

***Case No COMP/M.4450 -
UMICORE / ZINIFEX /
NEPTUNE***

Only the English text is available and authentic.

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

Article 6(1)(b) NON-OPPOSITION
Date: 26/02/2007

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COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, 26.02.2007

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 Where possible the information omitted has been replaced by ranges of figures or a general description.

PUBLIC VERSION

MERGER PROCEDURE
ARTICLE 6(1)(b) DECISION

To the notifying parties

Dear Sir/Madam,

**Subject: Case No COMP/M.4450 –Umicore/ Zinifex/ Neptune JV
Notification of 22 January 2007 pursuant to Article 4 of Council
Regulation No 139/2004¹**

1. On 22/01/2007, the Commission received a notification of a proposed concentration pursuant to Article 4 of Council Regulation (EC) No 139/2004 by which Umicore S.A./N.V. (“UM”, Belgium) and Zinifex Limited (“ZFX”, Australia) acquire, within the meaning of Article 3(1)(b) of the Council Regulation, joint control of Neptune, a newly created company constituting a joint venture.

I. THE PARTIES AND THE TRANSACTION

2. UM, a materials technology group headquartered in Belgium, is active in four business areas: zinc specialties, advanced materials, precious metal products and catalysts, and precious metal services.
3. ZFX, a zinc and lead company headquartered in Australia, is active at different levels of the zinc and lead production and supply chains.
4. Neptune, the JV to be set up by means of the proposed transaction, will be active primarily in zinc smelting, refining and alloying and lead smelting and refining, with some activities in hot-dip galvanising and die-casting.

¹ OJ L 24, 29.1.2004 p. 1.

5. The case concerns mainly the zinc sector, and to a minor extent, the sectors of lead and other metals.
6. On 11 December 2006, UM and ZFX entered into a Memorandum of Understanding (MoU) to combine their zinc smelting, refining and alloying businesses and to establish the Neptune joint venture entity. The parties will only contribute part of their respective businesses to Neptune, notably zinc smelting, refining and alloying (UM and ZFX) and lead smelting and refining activities (ZFX)².
7. UM and ZFX will jointly control Neptune as each will have a 50% voting interest in Neptune as well as the right to block Neptune's strategic business decisions within the Board of directors.
8. It must be highlighted that, pursuant to the BCA, it is foreseen that Neptune will be floated on a European stock exchange through an IPO as soon as market conditions allow. Both parties will then consequently fully divest the businesses contributed to Neptune and will thus relinquish control over Neptune.
9. However, as this loss of control is a mere intention contingent on market conditions, the competitive assessment of this decision is based on the combined market shares of the joint venture and of the two parent companies UM and ZFX.
10. Neptune will perform on a lasting basis all the functions of an autonomous economic entity joint venture, since it will operate indefinitely, will possess all the financial assets, facilities, personnel and materials required for it to operate as an autonomous entity, will have its own management for day-to-day operations [...]
11. The parties claim that by contributing part of their businesses to Neptune they will be able to better concentrate on their core activities (materials technology for UM and mining activities for ZFX) all of which will remain outside Neptune.

II. COMMUNITY DIMENSION

12. According to the last available consolidated figures, the undertakings concerned have a combined aggregate worldwide turnover of more than EUR 5 billion (UM: EUR 6.6 billion; ZFX: EUR 1.4 billion). Likewise, the aggregate Community-wide turnover of each the undertakings concerned is more than EUR 250 million (UM: EUR[...]; ZFX:[...]). Neither UM nor ZFX achieved more than two-thirds of their respective Community-wide turnover in any one EU Member State. The notified operation therefore has a Community dimension³.

III. RELEVANT MARKETS

13. As indicate, the sector primarily affected by the proposed transaction is the zinc sector. To a minor extent, the sectors of lead and other metals are as well concerned by the proposed transaction. However, only in the zinc sector will the transaction give rise to

² [...]

³ Turnover calculated in accordance with Article 5(1) of the Merger Regulation and the Commission Notice on the calculation of turnover (OJ C66, 2.3.1998, p25).

horizontally and vertically affected markets, as in the other sectors the parties activities are either insignificant or limited.

Zinc upstream markets

Zinc feed materials (zinc concentrate and zinc secondary materials)

14. Zinc concentrate and zinc secondary materials are the primary raw materials of the zinc smelting process. In past decisions, the Commission has found that there is a separate product market for zinc concentrates⁴.
15. The parties argue that zinc concentrate and zinc secondary materials are likely to belong to the same separate relevant product market, as zinc producers are able to easily switch purchases between these two inputs in reaction to relative price variations and therefore these two types of raw material are highly substitutable as inputs for zinc smelters.
16. The market investigation has not provided conclusive evidence on whether zinc concentrate and zinc secondary material constitute one single or two separate markets. Nonetheless, the market definition can be left open, as no competition concerns will arise in this sector as a result of the proposed transaction, regardless of the precise market definition.
17. As to the geographic market definition, in line with past Commission decisions⁵, the parties submit that the relevant market for the supply and the purchase of zinc feed materials is worldwide in scope, given that their price is determined globally based on the prices quoted on the London Metal Exchange (LME), that zinc concentrate is transported from mines to smelting facilities across the globe and transport costs do not represent a significant proportion of the total cost of zinc concentrate. The same, according to the parties would apply to secondary zinc materials, which are also frequently transported world-wide. This has also been confirmed by the market investigation.

Zinc metal

18. Zinc metal, the end product of the zinc smelting, refining and alloying process, is employed for a variety of uses, including in the galvanising of steel (the coating of steel to impart corrosion resistance), in the production of brass (a copper-zinc alloy), in die-casting (e.g. for the manufacture of automotive parts), in the production of zinc oxides and other chemicals (e.g. used in the vulcanisation of rubber as well as in paints, coatings, ceramics, pharmaceuticals and agriculture), and in the production of rolled and extruded zinc (predominantly used in the manufacture of building products).
19. There are five commercially traded grades of zinc metal: (i) special high grade zinc (SHG) (having a purity of 99.995%), (ii) high grade zinc (HG) (having a purity of 99.95%), (iii) good ordinary brand zinc (GOB) (having a purity of 98.5%), (iv) die-casting zinc alloy (DCA) and (v) continuous galvanising grade zinc (CGG). SHG is the most heavily traded grade, accounting for the vast majority of the overall zinc trade.

⁴ Case COMP/M. 2062, Rio Tinto/North and Case COMP/M.3284, Outokumpu/Boliden.

⁵ Ibidem.

20. The parties submit that all these grades of zinc form part of a single relevant product market. While the parties recognise that there may not be substantial demand-side substitutability between these differing grades of zinc, given their differing properties and end-uses, they argue, in line with previous findings of the Commission, that there exists substantial supply-side substitutability between at least SHG, CGG and DCA grade zinc⁶.
21. The market investigation has largely confirmed that there is no or limited demand-substitutability among the five grades as they are used for different applications, have different characteristics and are not substitutable at the end user level. However, the results of the market investigation as regards the degree of supply side substitutability are more nuanced, and appear to indicate that producers can relatively easily shift production from one grade to another at limited cost and within limited time.
22. It is however not necessary for the purposes of the present decision to conclude on whether zinc metal constitutes as a whole (including all five grades) the relevant product market, or whether each of these grades must be examined as separate relevant product markets, or whether SHG, CGG and DCA jointly constitute (in view of their higher supply-side substitutability) the most appropriate product market definition, as the proposed transaction will not give rise to any competitive concern regardless of the precise market definition.
23. As regards specifically the SHG zinc grade, one third party has suggested in the framework of the market investigation that there may exist a separate market for "specially selected" SHG (SSHG) zinc with specific requirements as regards the composition of the remaining impurity. This SSHG zinc would be essentially used as input in the production of zinc powder for alkaline battery applications. Producers of zinc powder for battery applications would not be able to shift from SSGH zinc to standard SHG zinc owing to the impurity requirements for zinc powder for batteries applications. Hence, it has been suggested that, owing to the lack of demand and supply-side substitutability, SSGH zinc (for zinc powder battery applications) would constitute a separate product market.
24. The Commission has carried out a supplementary investigation to verify this argument both with the parties and a number of third parties active in the market either as suppliers of SHG and SSHG zinc or as producers of zinc powder for battery applications or who are active both as suppliers and producers(i.e. vertically integrated companies).
25. As this investigation has shown, SHG zinc and SSHG zinc have the same zinc purity requirement (i.e. zinc purity of 99.995%), but differ in the composition of the remaining impurity. Furthermore, the investigation has not provided evidence so as to conclude that SSHG zinc constitutes a separate product market.
26. On the demand side, even though SSHG zinc is a necessary input for the production of powders for batteries, each customer has its own specific impurity requirement, each specification formula being the customer's property. SSHG specifications are therefore not substitutable to each other. Accordingly, what characterises the demand side is the customer's interest in SSH zinc with a special ("customized") impurity formula rather

⁶ Case COMP/M.2348, Outokumpu/Norzink.

than a uniform SSHG product and it is thus not relevant to distinguish a separate product market for SSHG.

27. On the supply side, there appears to be some degree of flexibility, as it has been indicated that any or most producers of SHG could relatively easily supply, upon demand, SSHG. In this regard, the parties have submitted that rather than to "production" of SSHG, one should refer to "special selection", i.e. through laboratory analysis producers identify those SHG batches meeting the special requirements of impurity. Carrying out these selection procedures would, according to the parties, only require relatively low investment in laboratory equipment and testing machines. Some of the SHG producers, who do not currently produce SSHG, confirmed that, in order to guarantee the required specifications, an additional investment might be necessary but its cost appear to be minor⁷ in comparison to the [...] premium that production and sale of SSHG yield⁸.
28. On the basis of the above, the Commission concludes that it is not relevant to distinguish a separate market for SSHG zinc.
29. As to the geographic market definition, the parties consider that the relevant market for zinc is worldwide in scope, since zinc is a globally traded commodity and the pricing of zinc metal is largely determined globally based on the prices quoted on the LME. Furthermore, they argue that there are non-negligible imports of zinc into the EEA from third countries and recent trends have been towards increased zinc imports into the EEA, because import tariffs and transport costs are relatively low.
30. This proposed geographic definition is not in line with past commission cases, in which it was concluded that the relevant market for zinc metal was EEA-wide⁹.
31. The market investigation has not provided conclusive evidence in support of either one of these alternative geographic market definitions. It is however not necessary to conclude on the precise geographic market definition, as the proposed transaction will not give rise to any competitive concern regardless of whether the assessment is carried out at a world-wide or at EEA-wide level¹⁰.

Zinc downstream markets

Zinc oxides

- 7 The parties claim that only a good laboratory equipment is needed to produce SSHG. The parties' view has been confirmed by the Commission's investigation.
- 8 For instance, the premium for SSHG sold by UM is [...] higher than the premium for standard SHG.
- 9 Case COMP/M.2348, Outokumpu/Norzink and case COMP/M.4256 Xstrata/Falconbridge.
- 10 For the purposes of this decision, the assessment will be carried out at EEA-level, because if it can be concluded that the propose transaction will not give rise to competition concerns at EEA level, it can also be concluded that no competition concerns would arise at world-wide level, as world-wide market shares are consistently lower.

32. Zinc oxides are produced in various grades of purity and are used for a wide range of industrial applications, including in rubber, tyres, glass, ceramics, chemicals, pharmaceuticals, cosmetics, lubricants, paints and agricultural applications. Zinc oxides are usually produced from SHG zinc or from zinc-bearing secondary materials.
33. The parties distinguish three grades for zinc oxides: (i) pure grade (zinc purity above 99.7%) mainly used in the chemical, pharmaceutical, cosmetics and tyre and rubber industries, (ii) standard grade (zinc purity between 99% and 99.7%) mainly used in the ceramics, tyres and rubber industries, (iii) zinc trace elements for animal feed (zinc purity under 80%). The parties consider that there is one single overall market for zinc oxides (including all various grades), given that there is significant demand-side and supply-side substitutability between the different grades of zinc oxide.
34. According to the parties, there is substantial demand-side substitutability as various grades of zinc oxides can often be used for a variety of specific applications. Moreover, there is significant supply-side substitutability between the various grades of zinc oxides, as most producers produce at least two or more of these grades and no excessive costs would be incurred by any zinc oxide producer to extend its product range to other grades of zinc oxide.
35. The majority of the respondents to the Commission's market investigation have not confirmed the existence of substantial demand-side substitutability between various grades of zinc oxides. Moreover it remains unclear whether there exists significant supply side substitutability. However, for the purposes of this case, the precise product market definition for zinc oxides can be left open, since the proposed concentration does not give rise to competition concerns under any alternative product market definition.
36. As regards the geographic scope of the market, the parties consider that the relevant market for zinc oxides is worldwide, because, in their view, transport costs are comparatively low and zinc oxides are typically sold on a worldwide basis. The market investigation has confirmed that zinc oxides are traded on a worldwide basis.

Fine zinc powders

37. Fine zinc powders (basically zinc dust) are produced in various grades of purity and particle size and are used in different industrial applications, including in paints, chemical applications and plating. Fine zinc powders are generally produced from SHG zinc or from zinc-bearing secondary materials.
38. The parties consider that fine zinc powders for battery applications (ZPB) constitute a separate product market from the other fine zinc powders (ZP). They underline that while ZP can be used in a number of different applications, ZPB are produced for battery applications only. ZPB have different end-use characteristics (in particular, there is a difference in the purity of the zinc used in the two types of powder and in the physical shape of the powder particles), contain alloying elements and require a specific morphology in order to fulfil the specific needs of battery manufacturers.
39. According to the parties, as ZPB are usually produced from specially selected SHG grade zinc (with particular requirements as to the type and level of permissible impurities), there is hardly any demand-side or supply-side substitutability between ZPB on the one hand and ZP on the other hand, since with very few exceptions, producers of ZPB do not produce ZP and vice versa.

40. The parties' view has been confirmed by the results to the Commission's market investigation. In particular, most respondents have stressed that ZPB requires a higher purity of zinc, a special alloying elements and a specific particle size distribution and morphology according to the needs of each battery manufacturer and battery type. Moreover they have confirmed that most ZP producers do not produce ZPB.
41. As regards the geographic scope of these markets, the parties consider that the relevant geographic market for both ZPB and ZP is worldwide, because, in their view, transport costs for zinc powders are comparatively low and zinc powders are typically sold on a worldwide basis.
42. As to ZPB, the investigation has indicated that they are traded on a worldwide basis. As a matter of fact, according to the data provided by the parties, the sum of ZPB imports and exports - into and outside the EEA - amounts to around [40%-50%] % of the ZPB production in the EEA.
43. As to ZP, it is unclear, as a result of the Commission's market investigation, whether the appropriate geographic market definition is EEA wide or worldwide. Imports and exports figures provided by the parties show that ZP are far less traded on a worldwide basis than ZPB, since the sum of ZP imports and exports - into and outside the EEA - amounts only to around [10%-20%] % of the ZP production in the EEA. This may be due to the fact that, as the ZP premium is significantly lower than the ZPB premium, transport costs account for a higher proportion in ZP price. However, for the purposes of this case, the geographic market definition for ZP can be left open, since the proposed concentration does not give rise to competition concerns under any alternative geographic market definition.

Zinc-made building products

44. UM's main business activity in building products consists of the production and sales of (i) roofing products and (ii) rainwater systems.
45. The parties state that SHG zinc can be rolled in order to be used as a building material or as an input for building material (to be cut to size on site by a contractor), mainly for two applications: roofing elements and rainwater systems.
46. The market investigation has confirmed that only rolled zinc of SHG quality is used as building material or as an input for building material. It has also confirmed that building materials are the main end use of rolled zinc. It follows that there is no need for a separate market definition of rolled zinc, which is rather to be considered as one of the shapes in which (SHG) zinc metal can be produced.
47. The parties consider that there is an overall market for all building products, or, if that is too wide, that there are two product markets for the production and sale of metallic and non-metallic materials for elements of roofing on the one hand and for rainwater systems on the other. In their view, both customers of roofing elements and customers of rainwater systems have the choice between various competing materials, including metallic and non-metallic materials, which thus compete with each other in each of the two mentioned product markets. If a roof needs to be covered a customer will have the choice between various competing materials (including rolled metals such as zinc, lead, aluminium, copper, galvanised steel, lacquered galvanised steel and stainless steel as well as non-metal products such as tiles, shingles, terra-cotta, fibre cement, concrete tiles, mortar, slate and PVC) and the customer can choose between various levels of

finishing of the products (e.g. rolled zinc which the customer or his contractor cuts and forms himself on site or ready-made roofing systems). As to rainwater systems (gutters and down pipes, retaining devices, such as collars, and accessories, such as angles, shapes and hooks) they point to rolled zinc, copper, galvanised steel, lacquered galvanised steel, stainless steel, aluminium, high-quality steel and plastic as alternative materials used.

48. The parties' view finds support in decisions of the Bundeskartellamt relating to rainwater systems on the one hand and to roofing elements on the other.¹¹
49. Past decisions of the Commission have delineated narrower markets than "all building products", using the function of the product as the main criterion of delimitation rather than the material used for its production.¹²
50. The market investigation in this case has confirmed that on the basis of their different characteristics and use, roofing elements made of zinc on the one hand and rainwater systems made of zinc on the other hand do not belong to one single product market.
51. The market investigation has also confirmed that for both types of products, there are a range of alternative materials from which to produce the products concerned, which are highly substitutable with each other from the point of view of the end use.
52. Both for roofing products and rainwater systems, respondents have pointed out that because of different building traditions in Member States, different materials have a different prominence; however, these differences are considered as subject to change under the influence of possible relative price evolutions. It follows that the different importance of different materials as of today is not seen by the respondents as an indication of different product markets along material-based lines.
53. On the basis of the preceding elements, it is first concluded that there is no overall product market for all building materials. Secondly, it can in particular be concluded that roofing elements and rainwater systems belong to two distinct product markets. Thirdly, the market investigation suggests for both roofing products and rainwater systems that a product market consisting only of zinc-made roofing products or rainwater systems respectively is too narrow.
54. However, the market investigation does not allow drawing the exact outer boundaries of each of the two product markets. Both product market definitions can be left open, however, as the conclusion reached in the competitive assessment below does not change regardless of the precise market definitions.
55. As regards the geographic market definition, the parties consider that the relevant market for the production and sale of any metallic and non-metallic building products is EEA-wide in scope, since all metallic and non-metallic building products are typically sold on an EEA-wide basis.

¹¹ Decision of 28 January 1999, B 5 – 27400 – U – 114/98 relating to both rainwater systems and roofing materials, http://www.bundeskartellamt.de/wDeutsch/download/pdf/Fusion/Fusion99/B5_114_98.pdf; decision of 22 January 2002, B 5 – 27532 – U 120/01 relating to rainwater systems.

¹² E.g. M.3943 Saint-Gobain / BPB: plaster based products, perhaps to be split in plaster and plasterboard; insulation materials for building applications.

56. While previous Commission decisions have often left the geographic markets open, they have tended to support national or even narrower geographic markets for the distribution of building products, and national or wider (mainly EEA-wide) geographic markets for the procurement of building products.¹³
57. The market investigation has not provided a clear answer as to the geographical scope of either roofing elements or rainwater systems.
58. Transport costs of rolled zinc, roofing elements and rainwater systems do not impede the transport and sale of these products all over Europe (and beyond). This suggests a wider geographical scope than national.
59. On the other hand, some respondents have pointed at the architectural taste differences between Member States referred to above in recital 52, which give a different prominence to different materials for the same functional product group (e.g. rainwater systems are said to be made predominantly of PVC in the UK, of copper in Germany and Italy, of zinc in France), stating that these contribute to a certain segmentation of the geographical markets along national lines.
60. The respondents to the market investigation have either stated that the market delimitation is EEA-wide or that it is national.
61. It is concluded for both roofing products made of zinc (and of other materials) and for rainwater systems made of zinc (and of other materials) that the geographic scope of the market is not narrower than national, and probably not wider than EEA-wide. The exact definition can however be left open, as the conclusion reached in the competitive assessment below does not change regardless of the precise market definition.

Zinc calots, galvanised steel products and die casting components

62. The proposed transaction will give rise to a number of limited vertical relationships due to the activities of the parties in the upstream market of zinc metal (as described above) and limited activities downstream in the production and sale of (i) zinc calots, (ii) galvanised steel products and (iii) die casting components.
63. Out of these sectors, galvanised steel products have been examined in previous Commission decisions¹⁴, which have established the relevant product market definition and defined its geographic scope as being at least EEA-wide.
64. As to zinc calots, the parties have provided their views on the most appropriate market definitions for these activities and provided market share data both at world-wide and EEA-wide level. The precise market definition can at any rate be left open, as the vertical relationship does not give rise to a vertically affected market.
65. As to die-cast components, the parties have not proposed any product market definition, underlining that the definition can at any rate be left open in view of the insignificant

¹³ E.g. M.3943 Saint-Gobain / BPB.

¹⁴ For example, Case COMP/M.4137, Mittal/Arcelor, and Case COMP/ECSC.1351, Unisor/Arbed/Aceralia.

activities of the parties. Conversely, it is argued that the geographic scope of this sector is EEA-wide, due essentially to transport cost and the limited imports into the EEA¹⁵.

66. As mentioned, none of the horizontal or vertical relationships regarding these sectors gives rise to affected markets¹⁶, due to the parties' very marginal presence in the downstream markets, in most cases below [0%-10%] both at world-wide and at EEA level. Furthermore, no third parties have raised issues in relation to these activities in the framework of the investigation. On this basis, it can be concluded that the transaction is not likely to give rise to competition concerns in these secondary areas of activities of the parties. Therefore, these sectors will no longer be addressed in the remainder of this decision.

Lead and other areas

67. In addition to the zinc sector, the parties are active in a number of other sectors. As a result, the transaction gives rise to several horizontal and vertical relationships originating from the parties' activities, at various levels of the relevant supply chains, in the following areas: lead, gold doré/gold, bismuth/bismuth alloy, cadmium, cobalt-containing residues sectors, silver, copper cathodes, sulphuric acid, zinc dross, zinc ashes and zinc skimmings, spent aluminium cathodes and lead anodes.
68. Some of these sectors (lead, gold, silver, copper, sulphuric acid) have been examined in previous Commission decisions, which have established the relevant product market definitions and defined their geographic scope as being, in most cases, worldwide.
69. The remaining sectors have not been examined by the Commission in previous decisions. The parties have provided their views on the most appropriate market definitions for these activities and provided market share data both at world-wide and EEA-wide level.
70. None of the horizontal or vertical relationships regarding these sectors gives rise to affected markets, due to the parties' marginal presence, in most cases below [0%-10%] at EEA level. Furthermore, no third parties have raised issues in relation to these activities in the framework of the investigation. On this basis, it can be concluded that the transaction is not likely to give rise to competition concerns in these secondary areas of activities of the parties. Therefore, these sectors will no longer be addressed in the remainder of this decision.

IV. COMPETITIVE ASSESSMENT

71. In view of the areas of activities of the parties, of their contribution to Neptune and of the businesses to be retained by each of UM and ZFX, the transaction will give

15 ZFX is not active in the production and sale of die-cast components anywhere in the world. UM, for its part, is only active in the production and sale of die-cast components through its controlling stake in Foehl China Co Ltd (which started its sales activities in 2006), which sells die-cast components almost exclusively in China and with only minor sales of die-cast components in the EEA ([...] tonnes in 2006).

16 As to galvanised steel, only if, hypothetically, a separate relevant (upstream) market was defined for the production and sale of CGG grade zinc in the EEA would the parties' combined 2005 market share exceed 25%. At the same time, as to die components, only if, hypothetically, a separate (upstream) market was defined for the production of DCA grade zinc in the EEA, would the parties market share exceed 25%.

rise to a number of horizontal overlaps and vertical relationships, most importantly in the zinc sector.

Horizontal aspects

72. The horizontal overlaps created by the proposed transaction give rise to horizontally affected markets only in the case of the market for the production and supply of zinc metal. Upstream of zinc metal, while the transaction concerns also the markets of zinc feed materials (both supply and purchases), the proposed transaction does not give rise to horizontally affected markets, in view of the parties' limited positions on these markets.
73. Nevertheless, it must be borne in mind that the assessment of the horizontal overlaps created by the transaction on the upstream zinc markets (zinc feed materials, i.e. zinc concentrate and zinc feed secondary materials) is important, even if they are not horizontally affected, in the light of the fact that these markets are vertically related to a number of markets and activities downstream along the zinc supply chain, therefore creating a number of vertically affected markets, which will be examined in detail further below in this decision.

Zinc feed material (production/supply and purchases)

74. As indicated, the transaction will not give rise to horizontally affected markets in the upstream market of the production and supply of zinc concentrate and zinc secondary feed material, regardless of whether they belong to the same product market or to separate ones (either world-wide or EEA-wide). Zinc concentrate is the primary raw material used in the zinc smelting process to produce zinc metal. Mined zinc ore is rarely rich enough in zinc to be used directly in a zinc smelter. Instead, the zinc ore must first be transformed into a zinc concentrate through a flotation process after the ore has been mined and milled. Accordingly, zinc concentrate is the end product of the zinc mining process. Only ZFX is active in the production and sale of zinc concentrate, with market shares (both world-wide and EEA-wide) well below [0%-10%]. UM is active, through its interest in Padaeng, to a marginal extent in the production of zinc concentrate. However, Padaeng makes no merchant market sales of zinc concentrate as its entire production is consumed internally. Accordingly, there is no horizontal overlap between the parties in the supply of zinc concentrate to the merchant market. As to zinc secondary feed materials, ZFX is not active in the merchant market, as it consumes all of its production internally, whilst UM has limited production, of which about [55%-65%] is consumed internally.
75. Similarly, the markets for purchases of zinc concentrate and zinc secondary feed material do not constitute affected markets (regardless of whether they constitute a single or two separate markets).
76. As such, the transaction is not likely to give rise to competition concerns in the markets for zinc concentrate and zinc secondary feed materials, in view of the limited market shares of the parties, the marginal increments of share and the wide number of significant competitors on these markets.

Zinc metal

77. In the zinc sector, the transaction will give rise to horizontal overlaps in the upstream markets of the production and supply of zinc metal between the zinc

smelting, refining and alloying businesses contributed to Neptune by both UM and ZFX.

78. As described in detail in the product market definition section, there are three alternative market definitions regarding the zinc metal sector. Regardless of the precise market definition, the transaction does not give rise to competition concerns in this area. The assessment is carried out, for the purposes of this decision, for the three alternative definitions and on the basis of the EEA-wide market definition. If no competition concerns arises at EEA level, also at world-wide level the transaction would not give rise to competition concerns, as the parties' market share would remain, at world-wide level, significantly lower than at EEA level and, in most cases, below 25%.

Zinc metal one single market including all five grades

79. In the alternative that zinc metal constitutes one single product market, including all of the five grades mentioned above, the parties have estimated their EEA-wide combined market share (in production volume terms) to be about [20%-30%] (UM [10%-20%], ZFX [10%-20%]) in 2005. Worldwide, the parties have a combined market share of around [10%-20%] (UM: [0%-10%], ZFX: [0%-10%]). The Commission has, through the market investigation, verified these estimates and reconstructed the market independently of the parties' estimates. The estimates of the parties have been essentially confirmed by the investigation, with the few remaining discrepancies to a large extent imputable to the fact that some third parties have provided actual sales data rather than production data.
80. Post transaction, the market would remain sufficiently fragmented, with a number of differently-sized players active in the market, most notably Xstrata/Glencore (the market leader with a market share estimated to be [30%-40%] in the EEA), Boliden (approximately [20%-30%]), Ruhr-Zinc, Miasteczko Slaskie and Boleslaw (with market shares respectively of about [0%-10%], [0%-10%] and [0%-10%]). As already highlighted in the geographic market definition section, imports from non EEA producers are estimated at approximately [10%-20%] in 2006, up from [0%-10%] in 2005 and [0%-10%] in 2004.
81. Moreover, the parties have provided data [...] (a mining and metal consultancy firm) indicating that average capacity utilisation is relatively high across the industry (consistently above [75%-85%]) and that capacity expansion can be expected in the medium /long term. Indeed, [...] reports [...] "confirmed and highly probable" projects to construct new zinc smelters or expand zinc smelting capacity, which will add an estimated [...] tonnes per year of worldwide zinc production capacity by 2008. Most importantly, of these [...] projects [...] are European ones (in [...]), with only one of the [...] being developed by the parties (ZFX in the [...]).
82. Furthermore, as previously acknowledged by the Commission¹⁷, a large part of the customers of zinc suppliers enjoy, to differing degrees, some level of buyer power. This has been confirmed to some extent by the market investigation, which has provided indications in this respect at least for large customers of certain categories, like steel producers, car and tyre manufacturers. In support of this argument, the

¹⁷ Case COMP/M.2348, Outokumpu/Norzink

parties have supplied data indicating that, for both UM and ZFX, the largest customers account for a significant proportion of the parties sales¹⁸.

83. Finally, as previously acknowledged by the Commission¹⁹ in 2001, the parties argue that the transaction prices in the zinc sector cannot be manipulated by the suppliers, as worldwide zinc transaction prices are based on the price quoted for zinc on the LME as a benchmark, to which a premium is added. Indeed, it must be stressed that the LME price is by far the dominant part of the final prices for all different grades, representing on average 90% of the final price and the market investigation has not provided any indication that the price-formation mechanism in the zinc industry may have changed as compared to the market conditions prevailing in 2001.
84. As regards the possibility of the transaction creating or favouring the conditions for co-ordinated effects, the Commission has previously²⁰ found that a number of characteristics of the zinc industry appear to render collective dominance unlikely²¹. Although the transaction at stake, by definition, will increase the degree of market concentration, it appears that the main characteristics of the market will remain unchanged. Most notably, transaction prices cannot be easily manipulated or influenced by one player individually or more players jointly, which means that condition of being able to easily reach a "common understanding" on the terms of co-ordination (one of the main pre-conditions for co-ordinated effects, as established by the jurisprudence in *Airtours vs. Commission*²²) would not be met. Moreover, all other characteristics of the market already highlighted in previous cases as liable to render co-ordinated effects unlikely will remain at play, in particular the absence of a credible retaliation mechanism owing to lack of excess capacity that would be available in the short term. Furthermore, growing demand in the zinc sector over the last few years constitutes an additional element contributing to rendering co-ordinated effects unlikely.

Five grades each a separate market

HG and GOB zinc

85. If the five zinc grades were to be considered as each constituting a separate market, the hypothetical markets for HG zinc and GOB zinc would not give rise to horizontal overlaps in the EEA, as the businesses contributed to Neptune by UM and

18 Top five customers account for above [...] of ZFX's sales and for around [...] of UM's sales (all grades included)

19 Ibidem.

20 Ibidem

21 In particular, decision COMP/M. 2348 Outokumpu/Norzink referred to i) the LME pricing mechanism ii) the level of asymmetry in the market iii) capacity constraints reducing the risk of tacit coordination and v) buyer power as indications that the market would not be prone to collective dominance.

22 [2002] ECR II-2585

ZFX are not active in the EEA in the production or supply of HG zinc or GOB zinc. Outside Neptune, the Rezinal recycled zinc production business which will be retained by UM post-transaction is active in the production and sale of GOB zinc, while ZFX has only marginal sales of GOB zinc at worldwide level, but none in the EEA.

DCA

86. As regards the hypothetical market of DCA zinc, Neptune would become the market leader with a market share of around [20%-30%] worldwide (UM: [10%-20%], ZFX: [10%-20%]) and of around [30%-40%] in the EEA. However, in practice the current market structure would not change in the EEA, as Neptune would essentially take over UM's market position. In addition to this, ZFX will contribute its Budel smelter in the Netherlands to Neptune. This smelter has only a small DCA line and anticipates beginning some limited production and sales of DCA in the EEA in 2007. It is foreseen that Budel's production will remain limited (around [...]tonnes) for the foreseeable future. On the basis of these figures, ZFX's estimated market share at the EEA level would be [0%-10%]. The increment in market share would thus be marginal and the removal of ZFX as an actual/potential competitor would not be likely to give rise to competition concerns. The market investigation has not highlighted any concern as regards the specific DCA zinc grade.

SHG zinc and CGG zinc

87. If SHG zinc and CGG zinc were to be considered as constituting two separate markets, the same assessment carried out for the whole of the hypothetical market of zinc metal would essentially apply. As a matter of fact, the market structure of both hypothetical markets would be very similar to the one for zinc metal as a whole, while market shares would change but would still remain relatively low, with the parties holding a market share in the EEA of around [10%-20%] for SHG (UM: [5%-15%], ZFX: [5%-15%]) and [20%-30%] for CGG (UM[0%-10%], ZFX: [10%-20%]). The parties have very much lower combined market shares worldwide (around [0%-10%] for SHG and [0%-10%] for CGG). Competitors (essentially the same players as for the alternative of zinc metal market as a whole) would see their relative positions change in either of the two markets, but the level of competitive constraint on the parties would remain similar to the one they would be able to exert in the market defined as zinc metal as a whole.

SHG, DCA, CGG one market.

88. Finally, the assessment would not change if SHG, DCA and CGG were to be considered to form one single product market. The market structure would remain similar to the one prevailing in the alternative of all five grades constituting together the relevant product market, with the parties holding a market share of approximately [20%-30%] in the EEA and [10%-20%] worldwide, and the competitors' market shares substantially in line with those for the zinc metal market considered as a whole.

Conclusion on Zinc Metal

89. In the light of the above, it can be concluded that the transaction will not significantly impede competition in the zinc metal markets, regardless of the precise market definition, in the common market or in a substantial part of it.

Vertical aspects

90. As indicated in the section on horizontal relationships, the proposed concentration gives rise to horizontal overlaps on the zinc metal markets. At the same time UM will retain activities in a number of markets downstream of zinc metal. Therefore the proposed concentration gives rise to vertical relationships between zinc metal markets and several downstream markets. However the proposed transaction gives rise to vertically affected markets only for ZP, ZBP, zinc oxides and zinc building materials, since UM has market shares above 25% only on these markets in the EEA²³.
91. It must be underlined that ZFX is not active in the downstream markets and that the vertical relationships examined in this section of the decision derive from UM's positions pre-merger.

Zinc metal and ZP, ZBP, zinc oxides

92. The parties have a combined market share of around [20%-30%] EEA-wide and [10%-20%] worldwide, either on a market for zinc metal (including all grades of zinc metal) or on a market which would include SHG, DCA and CGG zinc metals.
93. ZP, ZBP and zinc oxides are made from SHG zinc metal. On a hypothetical market for SHG, the parties have a combined market share of around [10%-20%] in the EEA and [0%-10%] worldwide. However, it is worth noting that due to the partial shut down of UM's Auby plant in France since 2006, the parties' combined market share has fallen to [10%-20%] in the EEA in 2006.
94. On the market for ZP, which is at least EEA-wide in scope, UM has a market share of [20%-30%] worldwide and of [> 50%] EEA-wide.
95. On the worldwide market for ZBP, UM has a market share of around [30%-40%] (the other main competitors being inter alia Mitsui Mining Smelting [...], Big River [...], Grillo [...], Dowa Mining [...], Noranda [...])²⁴.
96. On the worldwide market for zinc oxides, UM has a market share of around [0%-10%]. If separate product markets were to be considered, UM has a market share above 25% only as regards zinc trace elements for animal feed ([20%-30%]). However, this category of zinc oxides is not made from zinc metal but from zinc secondary materials which are only sold by UM²⁵.

²³ As already mentioned in the horizontal aspects section, the parties have very limited market shares on zinc feed materials (zinc concentrate and zinc secondary materials) which are upstream from zinc metal. The proposed concentration is therefore unlikely to give rise to any competition concerns in terms of vertical relationships between zinc feed materials and zinc metal.

²⁴ In February 2006, Big River shut down and, a few months later, was acquired by ZinOx which plans to restart production in 2007/2008. Due to the temporal shut down of Big River, the market shares in 2006 were distributed as follows: Mitsui [...], Noranda [...], Grillo [...], Dowa [...].

²⁵ UM's sales of zinc secondary materials amount to less than [< 10%] of the EEA-wide demand and to around [< 10%] of the worldwide demand.

97. The Commission has concluded, following a thorough specific market investigation with a number of third parties active both upstream and downstream, that the proposed transaction is not likely to create competition concerns resulting from the vertical relationships described above for the following reasons.
98. Firstly, UM's businesses downstream of zinc metal represent a small proportion of total zinc metal demand ([0%-10%] of total zinc metal demand on a worldwide and [0%-10%] of total zinc metal demand on an EEA-wide basis respectively, and [0%-10%] of total SHG demand on a worldwide and [0%-10%] of total SHG demand on an EEA-wide basis respectively). Indeed, UM sources internally the majority of its requirements of zinc metal. Accordingly, even if these downstream UM businesses were hypothetically to source their zinc metal exclusively from the new entity (and therefore become foreclosed to competing zinc metal producers), there would remain sufficient other customers to which upstream competitors could sell their zinc metal production.
99. Secondly, the parties represent together around [10%-20%] of the worldwide market for the production and sale of zinc metal and around [20%-30%] on an EEA-wide basis. As to SHG, which is used to produce the downstream products mentioned above, the parties had a combined market share of [0%-10%] worldwide and of [10%-20%] EEA-wide in 2005. Actually, their combined market share on SHG has recently decreased, mainly in the EEA, as a result of the shut down of 50% of zinc production capacity of the UM's Aubry plant in France. As a result, it can be estimated that the parties' combined share on the hypothetical market for SHG in the EEA in 2006 was [10%-20%]. Therefore, even if the new entity were to supply its zinc metal exclusively to UM, around [90%-100%] of current worldwide and [70%-80%] of current EEA-wide supplies of zinc metal would remain available to competitors on these downstream markets. If a separate SHG market were to be considered, there would remain about [90%-100%] of current worldwide and [80%-90%] of current EEA-wide supplies of SHG available to competitors.
100. However, one third party has claimed that the production of ZPB for alkaline batteries requires SSHG and that there are very few SHG producers which currently sell SSHG: UM, ZFX and Boliden in the EEA, Xstrata, Mitsui, Dowa, Shenzhen and Huludao in the rest of the world. As UM is also a ZBP producer, this third party was concerned that the new entity could foreclose access to SSHG to its competitors in the market for ZPB.
101. As already explained above in the product market definition section, it is not relevant (and appears inaccurate) to distinguish a separate product market for SSHG for both demand and supply side reasons.
102. Following a thorough investigation as regards this specific issue raised by the third party mentioned above, the Commission has concluded that the new entity would be unlikely to foreclose the ZPB market for the following reasons, which are supplementary to the other arguments developed above.
103. Firstly, the volume of SSHG sales account for a very small part of the SHG market in the EEA, namely less than [0%-10%].
104. Secondly, if the new entity were to raise its SSHG price, other SHG producers could switch production to SSHG zinc without prohibitive costs and a customer would find

new suppliers without significant delays, since SSHG contracts have usually a duration of [...].

105. Thirdly, UM already sources internally more than [90%-100%] of its requirements of SSHG²⁶ for its downstream activities. Therefore even if UM were to decide to source all its requirements of SSHG from the new entity, there would be no significant additional foreclosure of customers of SSHG. In addition, the data provided by the parties show that the loss of profits on the sales of SSHG would be hardly made up by any increased profit derived downstream from increased sales of ZPB²⁷. This would be even more the case since UM's ZPB capacity production is already [...] used.

Zinc metal (rolled zinc/SHG) and zinc building materials

106. The merger has no horizontal impact on any (zinc-made) building products market in Europe, as ZFX is not active on any of these. UM has important activities in zinc-made roofing materials as well as zinc-made rainwater systems.
107. However, there exist vertical links between the upstream market of zinc metal (more precisely the hypothetical market for SHG, and the product markets for (zinc-made) roofing materials and (zinc-made) rainwater systems downstream, on which UM has a strong position.
108. For competition concerns to arise owing to these vertical relationships, the parties would need to have both the ability and the incentive to use a strengthened position on the upstream (SHG) zinc metal market to foreclose competitors on the downstream markets for (zinc-made) roofing materials and (zinc-made) rainwater systems.
109. As the definition of the product market has been left open above, the narrowest market definition is considered, i.e. a product market for zinc-made roofing materials and another product market for zinc-made rainwater systems. As the definition of the geographic market has been left open above, the narrowest market definition is considered, i.e. national markets for both zinc-made roofing materials and zinc-made rainwater systems.
110. On these narrowest potential markets, UM has estimated market shares above 25% (and in some cases above 50%) in a considerable number of European countries²⁸.

²⁶ UM purchases the remainder SSHG zinc from [...].

²⁷ In 2006, UM earned an average net margin of around €[...] per mt globally on sales of ZPB. By contrast, in 2006, UM earned an average net margin of around €[...] per mt on sales of SSHG zinc to [...]. Similarly, in 2006 ZFX achieved an average net margin of around €[...]per mt on sales of SSHG zinc to its customers. As a result of this, the profits the merged entity could expect to derive from the production and sale of ZPB are far lower than those it could expect to derive from the sale of SSHG zinc to third parties. Therefore the merged entity would have no economic incentive to give preferential treatment to UM's downstream zinc powders for battery applications business to the detriment of third party purchasers of SSHG zinc.

²⁸ For zinc roofing material, UM's market shares range from 25-30% in [...] up to 75-85% in [...], with market shares between 30 and 70% in at least [...] other European countries. For zinc rainwater systems, UM holds market shares above 30 % in [...].

111. In view of the competitive assessment developed above as regards zinc metal and in particular as regards the hypothetical market for SHG zinc grade, it can be concluded that the parties do not have the ability to foreclose rivals on the downstream market for either zinc-made roofing materials or zinc-made rainwater systems. This conclusion follows from the relatively low combined market share (below [20%-30%]) on the upstream market, combined with the presence of strong competitors and a number of smaller competitors. Whilst this conclusion does not rely on the competitive constraint exercised, both for roofing materials and rainwater systems, by products made of other material than zinc, it is undeniable, in view of the results of the market investigation, that other materials exert a considerable competitive pressure, therefore reducing even further the possibility for the parties to attempt to foreclose competitors downstream.
112. Secondly, it appears at least doubtful that the parties would have an incentive to foreclose rivals on a downstream market for building products on the basis of their position on the upstream market for (SHG) zinc metal. The market investigation has specifically asked the market for possible concerns as regards a vertical foreclosure risk arising from the vertical link between (SHG) zinc metal and building products markets. No respondent has raised concerns in this respect.
113. It follows from the above that even under the narrowest potential market definitions downstream, i.e. national markets for zinc-made roofing products on the one hand and national markets for zinc-made rainwater systems on the other, the proposed concentration is not likely to give rise to competition concerns due to the vertical relationship examined above.

V. CONCLUSION

114. For the above reasons, the Commission has decided not to oppose the notified operation and to declare it compatible with the common market and with the EEA Agreement. This decision is adopted in application of Article 6(1)(b) of Council Regulation (EC) No 139/2004.

For the Commission,
signed,
Stavros DIMAS
Member of the Commission