

***Case No COMP/M.2348 -  
OUTOKUMPU /  
NORZINK***

Only the English text is available and authentic.

**REGULATION (EEC) No 4064/89  
MERGER PROCEDURE**

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Article 6(1)(b) NON-OPPOSITION  
Date: 27/03/2001

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COMMISSION OF THE EUROPEAN COMMUNITIES

Brussels, **27/03/2001**  
**SG(2001)D/287181**

In the published version of this decision, some information has been omitted pursuant to Article 17(2) of Council Regulation (EEC) No 4064/89 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 Where possible the information omitted has been replaced by ranges of figures or a general description.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 party**

Dear Sir/Madam,

**Subject: Case No COMP/M. 2348 - Outokumpu/Norzink**

Notification of 27.02.2001 pursuant to Article 4 of Council Regulation No 4064/89

1. On 27 February 2001 the Commission received a notification pursuant to Article 4 of Council Regulation 4064/89 ("the Merger Regulation")<sup>1</sup>, by which the Finnish undertaking Outokumpu Oyj ("Outokumpu") will acquire the Norwegian undertaking Norzink S.A. ("Norzink"). Norzink is jointly owned by the British Rio Tinto Investments Ltd ("Rio Tinto") and by the Swedish/Canadian Boliden Mineral AB ("Boliden Mineral"). Both undertakings will sell all of their Norzink shares to Outokumpu.
2. After examining the notification, the Commission has concluded that the notified operation falls within the scope of the Merger Regulation and does not raise any serious doubts as to its compatibility with the common market and with the EEA agreement.

**I. THE PARTIES AND THE OPERATION**

3. Outokumpu is a diversified metals group focusing on metals production and fabrication. Activities of Outokumpu range from mining and the production of various metal products including zinc and stainless steel to the global marketing of metals. Outokumpu is a public company quoted on the Helsinki Stock Exchange. Outokumpu Zinc B.V., a 100% owned

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<sup>1</sup> Council Regulation (EEC) No 4064/89 - OJ L 395/1, 30.12.1989; corrected version OJ L 257/13 of 21.9.1990, as last amended by Regulation (EC) No 1310/97, OJ L 180/1, 9.7.1997, corrigendum in OJ L 40/17, 13.2.1998.

subsidiary of Outokumpu, runs all of Outokumpu's zinc operations. Besides its two mines producing zinc concentrate, the Tara Mine in Ireland and the Pyhäsalmi Mine in Finland, Outokumpu's zinc operations consist of a single zinc production plant located in Kokkola, Finland. Norzinc, which has no mining activities, operates a single production plant located in Odda, Norway.

## II. COMMUNITY DIMENSION

4. The combined aggregate world-wide turnover of the undertakings concerned exceeded EUR 2,500 million in 2000 (Outokumpu €3,693 million, Norzinc €197.7 million). In each of three Member States, the combined aggregated turnover of the undertakings was more than EUR 100 million in 2000 (Germany, the UK, and Sweden). In each of these three Member States, the aggregated turnover of each of the undertakings was more than EUR 25 million in 2000. The aggregated Community-wide turnover of each of the two undertakings was more than EUR 100 million in 2000 (Outokumpu €2,055, Norzinc €186.5 million). The operation therefore has a Community dimension.

## III. COMPETITIVE ASSESSMENT

5. The parties' activities overlap in the production of zinc. There are basically three levels of zinc production: the mining of ore, the processing/treatment of the ore to produce zinc concentrate, and the refining of the zinc concentrate into zinc metal. The transaction affects this last level.

### **Relevant product market**

6. There exist different grades of zinc. In particular, there are five commercially traded grades of zinc: SHG (special high grade, 99.995% pure), CGG (continuous galvanising grade), DCA (die casting alloys), HG (high-grade zinc, 99.95% pure), GOB (good ordinary brand, 98.5% pure). Two main refining processes, the electrolytic process ("EP") and the imperial smelting process ("ISP"), convert zinc concentrate into different grades of zinc. All grades except GOB<sup>2</sup> can be produced through the EP method, although the HG grade is normally produced through ISP; SHG can also be produced through ISP if the ISP facility is equipped with distillation columns. Overlaps occur in SHG, CGG, GOB, and DCA as Outokumpu does not currently produce HG zinc.
7. The parties consider that all grades of zinc belong to the same product market in particular due to the strong price correlation between the different grades of zinc. The transaction prices for a particular zinc grade are determined by two principal elements: i) a benchmark price based on SHG grade determined on the London Metal Exchange ("LME"); ii) a premium reflecting the particular grade and the commercial terms of the sales (payment and delivery terms, credit risk). Indeed, the fact that all grade prices are based on a common element, the LME quotation for SHG, automatically causes a high degree of correlation between the different grades of zinc. However, this is not a conclusive proof that all types of grades are part of the same product market.
8. Demand-side. From a demand side point of view, each grade of zinc has slightly different properties due to their respective purity characteristics. The end use applications for SHG are zinc alloying, brass manufacturing, and electrolytic galvanising. CGG is principally

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<sup>2</sup> The GOB grade is only produced by ISP.

used for continuous galvanising, DCA zinc is primarily used in the casting industry to produce various metal objects. There appears to be limited demand-side substitutability between the different zinc grades.

9. Supply-side. Nevertheless, the market investigation has confirmed that the different relevant grades of zinc are SHG or SHG based. CGG and DCA respectively are produced from SHG to which one or more alloying elements have been added for use in continuous galvanising processes and in casting through an alloy furnace in final stages. As the installation of a furnace is not an excessive addition to the costs, the Commission considers that SGH, CGG, and DCA are highly substitutable from a supply-side point of view.<sup>3</sup> With regard to GOB, GOB is an intermediate product of the ISP method with minor merchant sales that is subsequently further purified in particular into SHG through the use of distillation columns. Furthermore, the parties have estimated that 87% of all zinc grades produced in the EEA are SHG or SHG based.
10. Therefore, given that no competitive concerns arise under any possible product market definition, the question whether different grades of zinc belong to the same product market can be left open.

### **Relevant geographic market**

11. Zinc contracts throughout the world refer to the LME quotation for SHG grade - as the main element in the transaction price. This is one of the parties' main arguments for their submission that the relevant geographic market for zinc grades is world-wide. Indeed, the variation in zinc prices between the three major consuming regions (Europe, US, Far East) was almost always less than 10% for 1994 to 1999. There are no significant trade barriers on a world-wide level.
12. However, only 13% and 10% of the imports in the EEA and in the US respectively are from other parts of the world. On that basis, and due to the nature of the product which incurs non-negligible haulage and freight costs the Commission considers that the relevant geographic market is the EEA. This conclusion has been highly confirmed by the market investigation.

### **Assessment**

#### **Single dominance**

13. The parties combined market share is [10-20 %] (Outokumpu: [5-15 %]; Norzink: [0-10 %]) at EEA level. The parties would face competition principally from the two market leaders Glencore ([25-30 %]), and Union Minière ([15-25 %]). The existence of such powerful competitors, coupled with Outokumpu and Norzink's capacity constraints at both plants (Kokkola and Odda's capacity utilisation rates are respectively [90-100 %] and [90-100 %] in 2000) and a 13% level of imports into the EEA, rules out the risk of single dominance.

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<sup>3</sup> Note that if the Commission were to consider overlaps into the HG grade, conclusions would be the same as HG grade produced by the ISP process can be further purified into SGH grade (i.e. through metal distillation "purification towers").

14. This assessment would not change if the five different zinc categories were assessed separately.

### **Collective dominance**

15. There is a risk that the transaction could lead to the creation of an oligopoly, with the top three players accounting for [more than 60 %] of the zinc grade market at EEA level: the merging parties ([10-20 %]), Glencore ([25-30 %]), and Union Minière ([15-25 %]). Other players are principally MIM ([5-15 %]), Budel ([5-15 %]), Datteln ([< 10 %]), Espanola ([< 10 %]), and Enirisorce ([< 10 %]). Such fringe operators, however, do not constitute substantial competitive pressure for the oligopolists. Basically because they operate at full capacities and do not plan to increase its in the next years limiting thus they ability to serve additional quantities in the market.
16. A number of market characteristics would appear conducive to a co-ordinated outcome:
- entry barriers are high: the zinc production industry has the characteristics of a sunk costs industry as fixed costs represent in average 60-70% of the total costs; and,
  - demand growth perspectives are limited (forecast : 2-3% for the next five years).
17. However, the Commission's market investigation has pointed out various elements explained below that weaken the likelihood of a collective dominance position *post-merger*. These are:
- the LME pricing mechanism and its inherent high degree of market liquidity, transaction prices for zinc grades cannot be subsequently manipulated; in addition,
  - an asymmetric market structure in particular in terms of organisation, cost structures, and range of products offered;
  - all players are running their plant at or close to full capacity.. Capacity constraints affect tacit co-ordination principally because in the absence of excess capacity, firms cannot impose a very impressive threat for retaliation on potential deviators.
  - end-users enjoy a non-negligible bargaining power.

### **Transaction prices**

18. Transaction prices for zinc are determined by a benchmark price referring to the LME quotation for SHG and a premium. The LME can be considered as a future market providing hedging facilities, whereas the premium is spot. A joint price increase would require that either the oligopolists are able to alter the prices resulting from the LME mechanism or the premium.
19. Daily LME quotations are the result of matching the intentions of buyers and sellers through supply and demand of zinc and fund and institutional investors clearly multiply those initial transactions. Indeed, the market investigation has highly confirmed that such high market liquidity prevents any manipulations of the LME mechanism by zinc suppliers (neither individually nor collectively).
20. There could also be a risk that zinc suppliers would raise the premium. However, the LME price is by far most dominating part of the final prices of the different grades. The

LME represents in average 90% of the final price whereas premium of the different grades represents 10% of the final prices (except for the DCA grade where the premium represents 20%): LME price moves in a band between 1000-1200\$/mt; SHG premium is [70-100] \$/mt; CGG premium is [100-145] \$/mt; DCA premium is [190-260] \$/mt.<sup>4</sup> Furthermore, the premium is normally renegotiable one-year contracts. Clearly, short-term contracts prevent the oligopolists to sustain any co-ordinated outcome over time as the premium part can be implicitly renegotiated. In conclusion, it can be ruled out that the final transaction prices can be manipulated.

#### Asymmetric players

21. Asymmetric costs. The zinc suppliers have considerable different cost structures: for example concerning energy costs, the parties are low-cost players (Glencore and Union Minière's costs are respectively [40-50] %, and [20-30] % higher). In terms of labour, the parties and Union Minière have symmetric costs while Glencore has much higher costs (up to 50%). Asymmetric cost structures decrease the market players' incentives to co-ordinate as some players will face strong incentives to undercut their rivals, making a co-ordinated outcome less likely.
22. Asymmetric range of product offered. The parties offer a range of homogeneous products (basic zinc grades) while Union Minière and Glencore offer a range of different products.
23. Asymmetric organisation. The parties and Glencore are vertically integrated players with upstream mining and processing facilities while custom smelters, such as Union Minière, have no such upstream integration. Union Minière, on the other hand, is more vertically integrated downstream to produce higher value added products (zinc sheets, gutters and oxides). With regard to production structures the parties would be concentrated into two sites, whereas Union Minière and Glencore were created by consolidation and therefore produce at a number of separate sites.

#### Absence of credible retaliation mechanisms

24. Usually, zinc producers run their facilities close to full capacity (more than 97% in average in 2000). In commodity industries such as zinc production, excess capacity usually could be a non-negligible tool in disciplining oligopoly members. However, excess capacity, one of the factors generally considered by the Commission to be conducive to a co-ordinated outcome in oligopoly markets, is absent here. Indeed, if a member of an oligopoly runs its plant close to full capacity retaliation (an increase in output and the prospect of a price war) is normally not a credible threat towards the other oligopolists.
25. It should be noted that significant additions of capacity are planned in the EEA. Planned increases are for the parties [...] kt (Outokumpu: [...] kt; Norzink: [...] kt), Glencore ([...] kt), and Union Minière ([...] kt).<sup>5</sup> These capacity additions will not facilitate a co-ordinated behaviour. Firstly, because these new capacities will come into large lumps that will potentially disturb any co-ordinated outcome (if it were to occur). Secondly, if

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<sup>4</sup> All prices are average prices.

<sup>5</sup> Source: [...]

this forecasts holds the market shares in terms of total capacities<sup>6</sup> would amount to [20-30] % for the parties (Outokumpu: [5-15] %; Norzink: [10-20] %), Glencore ([25-35] %), and Union Minière ([15-25] %) at the EEA level. Asymmetric capacities among the oligopolists would reduce the risk of co-ordination over time. Principally because an increase in the asymmetries of firms' capacities exacerbates the largest firm's incentive to deviate and thus always tends to limit co-ordination.

### Powerful buyers

26. The main end-users are the construction and the automobile industry, and for a small part the industrial machinery industries. The largest customers can principally be divided into galvanisers, brass industry, and zinc base alloys. The market investigation has confirmed that very powerful buyers dominate the demand-side. Indeed Outokumpu and Norzink's top five customers' shares represent in the year 2000 respectively [50-60] % and [35-45] % of their total quantities of zinc sold. This increasing trend to a greater concentration of the demand side has been confirmed over the last five years. In this sense, end-users can be considered to have considerable bargaining power.
27. Furthermore, for reasons of security of supply and in order to minimise risk and costs, some customers, described as "sophisticated", have developed a strategy of dual-sourcing. However, in practice some smaller customers have a single source of supply. This means that, if zinc producers were able to price-discriminate between the sophisticated customers and the non-sophisticated ones, they could profitably raise prices with regard to the latter. However, the nature of the zinc transaction prices and the nature of the market make a certain arbitrage possible and limit, therefore, the likelihood of such price-discrimination.
28. This assessment would not change if the five different zinc categories were assessed separately.

### Vertical issues

29. The transaction raises vertical issues. Outokumpu (but not Norzink) is a producer of zinc concentrate. The zinc concentrate is ultimately supplied to zinc producers. However, Outokumpu's supply accounts for approximately [5-15] % of Norzink's total concentrate consumption. As both Outokumpu and Norzink represent less than [5-15] % of the total demand, the risk of foreclosure is therefore limited as a result of the proposed transaction.
30. For all the reasons set out above, it can be concluded that the proposed transaction will not result in conditions that would lead to the creation of a collective dominant position.

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<sup>6</sup> Current plus planned capacities knowing that current capacities are close to current productions.

#### **IV. CONCLUSION**

31. 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 (EEC) No 4064/89.

For the Commission,