>276</sup>

[291] Furthermore, the suggestion that penetration would almost double the projected growth in demand for andalusite is not consistent with the evidence before us concerning penetration.

[292] According to Parte, the main geographic area in which Imerys seeks to achieve penetration is in China. However, no forecasts were provided for the penetration of andalusite in China and steel production in China is in fact currently declining and not growing.

[293] Parte further testified that the andalusite market in China had increased from 15 KT per annum to 46 KT per annum over the period 2005 to 2014.<sup>277</sup> However, a growth of 31 KT over a nine-year period – which, as De Hemptinne noted, is “very marginal” in comparison with other export markets<sup>278</sup> – is not consistent with a penetration effect that would almost double the growth in andalusite demand internationally. De Hemptinne stated “... 15 years of trying to penetrate the market and having those

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<sup>274</sup> Parte Transcript page 313 line 7 to page 314 line 2.

<sup>275</sup> Exhibit 48, Mncube Slide 18.

<sup>276</sup> Parte Transcript page 315, lines 9 to 12.

<sup>277</sup> Parte Witness Statement, paragraph 10 (pages 5 and 6).

<sup>278</sup> De Hemptinne Transcript page 1094 line 20.

*results ... doesn't seem to me to be a success" and went on to say "We don't see this as an evolution at all. As I mentioned, the Chinese customers of refractory producers are generally speaking companies that produce lower grade steel grades for which the performance of andalusite-based refractories isn't really the most important thing for them. They are much more focused on reducing costs and andalusite is a costly material and therefore ... and you know, the fact that we are not able to ... we would also otherwise be a happy producer of andalusite bricks to China and it just doesn't work, because the demand doesn't seem to be there, at least from a Vesuvius point of view."*<sup>279</sup>

[294] Furthermore, as discussed above, Murgatroyd conceded that historical actual figures are a poor indicator of the future demand for andalusite.

[295] Furthermore, even the abovementioned historical increase up to 2014 in the andalusite demand from China clearly cannot be assumed to endure into the future, especially given the significant decline in the growth of steel production in China since 2013 and its negative growth since 2014.

[296] The merging parties' averment regarding high future penetration of andalusite in China is furthermore contradictory to Imerys' recent closure of its Yilong mine in China. Murgatroyd did not produce any evidence to show that andalusite exports from South Africa to China would be cheaper than the andalusite that was produced at Imerys' Yilong mine before its closure. Neither did Imerys put up any evidence regarding a business case and strategies to convince us that there is the likelihood of meaningful andalusite penetration in China - bearing in mind that it would have to replace bauxite which is available at relatively low prices in China and which the merging parties themselves argue is meeting the Chinese customers' technical requirements.

[297] In conclusion, the above illustrates the paucity of evidence that the merging parties have placed before the Tribunal and the volatility of the factors that drive andalusite demand. There are no forecasts relating to the future global growth of specifically andalusite. Furthermore, the high-level forecasts that have been put up by the merging parties relate to a very limited time period. No evidence / forecasts were submitted over the long-term life of mine period.

### **Conclusion on counterfactual**

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<sup>279</sup> De Hemptinne Transcript page 1098 line 8 to page 1099 line 14.

- [298] A counterfactual that both Imerys and AR will become capacity constrained in the future and remain so indefinitely into the future for the life of mine period is not one that is supported by the evidence. As we have stated, even if capacity constraints were to bind both Imerys and AR for some period of time, which we cannot foresee, there is no basis whatsoever to conclude that that would be a permanent position over the life of mine. The factors that affect (the future binding of) capacities are not static and are not foreseeable over the long term. This includes the future global demand for andalusite over the long term, future potential investments to increase capacity over the life of mine period and future yields stemming from andalusite deposits with authorisations as well as pending mining rights applications.
- [299] Put differently, given the lengthy life of mine period absent the proposed transaction and the inherently variable nature of the drivers of andalusite demand over such a lengthy period, as well as the un-foreseeability of future investments by the merging parties to increase capacity over such a lengthy period (read in the context of Bain's evidence), there is no reason to conclude that both Imerys and AR will become and remain capacity constrained over this period.
- [300] Furthermore, pre-merger one has two independent, effective competitors with significant andalusite price differentials. This will change as a result of the proposed acquisition. Moreover, even on the merging parties' own evidence there are currently differentials between the various export andalusite prices achieved and not one single price. Magdol, for example, confirmed that there is a significant price differential between the prices of Imerys and AR. This is so despite the fact that AR is currently selling all the andalusite that it is able to produce. However, a price differential between AR and Imerys is not surprising given that AR is the lower cost producer, as confirmed in a number of Imerys' strategic documents and the fact that AR (according to Bain's evidence) is always forward looking, i.e. looking for new markets and opportunities and always in a growth and expanding frame of mind. AR sets its andalusite prices with this in mind. Thus, unless Imerys and AR are colluding, one would not expect their pricing to be the same absent the proposed transaction.
- [301] On the other hand, Imerys' rationale is clear from its conduct and strategic documents, i.e. to reduce capacity in the andalusite market and increase andalusite prices.



[302] We conclude that the alternative counterfactual contended for by the merging parties has not been established on the evidence before us. The foreseeable appropriate counterfactual for the purposes of analysing the competition effects of this proposed acquisition therefore is a situation where one or both the merging parties' capacity constraints do not bind.

[303] On the latter counterfactual it was common cause that the proposed merger is likely to give rise to unilateral anti-competitive effects. Therefore our finding is that the proposed transaction substantially prevents or lessens competition in the relevant market.

[304] The above finding on the relevant counterfactual fundamentally affects the various sets of remedies proposed by the merging parties in the course of the hearing. We shall discuss remedies below.

[305] We next briefly consider efficiencies before discussing public interest considerations.

### **Alleged efficiencies**

[306] There is no reason for us to deal extensively with the merging parties' alleged efficiencies since it was common cause that any alleged efficiencies would not outweigh the anti-competitive effects of the proposed merger and accordingly that the proposed merger should not be approved on efficiency grounds. Murgatroyd agreed with Mncube that, in the event that the merger is likely to result in unilateral effects, it is unlikely that such adverse effects would be mitigated by merger-specific efficiencies.<sup>280</sup>

[307] We note that a merger such as this to monopoly or near monopoly is highly unlikely to ever be justified purely on efficiency grounds. The *USA Horizontal Merger Guidelines* reflect in this regard: "*In the Agencies' experience, efficiencies are most likely to make a difference in merger analysis when the likely adverse competitive effects, absent the efficiencies, are not great. Efficiencies almost never justify a merger to monopoly or near-monopoly*"<sup>281</sup> (our emphasis).

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<sup>280</sup> Economic Experts' Issues of Disagreement (email to the Tribunal dated 30 September 2015).

<sup>281</sup> *Horizontal Merger Guidelines* issued on 19 August 2010 by the U.S. Department of Justice and the Federal Trade Commission, paragraph 10, page 31.

[308] Moreover, in this case the alleged efficiencies are limited in nature and value and have not been adequately substantiated by the merging parties. Furthermore, there is no evidence that the alleged efficiencies are likely to be passed on to customers.

### **Public interest**

[309] The merging parties argued that the Commission's identified public interest concerns (as discussed below) are addressed by their tendered behavioural remedies. The merging parties specifically referred to Magdol and other small customers and argued that they will be guaranteed both their current price (i.e. the allegedly lower AR price) and their current volumes until the occurrence of the counterfactual and will thereafter be in no different position to any other customers, whose prices will be capped.

[310] We have dealt with the counterfactual above and will explain the limitations of and concerns with the tendered remedies below.

[311] From a volume perspective the merging parties argued that the volume guarantees provided for in their tendered remedies package should be regarded as "positive" public interest aspects of the merger, given that absent the merger customers would (assuming that the merging parties' counterfactual is correct) have no supply contracts and have to compete for volumes with export customers.<sup>282</sup> They stated that under the merger with conditions, andalusite will remain available to local refractorists and there is no reason to think that there will be any diminution in their ability to serve downstream customers. Again, we have dealt with the counterfactual above and concluded that there is no basis for the merging parties' alleged counterfactual.

[312] From a pricing perspective, the merging parties alleged that the tendered Producer Price Index ("PPI") pricing remedy is also a benefit of the merger. This they said is because prices under the conditions are likely to remain lower than they would otherwise have been absent the merger. They argued that Mncube was not able to dispute that the merging parties would ordinarily be expected to pass the full extent of any cost increments on to customers, whereas the PPI measure is likely to under-index many of the costs faced by the merging parties.<sup>283</sup> We however point out below that the merging parties in the finally tendered behavioural remedies insisted on a "hardship clause" as part of the remedy package. This means that price increases will not in fact

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<sup>282</sup> Murgatroyd Transcript page 2246, lines 8 to 11.

<sup>283</sup> Mncube Transcript pages 2984 to 2989; Exhibit 83.

be capped at PPI as alleged but at the merged entity's "exact" costs, as determined on a three year cycle.

[313] The Commission, on the other hand, argued that the proposed merger is likely to give rise to significant public interest effects on the users of andalusite / refractorists in South Africa and their downstream domestic customers. In particular, it argued that as a result of the proposed merger, a lower quantity of andalusite will be available to users in South Africa and at higher prices. The Commission said that this is a function not only of the loss of competition between Imerys and AR post-merger, but also of the very rationale for the proposed merger as advanced by the merging parties (as discussed above).

[314] Mncube emphasized the Commission's public interest concern from "*the ability of small business to become competitive*" perspective and referred specifically to small refractorist businesses such as Magdol.<sup>284</sup> He pointed out that Magdol pays lower prices to AR than to Imerys.<sup>285</sup> Mncube testified: "*there's one thing that stands out for me and it relates to the ability of small businesses to become competitive. I think the merger will, on a public interest grounds will significantly affect the ability of small businesses to become competitive. This is because the merger removes Andalusite Resources and Andalusite Resources before the merger was a competitive constraint to Imerys. If this constraint is removed I would expect that the ability of small businesses to become competitive is going to be significantly constrained. This comes from the testimony to Ms Du Preez ...*"<sup>286</sup> We shall below deal with Du Preez's testimony.

[315] As we have explained under the discussion of the rationale for the proposed transaction, if we assume that the merging parties' claimed rationale for the proposed transaction - i.e. to increase exports of andalusite from South Africa to higher-paying export destinations - is correct, then on the merging parties' own version, the proposed merger will result in more local andalusite supplies being diverted to export markets – we note that this must be read together with the merging parties' argument that both Imerys and AR will imminently become capacity constrained. This will necessarily result in less andalusite being available for South African andalusite customers (as

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<sup>284</sup> Mncube Transcript page 2967, lines 19 to 23.

<sup>285</sup> Mncube Transcript page 2968 line 4 to page 2970 line 14.

<sup>286</sup> Mncube Transcript page 2718 line 22 to page 2720 line 18.

occurred when there was a global shortage of andalusite in 2008).<sup>287</sup> In that event, local customers will be forced to accept a “short” domestic market for andalusite.

[316] We next discuss the users of andalusite and downstream customers’ view of the effects of the proposed transaction on the andalusite value chain.

[317] Msibi of Scaw explained the effect on Scaw should andalusite not be available in South Africa. He said such a situation would have a significant detrimental impact on Scaw’s commitments in terms of long-term contracts insofar as local content in production is concerned. With reference to the terms of a contract with a specific customer he indicated that if that contract were to be revoked, because it cannot comply with the local content provisions, it will basically mean “*the end of business for the [Scaw’s] wheel plant.*”<sup>288</sup>

[318] Du Preez of Magdol, from a small business perspective, testified that Magdol needs to produce refractories with the most cost-effective raw materials in order to remain competitive with larger refractory producers and stressed that AR has lower andalusite prices than Imerys. Her testimony was: “*As a small company, we have to be very price competitive and it’s not always easy. So we have to try and be as price competitive as we can. So we have to purchase from people with more cost-effective materials and I find Imerys or the Samrec materials to be quite significantly more expensive than what the Andalusite Resources materials are*”<sup>289</sup> (our emphasis).

[319] Although the merging parties’ economics expert suggested that Magdol was already charged a price by AR within a range of EPP prices, her evidence was very clear that she (nevertheless) receives a significantly lower andalusite price from AR than from Imerys.<sup>290</sup>

[320] Du Preez further explained why a small business like Magdol cannot redevelop new products, that imported materials would not be suitable from a quality perspective and that any downtime would have significant cost implications for the business: “*[s]eeing that we are a small company and we are not ... we don’t have a lot of people on site doing mostly the quality and the development, I’m the person responsible for development, but I’m also responsible for a lot of other daily happenings and things in the company, the responsibilities, this will tie me down for a lot of time and I wouldn’t*

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<sup>287</sup> Parte Witness Statement, paragraph 20 (page 8).

<sup>288</sup> Msibi Transcript page 1753 line 3 to page 1755 line 13.

<sup>289</sup> Du Preez Transcript page 1603, lines 12 to 17.

<sup>290</sup> See also Mncube Transcript page 2970, lines 1 to 11.

*be able to really operate the running daily business of the company. I don't have the manpower to actually re-develop and all that.*

*The second thing is if I have to use materials that are not really 100% suitable, it will compromise the quality of my products, like if I have to ... I've explained already why chamotte isn't always feasible and why bauxite isn't feasible.*

*Then the third one is cost. Our costs, if we have to have down time and stand still and not produce anything and supply our clients, we are going to lose our clients first of all, because they are not in the habit of wanting to wait. If they place an order, they've got furnaces that are operating that need materials to prevent burn-throughs and things like that. So, it will be very expensive for us to lose business and it will be expensive if we have to stand still and not operate or anything. We unfortunately are ... we have to rely on daily sales to make ends meet. We can't stand still for days and weeks and months to not operate.”<sup>291</sup>*

[321] Terblanche of ArcelorMittal emphasised the importance of the technology and efficiency advantages associated with having two players competing in the andalusite market: *“The question was, I should not be worried because I've got a 10 year agreement with my larger supplier. That's not what I mean. My strategy is I want multiple suppliers. I am not in favour of a monopolistic or a one supplier. My strategy is to say I have two suppliers and I want on every product two suppliers performing at the peak, making sure they stay ahead of technology, make sure they drive the efficiencies, they drive the costs in line with me. I have [to] compete with Chinese guys. I have to cut my costs ...”<sup>292</sup> (our emphasis).*

[322] Terblanche further explained that ArcelorMittal's concerns with the proposed merger are broader than just a price consideration. He said that a supply contract remedy as tendered, will not address his broader concerns from an industry and specifically from a technical development perspective: *“No, because the question is that is where we were and today we are already talking 10 years and from the beginning my statement and my discussion with the Commission was I have a concern for the South African industry and the South African socioeconomic situation. For me that is the ground of why we decided to submit a statement. It was not only about 5 or 10 years. 10 years is not my problem. I'm on pension then, but it's incorrect for me to work on a strategic plan and say don't worry after years, because it's not my problem. This is a problem”*

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<sup>291</sup> Du Preez Transcript page 1611 line 4 to page 1612 line 14.

<sup>292</sup> Terblanche Transcript page 1711, lines 10 to 19.

*for the South African industry, for South African job creation, for technical development in refractory manufacturers. Mr Ronn Parry is one of two left with any experience. There is no new entrant and if you exclude and eliminate the opportunity to develop technically your own methodologies and philosophies, it's got a major impact on the future of both the industry, the manufacturers and us as the end-consumer, because there's very few people in the market who can technically have a challenging discussion with a supplier about these sorts of things. Even I'm not a mineralogist. So, when I enter into a deep detailed discussion like involving this, I make sure that one of the parties can answer the questions that I have and I don't know the detail about. For example, what's the shrinking aspects in terms of firing? What do you have to be aware of? What is the issue if you start blending raw materials and start doing other things, hot MOR and cement additions, because that is contradictory in terms of what you are trying to achieve. It's a no-no issue to add lime to alumina. That's dangerous, but yet the cement is there. So, that knowledge, that experience, that research in my opinion is fundamental if you have access to a product like Andalusite that is very versatile, actually a refractory product of a much higher capability than that it's been given credit for, even in South Africa"<sup>293</sup> (our emphasis).*

- [323] Terblanche further explained that historically, given the local availability of andalusite, the local refractorists have been driving the technical development of specifically andalusite-based products. He said that there is the danger that this focus to utilise, develop and improve andalusite-based products would be lost post-merger. He explained: "As I say, if you look at historically, the situation with the refractory manufacturing or suppliers in South Africa, the local manufacturers develop products based on what is available. So chamotte and Andalusite is available, so a lot of development, technically development work went into that and most of the guys that's been in this industry as long as I do, is still around and we see them coming through here as well. If you look at European and American development, the raw material and South America, the raw material is bauxite. So the development work is around bauxite and developing and improving that as first intent. The realities over the past 3 to 5 years, many of the ... or a lot of combining of suppliers occurred. So you find like Calderys now is an international company, the same for Vesuvius and because of either requirements and branding requirements, they are channelled to fall within the global branding recipes, things like that. So very few of the local manufacturers with international independent companies are allowed to continue this development. They

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<sup>293</sup> Terblanche Transcript page 1704 line 1 to page 1707 line 12.

rather tend to copy the development and the datasheet and the product mix sheets and just manufacture it locally. So the whole focus to utilise and develop and improve the Andalusite and extend that market, sort of is falling by the waist side, because it's financially, time wise, strategy wise, better than to import the raw material mix and just manufacture it as such<sup>294</sup> (our emphasis).

[324] From a South African industry development and downstream beneficiation perspective of our locally available andalusite Terblanche stated: “*We want somebody to invest to research to improve the product, quality of Andalusite and the performance to say I don't need to import or buy a bauxite product. I'll take Andalusite, upgrade it and it will out-perform any bauxite product for South African conditions.*”<sup>295</sup>

[325] Terblanche again confirmed his view that the local industry will suffer as a result of the proposed transaction: “*The industry and the end-users will be at a disadvantage and I think some of the smaller guys will have to move out of the market.*”<sup>296</sup>

[326] Terblanche also explained why andalusite is of critical import in ArcelorMittal's applications and overall manufacturing processes. In this context he specifically referred to the proper functioning of Arcelor Mittal's torpedo car that, according to Terblanche, is completely reliant on Andalusite: “*Both Vanderbijlpark and Newcastle is what is called integrated steel works. It means it's got a coke oven sinter blast furnace configuration as a primary manufacturing facility and due to historic reasons the distance between the iron making and the steel making route is typically in the order of 1 to 3 kilometres. It's a long distance and a torpedo car is used to transport hot metal from the blast furnace to steel making. So, if there is a failure in that line, the risk is you can stop a blast furnace unplanned and that can be catastrophic for a blast furnace operation*”<sup>297</sup> (our emphasis).

[327] Given that this is a “two to one” merger and the anti-competitive effects of that, as discussed above, it is clear that the proposed acquisition will deprive the users of andalusite and andalusite-based refractories in South Africa of the unique functional and price benefits of a scarce natural domestic resource that has historically benefited them in the respective local and international markets in which they compete. Furthermore, South African users will also post-merger be deprived of the non-price benefits of innovation, quality, service levels, customer assistance and the like that

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<sup>294</sup> Terblanche Transcript page 1664 line 8 to page 1665 line 8.

<sup>295</sup> Terblanche Transcript page 1711, lines 1 to 5.

<sup>296</sup> Terblanche Transcript page 1712, lines 10 to 12.

<sup>297</sup> Terblanche Transcript page 1652, lines 8 to 22.

they have historically enjoyed as a result of effective competition between the merging parties, as is clear from their own strategic documents (as discussed at length above). Thus this is not simply a matter of the merging parties' ability to compete in the various andalusite export markets, as advanced by the merging parties, but also a matter of the ability of refractorists in South Africa and their customers, including South African steel producers, to compete in the various (local and international) markets in which they are active. We have locally available andalusite from two suppliers, one of which is not vertically integrated (i.e. AR), that are effectively competing on price and non-price elements of competition, which gives refractorists the ability and incentive to invest in the technical development of specifically andalusite-based products with obvious benefits for their downstream customers such as steel producers in South Africa.

[328] Moreover, the anti-competitive price and non-price effects of the merger are likely to impact particularly small businesses such as Magdol in the andalusite supply chain. As we point out below, the smaller firms in the andalusite value chain do not have the bargaining power of large competitors such as Vesuvius.

[329] Given the above, we conclude that the proposed merger will have a significant adverse impact on the entire andalusite supply chain in South Africa, and particularly on smaller firms that lack the capacity, resources and bargaining power of their larger competitors to respond to the anti-competitive price and non-price effects of the proposed merger.

### **Tendered remedies**

[330] In order to address the anti-competitive effects of the proposed merger, the merging parties proposed numerous sets of behavioural (supply) conditions. The remedies that they offered kept altering as the hearing of the matter progressed and they ultimately, after closing arguments, submitted a hybrid set of behavioural remedies.

[331] The merging parties were of the view that their proposed behavioural remedies have been narrowly tailored to address any anti-competitive effects of the merger. Furthermore, they alleged that the remedies have been carefully constructed so as to minimise the danger of circumvention and that the costs of their enforcement will be borne primarily by the merging parties. In addition, they argued that the remedies are to some extent self-enforcing as it is the customers themselves who will be able to verify that they are receiving the required pricing, on the basis of the independent audits paid for by the merging parties.



[332] The various sets of tendered behavioural conditions were premised on the abovementioned theoretical economic framework for the relevant counterfactual. However, given our conclusion on the relevant counterfactual, we do not have to deal in detail with all the various adaptations of remedies put forward by the merging parties during the proceedings.

[333] The Commission disagreed that any of the merging parties' remedy proposals addressed the competition and public interest concerns stemming from the proposed transaction and furthermore raised several other concerns regarding the proposed remedies, as discussed below.

### **Background**

[334] We note that Imerys concluded a [...] supply agreement with VSA which is contingent upon the approval of the proposed merger. Imerys approached VSA to negotiate this agreement in early [...] and that agreement was eventually concluded on [...] (i.e. after the Commission had prohibited the proposed merger and the merging parties had filed a Request for Consideration before the Tribunal). The agreement is effective for an initial period of [...] years after the closing of the proposed transaction and is renewable for [...] further periods of [...] years each (i.e. a total of [...] years) subject to agreement on price adjustments.<sup>298</sup>

[335] VSA had initially proposed that the duration of the supply agreement should be [...] years; however Imerys was unwilling to agree to this duration and the parties eventually settled on a lesser duration of [...] years as a commercial compromise.<sup>299</sup> De Hemptinne stated that "*there was no magic number*" and VSA "*made the concession and we accepted [...] years*".<sup>300</sup>

[336] De Hemptinne said that VSA has significant concerns regarding the anti-competitive effects of the proposed merger<sup>301</sup> [...].<sup>302</sup>

[337] Imerys also tendered a range of supply agreements with the merging parties' other [...] customers in South Africa. However, none of these tenders [...].

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<sup>298</sup> See clauses 2 and 3 of the agreement (Trial Bundle pages 3359 to 3361).

<sup>299</sup> Exhibit 26: De Hemptinne Witness Statement, paragraph 7; De Hemptinne Transcript page 1029 line 8 to page 1030 line 21.

<sup>300</sup> De Hemptinne Transcript page 1030, lines 14 to 21.

<sup>301</sup> VSA submission dated 05 February 2015, paragraph 4.1 (Trial Bundle page 2926) and 5.2 (Trial Bundle page 2929); De Hemptinne Transcript page 1014 line 1 to page 1018 line 13.

<sup>302</sup> De Hemptinne Transcript page 1025, lines 10 to 19.

[338] We stress that the [...] South African andalusite customers are not in the same position as Vesuvius since they lack the global bargaining power and volumes of the Vesuvius group. De Hemptinne classified Vesuvius as “[...]” of andalusite.<sup>303</sup> The fact that Vesuvius is in a different position to other customers in South Africa is evident from [...] the abovementioned negotiated supply agreement.

***Succession of behavioural remedies tendered***

[339] As regards other customers than [...], the merging parties initially tendered a five-year supply agreement in the Tribunal proceedings. The Commission canvassed this tendered five-year supply agreement with customers and found it unacceptable because it offered no protection to customers after the expiry of the five-year period in circumstances where the unilateral effects of the proposed transaction would be structural and permanent. Indeed customers testified as such before us.<sup>304</sup>

[340] The succession of tendered remedy packages can be seen in *inter alia* Exhibit 61, Exhibit 70, Exhibit 84 and finally, after closing arguments, a letter received from ENS dated 05 August 2016.

[341] We note that the merging parties proposed two alternative two-part packages of conditions, depending on the various potential counterfactual scenarios as described in Exhibit 53.

[342] The first remedy package (“Remedy Package 1”)<sup>305</sup> was proposed in the event that the Tribunal found that the likely counterfactual scenario is scenario 3<sup>306</sup> as described in Exhibit 53. Given our conclusion on the relevant counterfactual, rejecting scenario 3, we do not consider Remedy Package 1 any further in these Reasons.

[343] Remedy Package 2<sup>307</sup> was tendered in the event that the Tribunal found that the likely counterfactual scenario is that at least one of the merging parties will have spare andalusite production capacity (i.e. counterfactual scenario 1 or 2 applies). Remedy Package 2 consisted of two parts:

- (i) Part A deals with the period before capacity constraints are likely to bind (based on the merging parties’ counterfactual arguments). The merging parties

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<sup>303</sup> De Hemptinne Transcript page 1062 line 9.

<sup>304</sup> See, for example, Du Preez Transcript page 1630 line 9 to page 1631 line 17.

<sup>305</sup> The specific details are set out in *inter alia* Exhibit 84.

<sup>306</sup> Scenario 3 was the counterfactual that both Imerys and AR would be capacity constrained absent the proposed merger.

<sup>307</sup> See Exhibit 61 (ENS letter dated 24 March 2016); Exhibit 70 (ENS letter dated 16 June 2016) and Exhibit 84 (submitted by the merging parties on 24 June 2016).

suggested that during this period, i.e. a period of 5 years, price increases for South African andalusite customers would be capped at PPI whilst guaranteeing current volumes to andalusite customers in South Africa for the five-year period; and

- (ii) Part B deals with the period after capacity constraints are likely to bind (again based on the merging parties' counterfactual arguments). Part B of the proposed conditions suggested that prices should be capped at a weighted average EPP with no volume guarantee to South African customers.

[344] The premise of the abovementioned period was that, absent the proposed merger, both Imerys and AR will become capacity constrained and raise their prices to EPP levels within the five-year period. Murgatroyd however conceded that if this premise is incorrect, and that the merging parties would only be able to increase their domestic prices to EPP levels after the five-year period (if at all), this remedy would not address the anti-competitive effects of the proposed merger.<sup>308</sup>

[345] Subsequently, in an attempt to address the scenario where the Tribunal found that both parties are likely to become capacity constrained in a particular year after the period covered by the five-year supply agreement, the merging parties tendered to extend the terms of that agreement up until that particular year.

[346] As we have explained above, the assumption that the Tribunal could determine the precise time(s) at which capacity constraints may bind both parties over the long term, is not a tenable situation. This requires a precision of foresight regarding demand and capacity in the andalusite market which is simply unattainable on the limited evidence on the counterfactual before us. For the reasons discussed above, we cannot on the limited evidence before us conclude that both merging parties will be capacity constrained at all in future over the life of mine period, let alone in specific years in the future. The evidence before us simply does not enable us to make a likely prediction of this kind of specificity. As discussed above, this is precisely the kind of "*finely balanced judgment about what is and what is not the counterfactual*" that the UK Merger Assessment Guidelines suggest that a competition regulator should not be called upon to make.<sup>309</sup>

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<sup>308</sup> Exhibit 53.

<sup>309</sup> *Merger Assessment Guidelines* of the UK Office of Fair Trading and Competition Commission, paragraph 4.3.6, page 22.

[347] The merging parties then, in an attempt to address the scenario where the Tribunal found that the joint capacity constraints of the merging parties are unlikely ever to bind, proposed an indefinite PPI-based supply agreement although, significantly, initially without any volume guarantees for South African andalusite customers.

[348] Given *inter alia* the shortcomings identified by the Commission in the various sets of remedies put up by the merging parties during the proceedings and to assist both parties, the Tribunal during the hearing raised certain general principles that any potential supply-type behavioural remedy in the andalusite market should at the very minimum address. This included a PPI-type price cap, volume guarantees to local customers, including provision for the future growth of local customers, as well as quality guarantees.

### ***Final remedies package tendered***

[349] In reaction to the above, on 05 August 2016, after conclusion of the hearing, the merging parties submitted a further and final set of proposed behavioural remedies, which was a hybrid of the previous remedy proposals.

[350] The merging parties' amendments to the previously tendered remedies concerned the following:

- (i) A price increase limitation based on PPI as opposed to a weighted average of EPP;
- (ii) an extension of the andalusite volume guarantee to South African customers - but still subject to a cap; and
- (iii) a provision which allows for - some but limited - growth in the andalusite consumption of South African producers and in proportion with any growth in the merging parties' combined sales volumes.

[351] We next summarise the final set of tendered behavioural conditions, again split into two periods under Part 1 and Part 2.

[352] **Part 1** would apply for a period of eight years commencing 01 January 2016. Part 1 contains *inter alia* the following:

- a. From a volume and price perspective, the merged entity will continue to offer to supply all Existing Non-Related Domestic Customers ("existing customers")<sup>310</sup> of

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<sup>310</sup> "Existing Domestic Customer" means a Domestic Customer (or affiliate of such customer) that has purchased andalusite from either AR or Imerys in the last three years. "Domestic Customer" means a

both AR and Imerys with annual volumes which are at least equal to the annual average purchased by the customer in question over the last three years, i.e. 2013, 2014 and 2015, at the initial prices already agreed with each customer for 2016;

- b. From a future price perspective, price increases will be reviewed annually, however, prices may not be increased by more than a level equal to PPI for the previous year - however, also see hardship clause below;
- c. From a volume growth perspective, to the extent that an existing customer wishes, in a given year, to purchase volumes in excess of its annual average volumes purchased over the last three years, provision will be made for such customer to purchase additional volumes of **up to 5%** on the above terms;
- d. From a new customer perspective, to the extent that a New Domestic Customer<sup>311</sup> ("new customer") wishes to purchase volumes, volumes will be made available to such new customer on terms and conditions which do not discriminate against such customer when compared to other customers. However, a 14%<sup>312</sup> volume cap is placed on this in that the merged entity will not be required to sell volumes to such new customer on such terms if they would cause the proportion of sales made to customers to **exceed 14%**,<sup>313</sup>
- e. From an arbitrage perspective, the conditions further stipulate that all customers must consume the purchased andalusite in their local operations only, and may not on-sell such volumes to any third party, inside or outside South Africa.

[353] **Part 2** would apply upon expiration of the eight year period defined in Part 1 and for so long as the merged entity is in control of the South African mines and its reserves are not depleted. Part 2 contains *inter alia* the following:

- a. From a volume perspective, including growth of customers' demand (see paragraph 352c above) this will be capped as follows: the merged entity commits

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customer that is domiciled in the Republic of South Africa and which purchases andalusite for operations it carries out in the Republic of South Africa with the exception of Vesuvius.

<sup>311</sup> "New Domestic Customer" means a Domestic Customer (or related party of such customer) that has not purchased andalusite products from either AR or Imerys in the last three years.

<sup>312</sup> The merging parties initially proposed that 18% of their combined andalusite sales be reserved for South African customers. They however later submitted that when excluding Calderys and Vesuvius South Africa as well as coarse grade products, the percentage of the merging parties' combined andalusite sales volumes for the period January 2014 to October 2015 that went to domestic customers equals 11%. This means that an additional 3% share of sales volumes per annum is reserved for the domestic market in total. We note however that this 14% cap will include any sales made to new customers.

<sup>313</sup> Excluding sales to Calderys and Vesuvius South Africa from the numerator, and excluding coarse grade products from both the numerator and the denominator.

in a given year to offer to supply to customers, including any new customer, an aggregate volume of fine- and medium-grade andalusite equivalent to a **minimum of 14%** of the previous year's total production of fine- and medium-grade andalusite from its South African assets. This will be made available to the said customers on a first-come, first-served basis **up to the level of 14%**, for their own consumption, and will be subject to the price increase cap set out above.

- b. The same non-arbitrage provisions as above will apply.
- c. New customers will be supplied on similar non-discriminatory terms as above. Again a volume cap will apply in that the merged entity will not be required to sell volumes to such new customer on such terms if they would cause the proportion<sup>314</sup> of sales made to customers **to exceed 14%**.

[354] We note that the merging parties now, for the first time, insisted on a "*hardship clause*". This *hardship clause* states: "*At the end of year 3, if the actual costs of production of the Merged Entity have increased at a higher percentage rate than the PPI during the first 3 years, then the Merged Entity may request upon providing to the Competition Commission evidence in the form of an independent expert report, an adjustment of the price increase applicable to Non-Related Domestic Customers so that the price applicable at the beginning of year 4 could exactly reflect the percentage increase of the costs of production incurred by the Merged Entity during the first 3 years. The same mechanism is to be replicated every 3 years" (our emphasis).*

[355] The proposed conditions also allow the merged entity or the Commission to, at any time after the merger, approach the Tribunal for a reconsideration of the conditions and the Tribunal may, on good cause shown, lift, revise or amend any conditions imposed.<sup>315</sup>

### ***Commission's response to final remedies tendered***

[356] The Commission objected in the first instance to the proposed behavioural remedies on the basis that it would turn the competition authorities, insofar as they are required to monitor and enforce the remedies over an extended and indefinite period of time, into a price-regulator in the mining and sale of andalusite in South Africa.

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<sup>314</sup> Excluding sales to Calderys and Vesuvius South Africa from the numerator and excluding coarse grade products from both the numerator and the denominator.

<sup>315</sup> See paragraph 7 of the proposed remedies.

[357] The Commission further submitted that the merging parties' proposed behavioral remedies are inappropriate both in principle, since they do not sufficiently address the identified anti-competitive concerns arising from the proposed transaction and that they furthermore are inappropriate from a practical perspective.

[358] The Commission reiterated that the proposed transaction results in a monopoly and a permanent change to the structure of the andalusite market in South Africa. It stated that AR currently acts as a constraint on the prices paid for andalusite products in South Africa. In such circumstances, the Commission argued that structural remedies may have been appropriate but not behavioural remedies because:

- (i) structural remedies are likely to deal with a substantial lessening of competition and its resulting adverse effects directly and comprehensively at the source and restore rivalry in the relevant market;
- (ii) behavioural remedies may not be effective and may create significant costly distortions in market outcomes; and
- (iii) structural remedies (unlike behavioural remedies) do not normally require monitoring and enforcement once implemented, whereas behavioural remedies are generally subject to higher risks than structural remedies and are therefore less likely to be effective.

[359] In relation to the monitoring and enforcement of the proposed behavioural remedies, the Commission submitted that the remedies would require an ongoing and intensive monitoring and enforcement process to maintain the remedy and to address the risk that the remedy could be circumvented.

[360] Furthermore, from a compliance and effectiveness perspective, the Commission raised specification risk concerns. It said that it is unclear how it will be able to monitor and enforce certain aspects of the proposed conditions – for example, how will the Commission determine whether reserves have been depleted and which customers approached the merged entity first?

[361] Mncube noted that “... *to monitor in perpetuity, in my view, it's problematic ...*” and “*So the point I was raising at least to the tribunal, challenges around circumvention and all of the other things and whether that monitoring would be effective*”.<sup>316</sup> He later said that a price cap, specifically one that exists in perpetuity, may be circumvented in a number

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<sup>316</sup> Mncube Transcript page 2996 line 20 to page 2997 line 12.

of ways, including degrading quality of products and he questioned how one would deal with future uncertainties such as new mines that may be developed by one or more of the merging parties in the future.<sup>317</sup>

[362] The Commission further commented that it was unclear what the basis is for reserving only an additional 3% share of the sales volume per annum for domestic customers (see footnote 312). The Commission also noted that the restricted volume guarantees put up by the merging parties do not address the South African andalusite customers' concerns that this method of calculation may result in an inaccurate reflection of the actual volumes required.

[363] Also, the Commission noted that the proposed remedies do not consider the consequences of a breach, which may have grave consequences for South African customers.

[364] The Commission ultimately submitted that the only manner in which the significant anti-competitive and public interest consequences of the proposed merger can be addressed, is by prohibiting the merger. The Commission argued that a prohibition would prevent the likely substantial lessening of competition and would therefore be a comprehensive solution with no risks as to its effectiveness.

### **Assessment**

[365] Merger conditions can be divided into two groups; (i) structural remedies i.e. obliging the merged entity to divest part of its assets (which the Commission said may have been appropriate); and (ii) behavioural remedies, i.e. forcing the merging parties to behave in a certain way, for example price caps and other supply commitments and the like. As indicated above, the conditions proposed by the merging parties are all behavioural in nature.

[366] Behavioural remedies, unlike structural remedies, because of their very nature are associated with many risks and concerns and therefore competition authorities only impose behavioural remedies in specific circumstances when the risks associated with these types of remedies are limited and when it can be easily and effectively monitored and enforced, as explained below.

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<sup>317</sup> Mncube Transcript page 3017, lines 9 to 20.



- [367] The *Merger Remedies Guidelines* of the UK Competition Commission describe the difficulties associated with the type of behavioural remedies as proposed by the merging parties in this matter. These Guidelines, for example, at paragraph 2.11 state: “*Particular types of behavioural remedy such as price caps, supply commitments and service level undertakings control or restrict the outcomes of business processes. These aim to control the adverse effects expected from a merger rather than addressing the source of the SLC. This type of remedy may not only be complex to implement and monitor but may also create significant market distortions*”<sup>318</sup> (our emphasis). The same Guidelines again state that these types of behavioural remedies “*...seek to restrict the adverse effects of an SLC rather than address the SLC itself*”.<sup>319</sup>
- [368] One primary difference between structural and behavioural remedies and the reason for preferring the former over the latter, lies in the fact that behavioural remedies require “*constant monitoring by the competition authorities or, expressed otherwise, ongoing regulatory intervention in the affairs of the merged entity*”.<sup>320</sup>
- [369] However, whether or not behavioural conditions are appropriate and address the competition concerns and public interest concerns, if any, must be assessed on a case-by-case basis considering all relevant factors including the characteristics of the market and products concerned, the type of market structure that will result post-merger, the elements of rivalry in the market, including both price and non-price elements, the nature and scope of public interest concerns (if any), the types of conditions tendered and their complexity, as well as the duration of the tendered conditions.
- [370] In *Media24 Limited / The Natal Witness*, the Tribunal stated “*Although as a general principle the Tribunal and other competition agencies prefer structural to behavioural remedies, for various reasons as advanced inter alia in Pioneer/Pannar, the evaluation of an appropriate remedy must be done on a case-by-case basis by considering such remedy within the wider context of the characteristics and dynamics of the relevant markets in question and the specific competition and/or public interest concerns that such remedy is intended to address*”<sup>321</sup> (our emphasis).

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<sup>318</sup> *Merger Remedies: Competition Commission Guidelines*, November 2008, page 14.

<sup>319</sup> *Idem*, paragraph 4.8, page 27.

<sup>320</sup> *JD Group Ltd / Ellerine Holdings Ltd* [1999–2000] CPLR 53 (CT), paragraph 4.8 at page 81.

<sup>321</sup> *Media24 Limited and another / The Natal Witness Printing and Publishing Company (Pty) Ltd* [2012] 2 CPLR 462 (CT) at paragraph 178.

- [371] It is clear that the merging parties' proposed remedies are complex in nature and would apply for an extremely long time period given the life of mine of AR and Imerys. It is also clear from the competition analysis that any potential remedy would have to address elements of both price and non-price competition. Such a remedy would not only be difficult to effectively monitor and enforce, but may also create significant market distortions. The UK Guidelines warns: "*This class of remedy directly overrides market signals with the result that it may generate substantial distortion risks over time that increase the effective cost of the remedy or reduce its effectiveness. For example, a price cap may deter entry or a supply commitment may discourage product innovation.*"<sup>322</sup>
- [372] A fundamental shortcoming of the merging parties' proposed remedies is that they do not address the non-price elements of competition that would be permanently lost as a result of the proposed merger. This would, even if such conditions could be crafted, be extremely difficult to monitor over the life of mine. As concluded above, non-price competition is an important feature of the andalusite market, and includes not only innovation in the form of new products and applications, but also product quality, service levels, customer assistance and the like. It is not evident how the tendered remedy would address the loss of non-price competition as a result of the proposed merger and how the Commission could ever monitor and enforce this. Again the UK Guidelines stipulate: "*Monitoring and enforcement [of behavioural conditions] may be costly and intrusive and may lack effective-ness, especially where the form of remedy is complex.*"<sup>323</sup>
- [373] Furthermore, since any potential remedy package would have to address both price and non-price elements of competition, which adds to its complexity, specification risk becomes a real concern. The UK Guidelines specifically caution against the specification risk associated with behavioural remedies. In other words, the remedies need to specify in significant detail the products or services that are subject to control and the basis of the control. The remedy will generally also need to specify how the control will deal with (unforeseen) market changes, such as the development and introduction of new products or in this case new mining rights being obtained and new mines being established.<sup>324</sup> The Guidelines state "*The control may be vulnerable to circumvention risks despite the addition of complex preventative provisions. For*

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<sup>322</sup> *Merger Remedies: Competition Commission Guidelines*, November 2008, paragraph 4.30(b), page 31.

<sup>323</sup> Paragraph 4.30 (d), page 31.

<sup>324</sup> *Idem*, paragraph 4.29, page 31.

*example, a price cap may be circumvented by a firm reducing the quality of controlled products or restricting the supply of controlled products”.*<sup>325</sup>

[374] The period over which the behavioural conditions will apply and have to be monitored and enforced by the competition authorities, is an important consideration in deciding the appropriateness of behavioural remedies. In this case the tendered remedies will apply in perpetuity and we have seen from the above discussion of the life of mine that this could be as long as [...] years. The UK *Merger Remedies Guidelines* in this regard advise: “*In view of these disadvantages the CC will only use remedies that control outcomes where other, more effective, remedies are not feasible or appropriate. In addition, where this class of remedy is employed, it is most likely to be used on a temporary basis unless there is no alternative to a continuing regulatory solution*”<sup>326</sup> (our emphasis).

[375] Thus, in this case the remedies proposed by the merging parties are not only complex, with significant specification risk associated with it, but would also have to be monitored and enforced by the competition authorities in perpetuity – over the lengthy life of mine of the merging parties’ andalusite operations. Based on this consideration alone the proposed remedies are inappropriate.

[376] Given the complexity and nature of the remedies, *inter alia* the control of both prices and volumes as well as non-price elements of competition such as quality and innovation (that is not currently provided for in the tendered remedies), as well as the complex cost assessments that would have to be done by the Commission given the abovementioned “hardship clause”, the Commission will in effect be expected to act as a price regulator for the mining and sale of andalusite in South Africa for an indefinite period of time. We have taken guidance from the CAC that explained in *Mittal* that “*The powers and duties of the competition authorities, and their limitations, are contained in the Act. The authorities are not called upon to set a price for a good or service ... There is no suggestion in the Act that the competition authorities should regulate and set prices.*”<sup>327</sup>

[377] We note that the above is even more applicable in this case, since in excessive pricing cases such as *Mittal*, the case is centered on price, whereas this merger case involves both price and non-price elements of competition and furthermore there is an

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<sup>325</sup> *Idem*, paragraph 4.30 (c), page 31.

<sup>326</sup> *Idem*, paragraph 4.31, page 31.

<sup>327</sup> *Mittal Steel South Africa Limited v Harmony Gold Mining Company Limited* (Case No. 70/CAC/Apr07), paragraph 47.

alternative (and clear and effective) remedy in the form of a prohibition of the proposed transaction.

- [378] In relation to the abovementioned hardship clause insisted on by the merging parties, we note that this would require an extremely complex assessment by the Commission of the merging parties' actual costs every three years for the duration of the conditions. The Commission could take years to complete just one such cost assessment and would have to consult both financial and industry experts, at great expense, to determine what the merging parties' "reasonable" costs are in any given period. There is no basis to suggest that the merging parties should be allowed all and "exact" costs, as the merging parties contend for, when the Commission would be acting as a price regulator in the relevant market (which we say the Commission should not do).
- [379] We conclude that expecting the Commission to fulfill a price regulator function i.e. monitoring and enforcing the pricing, non-price and volume remedy in perpetuity, would unduly burden the Commission.
- [380] We conclude that the merging parties' proposed set(s) of remedies are inadequate and insufficient to address the significant anti-competitive and public interest effects that are likely to arise from the proposed acquisition. Furthermore, the proposed remedies have substantial specification and circumvention risks and costs associated with them and from a monitoring and compliance perspective the remedies are impractical and would place an unduly burden on the Commission.
- [381] For all the above reasons we find that the only appropriate and effective remedy is the prohibition of the proposed transaction.

## **CONCLUSION**

- [382] In light of the above, we conclude that the proposed transaction is likely to substantially prevent or lessen competition in the relevant market. In addition, significant public interest issues arise from the proposed transaction. Accordingly, we prohibit the proposed transaction.

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**Mr. AW Wessels**

31 October 2016  
DATE

**Ms Yasmin Carrim and Ms Mondo Mazwai concurring**

Tribunal Case Manager: Karissa Moothoo Padayachie

For the merging parties: David Unterhalter SC and Richard Moultrie

*Instructed by:* Jocelyn Katz of Edward Nathan  
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