
Arcelor SA / Corus Group plc merger inquiry

Market questionnaire

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The following questions relate to Corus's hot rolled steel sheet piling business before the merger.

A. General information - Corus's business

1. Please provide details of (i) the volume of annual hot-rolled steel sheet piling (“HRSSP”) previously produced at Corus's Scunthorpe heavy section mill (“HSM”), (ii) the proportion of this mill's total output accounted for by this HRSSP production, (iii) details of any other products produced at this mill, (iv) the value of annual HRSSP sales, and (v) annual capacity data for the Scunthorpe HSM over the last five years. (Where the capacity for producing HRSSP is less than the mill's total capacity, please provide details.) If any proportion of Corus's production of each of the relevant HRSSP products was used by Corus itself, please differentiate between net production and sales (i.e. excluding in house use) and gross production and sales in the data you provide.

The response to (i), (ii) and (iv) is set out in the following table. A small proportion of Corus' production in 2002 to 2004 was sold in-house to Corus' hydrobarrier business.

Year	Volume of HRSSP produced / kt	HRSSP production as a proportion of mill's total output / %	Value of annual HRSSP sales / £ million	In-house sales / £ million
2000	[..]	[..]	[..]	[..]
2001	[..]	[..]	[..]	[..]
2002	[..]	[..]	[..]	[..]
2003	[..]	[..]	[..]	[..]
2004	[..]	[..]	[..]	[..]

Figures do not include traded piling. **[ALL FIGURES DELETED AS CONFIDENTIAL]**

The other products produced at the HSM were:

- Universal beams (from 254x146 to 457x191);
- Universal columns (203x203 and 305x305);
- Parallel flange channels (from 300 to 430);
- HE (from 180 to 300);
- IPE (From 300 to 450); and
- Special sections **[CONFIDENTIAL]**.

It should be noted that at the time of closure only two “specials” **[CONFIDENTIAL]** had not been transferred to other mills as part of the plan to close the HSM.

Over the last five years, the theoretical annual capacity of the HSM was 408 kt (based on 21 shift working for 48 weeks). This calculation is based on an assumed mix of

products (i.e. sections and piling) with 100% availability and makes no allowance for planned “down shifts” for maintenance. However, actual production was significantly below the theoretical ceiling. As a result, in 2003 the level of shift working was reduced to 15 shifts a week and in 2004 this was further reduced to 10 shifts a week.

2. *How frequently (in terms of shifts per month) did Corus roll HRSSP on the Scunthorpe HSM and how frequently did it roll other products? How many shifts per month were potentially available but unused? Where are the other products now produced following the closure of the Scunthorpe HSM?*

The following table sets out the average total number of shifts per week that were worked from 2000 to 2004 at the HSM and the average number of those that were used to roll HRSSP.

Year	Average total shifts worked (excluding holidays) / <u>per week</u>	Average shifts worked on HRSSP / <u>per week</u>
2000	19.7	8
2001	19.7	9
2002	18.7	10
2003	12.7	9
2004	9.0	8

In 2000 to 2002 the mill was working a full shift pattern so all shifts not used to roll HRSSP (i.e. used to roll sections) were theoretically available for piling, subject to operational requirements on the build up of rolls. From 2003 the level of shift working was reduced from 21 to 15 shifts a week and in 2004 this was further reduced to 10 shifts a week.

Following the closure of the Scunthorpe HSM, the other products produced there are now produced either at the Medium Section Mill (“**MSM**”) or the Teesside Beam Mill (“**TBM**”). At the time the HSM closed the only two sections other than piling that the mill rolled were **[CONFIDENTIAL]**.

3. (a) *Why did Arcelor not wish to purchase the heavy section mill and other HRSSP production facilities at Corus's Scunthorpe works?*

This question should be directed to Arcelor. We assume the answer would relate to sufficient spare capacity on their mill (see response to question 19).

- (b) *What problems, if any, did these production facilities have?*

The HSM was identified as being uncompetitive in terms of its conversion cost to transform semi-finished slab or bloom into a finished piles and sections and as such Corus had more profitable routes for the finite amounts of available

steel. For further details, see the response to question 6 of the financial questionnaire.

- (c) *What problems, if any, did Corus have with its range of HRSSP products?*

The HSM, unlike its major competitors, was unable to produce a wide Zed type pile. Wide Zeds give substantial benefits to the customer (e.g. fewer piles to drive for a given length of wall) and the trend in the market was towards wider piles. Without the ability to produce wide Zeds Corus was not in a position to compete with the European suppliers. For further details, see the response to question 6 of the financial questionnaire.

- (d) *Were any of these problems specific to Corus, or were they symptomatic of problems in the HRSSP sector in the UK and European reference areas generally?*

These problems were specific to the HSM, although the two Eastern EU mills also have a poorer range than Arcelor and Salzgitter.

4. (a) *Please outline briefly Corus's strategy for developing steel production at Scunthorpe and explain how and where this steel will be used. How does this strategy relate to Corus's plans for the future of steelmaking at Teesside and of long-product production at Teesside, Scunthorpe, Workington, Hayange and elsewhere?*

Corus' UK Restructuring plan that was announced in March 2003 identified that steelmaking sites in the UK would be reduced from five to three, with Stocksbridge closing and Teesside being established as a merchant slab producer. [Annex 1](#) provides an outline of the investment programme that was identified for Scunthorpe to increase liquid steel production by 0.6mt to 4.5mt/year.

Capital investment proposals for the third ladle furnace, the transfer of the ex-Llanwern degasser and the additional bloom slow-cooling pens are now approved and the equipment will all be commissioned during 2005. There has been some revision to the blast furnace reline programme at Scunthorpe because raw material shortages precluded the re-lighting of the fourth furnace during 2004. Currently, it is planned [CONFIDENTIAL].

- (b) *Please provide a production flow chart for the Scunthorpe works and associated mills for the previous year and also as projected following the closure of the Scunthorpe HSM.*

[Annex 2](#) sets out, in flowchart form, planned activity levels of Corus' long products facilities and the transfer of semi finished products between plants for:

- Annual Plan 2004;

- 2005 (assuming the first blast furnace reline starts in September);

[CONFIDENTIAL].

5. *Would it be technically feasible for Corus to resume production of HRSSP using the Lackenby Beam Mill, the Scunthorpe Medium Section Mill or any other section mill? If so, what would be involved and roughly how much capital investment would be required? Would any investment in steelmaking capacity be needed to supply such an investment?*

It would be technically feasible for Corus to resume production of HRSSP at the Lackenby Beam Mill, but not at the MSM as its mill housings are too small. As to what would be involved and roughly how much capital investment would be required, please see the response to question 6 of the financial questionnaire. No investment in steelmaking capacity would be needed to supply such an investment.

B. The market(s)

6. (a) *Are there any alternative products or services, besides HRSSP products, which your customers might reasonably have used in place of HRSSP products? Please provide evidence.*

Broadly customers for HRSSP fall into two categories:

- (i) *Stockholders:* These, by the nature of their business, would not have any choice.
- (ii) *End Users:* These customers have a choice of system to install depending on specific site conditions. HRSSP competes with concrete, in situ or precast, brick and blocks, gabions, timber, geotextiles, and plastics.

- (b) *Do such alternatives effectively compete with HRSSP products? Please provide evidence.*

Yes. See attached extracts from independent market research which addresses shares for the different alternatives (Annex 3). Corus respectfully suggest that the Commission seek further amplification on this point from Arcelor, who now employ Corus' technical experts in this area

- (c) *Are particular alternatives suitable mainly for certain applications? If so, please explain why.*

Once again, Corus has transferred its technical experts to Arcelor and respectfully suggests that they be contacted to provide a comprehensive response to this point.

- (d) *Did Corus, or any of its competitors in HRSSP products, produce any of these alternatives? If so, please provide details.*

No.

7. *How price sensitive were your customers? Please provide us with any information you have on the price elasticity of demand for HRSSP products (both the price elasticity of demand previously facing Corus and the price elasticity of demand in the market generally), and cross-price elasticities with related products.*

Customers were very price sensitive. In many projects HRSSP is a high percentage of the total project cost so the price of piling component would be scrutinised closely. This is supported by independent attitudinal research (see [Annex 4](#)).

No specific work has been done to model price elasticity of HRSSP.

8. (a) *If you had increased the price of HRSSP products to your customers by 5 per cent, what might they have done? Please explain your reasoning.*

The answer to this is very much shaped by the nature of the required product and usage.

- *Commodity size/length/grade/quantity:* customers would always seek competitive offers from other mills and stockholders.
- *Non-standard size/length/grade/quantity:* customers would seek a benchmark offer from competing mills.

- (b) *If the prices of HRSSP from ALL producers had increased by 5 per cent, what might customers have done? Please explain your reasoning.*

Sheet pile installers would seek as always to mitigate such increases by using lean design solutions. The end client would look at the competitive position of alternative solutions (e.g. concrete).

- (c) *By how much would your sales have had to reduce in order for such a 5 per cent price rise to have been unprofitable? Please explain your reasoning.*

Increasing prices at the cost of UK sales is a difficult scenario to model as to load the mill to nominal capacity export business would need to be recruited, which [CONFIDENTIAL].

9. (a) *Please provide details of any other companies that might be able easily to switch to, or start up in, the production of HRSSP (e.g. manufacturers of other long carbon steel products not currently producing HRSSP products).*

It would not be an easy task to start up in the manufacture of HRSSP. It would technically be feasible to switch production on a heavy section mill with investment (see below).

- (b) *How easy would it be from a technological standpoint for such companies to change to the supply of HRSSP products (e.g. what new equipment, if any, would be needed)?*

If the company already had an HSM (such as Corus' Lackenby Beam Mill) then additional mill housing stands and roll sets would be required, with the need for these to be inserted into an existing layout. There would be a consequent loss of production (revenue) during installation. If the company did not have an HSM then changing another facility to supply HRSSP would not be possible. See answer to question 6 of the financial questionnaire for information on Corus' examination of the possibility of producing piling at the TBM.

- (c) *For each company, please illustrate the changes that they would need to make in order to switch to, or start up in, the supply of HRSSP products.*

Corus does not have such information available.

- (d) *Please provide an estimate of the likely cost to each company of making such a switch to, or of starting up in, the production of HRSSP products.*

Not applicable.

- (e) *How would you expect the profitability of producing HRSSP products to compare to the profitability of each company's existing product range?*

Not applicable.

- (f) *How much would the price charged for HRSSP products have to rise for these companies to switch/start up?*

Not applicable.

- (g) *Given the factors in parts (b) to (f), for each company, please outline how likely you feel it is that they will begin supplying HRSSP products in the next year or so.*

Corus cannot identify any companies who will begin supplying HRSSP products in the next year or so.

Please provide reasoning for your answers.

10. (a) *Specifically please provide details of Corus's ability to convert other Heavy Section Mills currently in operation so that they are capable of producing HRSSP.*

Please see response to question 6 of the financial questionnaire.

- (b) *What level of Investment if any would be required? Please provide us with any feasibility studies that you have carried out in this regard.*

Please see response to question 6 of the financial questionnaire.

11. (a) *Please provide an account of the nature and extent of competition in the supply of HRSSP products in the UK and European reference areas pre merger (e.g. is there any customer loyalty?). In particular, what is the basis of competition in this sector? Is there any product differentiation within HRSSP products (e.g. by quality or product type) or is all competition cost driven? Is there significant competition on the basis of service and delivery?*

Competitors: The following sheet piling producers imported sheet piles into the UK market and provided the main competition in the European reference areas pre-merger:

- Arcelor (Luxembourg);
- Salzgitter HSP (Germany);
- Vitkovice (Czech Republic);
- Huta Katowice (Poland);
- NKK (Japan) – mainly UK market; and
- Inchon/Kangwon (Korea) – mainly in rest of Europe.

Annex 5 shows the extent of competition within other key European markets.

Annex 6 shows the nature and extent of competition within the UK market pre-merger.

It is important to consider the routes to market in the UK. 79% of imports were purchased via Stockholders with the remainder being purchased by a small number of Piling Contractors. In the most part, therefore, Corus was not directly competing with the producer but rather with the company that had purchased the imported material.

Corus competed very much on service in the UK market. Being the domestic producer it was easier for Corus to phase deliveries to site, a facility only the UK stockholders could emulate. Overseas producers find the logistics much more difficult so that without the domestic mill the producing mills are now on a more level playing field.

There were no direct imports via Poland, but it is believed that they could have been traded via the Netherlands. [CONFIDENTIAL] was offering Polish piles in the early part of 2004.

[CONFIDENTIAL] purchased Japanese piles during 2002, but no further imports have been received since then.

Customer Loyalty: Annex 7 shows Corus' share of new tonnage bought in 2002 and 2003 for key UK HRSSP players.

Competitive Pressures: During 2003, competitive pressure was mainly on price to win orders. During 2004, the dynamics changed slightly, wide piles were becoming increasingly popular in the market – either specified at the beginning of a project; or re-specified after the bidding process. Corus did not have a wide U or Zed pile to compete on these projects. Eastern European and Far Eastern sheet piling is in a limited range and mainly competes on price. As mentioned above, service plays a significant role in the UK.

- (b) *Please describe the extent to which Corus and Arcelor competed directly for customers. How far did Corus and Arcelor target each other's customers to win business? Please provide information and examples of customer switching to support your answer. Please also provide details of significant contracts for the supply of HRSSP products won and lost over the last two years (i.e. product, customer, volume and value won/lost and to/from whom) and the reasons for these changes, e.g. price, security of supply).*

Annexes 8, 9 and 10 illustrate Corus' tracking of "lost orders" (i.e. orders, which were not supplied mill direct from Corus) for the periods 2002 to 2004 (April).

Where possible the information shows who supplied the order (generally a Stockholder or a Piling Contractor) and who the original producer of the sheet piling was (where known).

Please note data was only captured on these sheets if the information was available and therefore not all lost business is captured.

C. Pricing

12. *Please provide a copy of the last price list for HRSSP products published under the ECSC regime or of the most recent price list if Corus continued to publish price lists voluntarily.*

See Annex 11.

13. *Please provide details of all tenders for HRSSP products in the UK and European reference areas that you have bid for in the last three years. Please give details of (i) the awarding authority/customer (including any relevant reference number, e.g. invoice number, OJEC tender), (ii) the tender date and the award date, (iii) the awarding procedure (e.g. open tender, restricted tender, bilateral negotiation) [Note: a restricted tender is an open tender among a pre-selected group of suppliers], (iv) the incumbent supplier at the time of the tender, (v) the tender details (e.g. product specification, quantity, length of contract, delivery time, intended use, whether the tender was*

subdivided into lots and, if so, how many), (vi) the value of the winning bid and whether it was the lowest bid, (vii) the number of competing bidders and their identities (if the tender was subdivided into lots, please indicate which competing bidders tendered for which lots), (viii) the cost to Corus of supplying the product(s) tendered for.

Since Corus exited the piling business and lost the staff who kept the historical information requested here, our ability to reply in the detail required is limited. Please find attached lists of UK enquiries and, as an example, a spreadsheet covering German enquiries (see [Annex 12](#)).

Formal supply agreements were only in place with [CONFIDENTIAL]. Details of competing suppliers and their prices have been treated confidentially by these agencies.

14. (a) *Were customers ever offered better prices - or were tender prices reduced - if they ordered solely from Corus?*

No.

- (b) *Could customers have negotiated better prices by buying more than one type of product (i.e. more than one type of HRSSP product, or some combination of HRSSP and other products)?*

In agreeing quarterly stockholder prices the traditional product/size mix was taken into account. Projects were priced as stated above.

Attached is the last pricing matrix for the UK market which illustrates by product the variations by customer and customer type (see [Annex 13](#)).

15. (a) *Please outline how you previously set prices for HRSSP products (e.g. what were the main factors, such as costs, that you consider when setting prices?).*

In deciding on the Corus UK pricing policy all "typical" influences such as manufacturing cost, competitor positions on HRSSP, alternative solutions, current demand and exchange rates were taken into account.

- (b) *Were there any additional costs added to the sales price, such as transport or insurance? If so, please provide details.*

Typically prices agreed were all inclusive delivered to site.

- (c) *Did you have list prices and, if so, were these published? If so, please provide details and price histories for each relevant HRSSP product in the UK and European reference areas in the last five years.*

The last published price list was dated March 1998 and is attached with price histories at [Annex 11](#). In practice, prices tended to be negotiated on the basis of so-called "desk prices", which were below list prices.

- (d) *What discretion was there in price setting? Were individual prices negotiated with customers? If so, please describe. (For example, which staff were involved in negotiations? Over which aspects of the contract were staff able to negotiate, e.g. just price? How were base prices determined? What were the procedures for negotiation, e.g. what triggered referral to a higher negotiating authority? How were staff incentivized in negotiations, e.g. commission? What information was available to staff involved in negotiations?)*

Most negotiations were by way of informal tender for projects with a number of suppliers quoting. For stockholders there would be quarterly supply negotiations taking into account demand, exchange rates and spot prices. The piling sales team had authority to negotiate business up to a prescribed value and period, as laid down in Corus' Authority to Commit document, depending on their managerial level (see [Annex 14](#)). Each negotiation would vary with the buyer, the competitive position, the mix of product and service required and so on. Sales staff were not paid on a commission basis.

- (e) *Were prices transparent?*

Corus prices were not transparent to competitors.

- (f) *How did Corus's prices compare to your competitors'? Please quantify the differences for a typical UK customer's order.*

As the domestic supplier, Corus generally commanded a price premium, particularly for project business where added value and better service components gave Corus differentiation.

- (g) *Please provide data to indicate the degree of price variation for Corus's former customers for each relevant HRSSP product.*

See [Annex 13](#).

- (h) *In general, were there any customers or groups of customers who paid more or less than typical prices? If so, please describe the characteristics of these customers (e.g. smaller customers, customers on short contracts, customers using particular hot-rolled steel sheet piling for particular applications, customers in particular locations).*

In general for stockholders there would be a maximum difference of **[CONFIDENTIAL]**/tonne depending on volume, product mix and location. For projects where several contractors were competing Corus would offer the same price to all to give them a level playing field to compete on. Price would depend on the size of the project and the product and service levels required.

16. *Please provide data on average prices for each relevant HRSSP product over the last five years for the UK and European reference areas. Please provide this data at the highest frequency possible (e.g. weekly, monthly).*

See [Annex 15](#).

D. Customers

17. Please provide, in order of importance, a list of all customers for HRSSP products in the UK and European reference areas, and the volume and value over the past five years of HRSSP products purchased by each.

See Annex 16.

18. Did any of your customers possess buyer power? Explain your answer and provide evidence to support it, including details of the basis of any buyer power.

Large stockholder accounts tended to possess the greatest purchasing power due to the volume of standard size/lengths they purchased, coupled to the reduced service levels required compared to direct project business. Historically stockholders would buy at a price £[CONFIDENTIAL] below direct project supply albeit the product offering and service levels varied dramatically.

E. Production

19. (a) Please provide details of total HRSSP production capacity in the UK and European reference areas for the last five years, split by types of relevant HRSSP products.

Corus' details are contained in response to question 1, there are no other producers in the UK. Current estimates for total theoretical maximum annual piling capacity and current share utilised of that capacity for other producers are:

Producer	Maximum annual capacity / kt	Current HRSSP share / %	Assumptions
Arcelor	550	76	New section mill releases full piling potential of Esch mill in 2005. With Capex they plan to go to [CONFIDENTIAL]kt.
Salzgitter (HSP)	400	45	Mill has been operating well below its potential. Assumes 50kt other products still in mill.
Ispat Polska	600	13	Assumes c.400kt rail and heavy sections still produced. Big potential to increase piling production.
Vitkovice	140	50	Assumes no sections production.
Total	1690	44	EU(25) demand c.650kt.

It is not relevant to split by HRSSP products as this does not define capacity.

- (b) *What proportion of total heavy- and medium-section mill capacity did HRSSP capacity account for in each of the last five years?*

As Shelton mill was closed and HSM deshifted the proportion represented by HRSSP fell from 10% in 2000 to 6% in 2004.

- (c) *Please provide details of share of capacity in the UK and European reference areas for all companies involved in the supply of HRSSP products for the last five years, split between all relevant product categories.*

See table above.

20. (a) *Please outline the production facilities at each Corus mill producing heavy- and medium-section mill products and explain any limitations these impose on each mill's ability to produce HRSSP products.*

Corus has two mills in this category, the MSM at Scunthorpe and the TBM at Lackenby. The MSM was laid down in 1973 and uprated in 1985. It is physically too small in terms of its mill stand housings to manufacture HRSSP of any useful size (width) (see question 5). It takes a mixture of bloom and billet semi finished steel and rolls them to a wide range of products: Universal beams, Universal columns, Angles, parallel flanged channels and joists.

The TBM was laid down in 1958 with a major upgrade in 1991. It has the capability to produce much larger sections (Universal beams, columns and PFCs) up to over 1 metre in height. Its limitations in regard to production of HRSSP are covered in the answer to question 6 of the financial questionnaire.

Annex 17 shows the full range of sizes produced for the UK market with the prefix denoting the producing mill.

- (b) *Do you have any plans to develop these mills within the next three years? If so, what effect do you expect this development to have on each mill's capacity to produce HRSSP products?*

None of the developments planned for the next 3 years alters either mills capability to produce HRSSP.

21. (a) *Please outline the different categories of your costs which you incurred in the supply of HRSSP products in the UK and European reference areas.*

- (b) *Please provide an indication of the level of each category of cost.*

Steel supplied into HRSSP was manufactured at the integrated iron and steelmaking facility at Scunthorpe. The costs incurred in the process of converting raw materials (iron ores, coals, alloys) to finished HRSSP are shown in the following table.

Classification of rolled through cost	%
Raw materials	[..]
Operating cost	
Energy	[..]
Production labour	[..]
Loose plant and tools	[..]
Operating supplies	[..]
Maintenance labour / workshops	[..]
Maintenance spares / repairs	[..]
Refractories	[..]
Hire costs	[..]
Testing costs	[..]
IT costs	[..]
Infrastructure / functions / UBR	[..]
Depreciation	[..]
Manufactured cost	100

[ALL FIGURES DELETED AS CONFIDENTIAL]

- (c) Which of these costs are fixed in the short term (a year) and which vary according to the level of production?

Corus UK uses a standard costing system in its manufacturing units. This costing system defines both categories and classification of cost. Of the rolled through cost from raw materials to finished HRSSP c.[CONFIDENTIAL]% is variable with production, c.[CONFIDENTIAL]% is fixed in the short term (i.e. a year) and c.[CONFIDENTIAL]% represents depreciation of fixed assets. The table shows the classification in more detail.

Classification of rolled through cost	Variable / %	Fixed / %	Depreciation / %	Total / %
Materials	[..]	[..]	[..]	[..]
Operating cost				
Energy	[..]	[..]	[..]	[..]
Production labour	[..]	[..]	[..]	[..]
Loose plant and tools	[..]	[..]	[..]	[..]
Operating supplies	[..]	[..]	[..]	[..]
Maintenance labour / workshops	[..]	[..]	[..]	[..]

Classification of rolled through cost	Variable / %	Fixed / %	Depreciation / %	Total / %
Maintenance spares / repairs	[..]	[..]	[..]	[..]
Refractories	[..]	[..]	[..]	[..]
Hire costs	[..]	[..]	[..]	[..]
Testing costs	[..]	[..]	[..]	[..]
IT costs	[..]	[..]	[..]	[..]
Infrastructure / functions / UBR	[..]	[..]	[..]	[..]
Depreciation	[..]	[..]	[..]	[..]
Total cost	[..]	[..]	[..]	100

[ALL FIGURES DELETED AS CONFIDENTIAL]

- (d) *Please provide details of gross and net margins for sales of the relevant types of HRSSP products for each of your steelworks. How did these margins compare to the margins Corus makes on sales of other heavy- and medium-section mill products? How do you think that they compared to your competitors' margins?*

In the Corus UK management accounting system, margins are struck against a combination of full standard manufactured cost (comprising costs which can be written into stock in UKGAAP), head office overhead and costs of commercial activity and contributions are struck against variable manufactured cost. The table below shows for fiscal year 2003 and H1 2004 a comparison of volumes, revenues, contributions and margins for both HRSSP and other heavy and MSM products.

[ALL FIGURES DELETED AS CONFIDENTIAL]

Corus believes that the rolled through cost of HRSSP at Scunthorpe is higher than that for Arcelor and would be potentially higher than that for Salzgitter if its mill were to approach full utilisation. In addition both these competitors enjoy lower distribution costs in mainland Europe. It follows that Corus believes its future margins would be lower than those of competitors.

22. *Please outline the reasons for the high production costs at the Scunthorpe HSM compared with other Corus heavy and medium section mills. Could it have been made more competitive by further investment? If so, roughly how much would this have cost?*

The Scunthorpe HSM was inefficient and hence expensive in comparison to the other Corus heavy and medium section mills because:

- (i) It required the four cross-country piling stands to convert a bloom into a “beam blank” prior to entry into the beam mill. Other mills achieve “beam blank” production through a single cogging stand. Consequently at the HSM this operation had a comparatively lower rolling rate (throughput tonnes/hour) and with three times more likelihood to encounter a rolling problem, the activity had lower availability.
- (ii) There were only two mill motors driving the four beam blank stands. This further reduced the number of bars which could be rolled without overloading power on the stands.
- (iii) Bar temperature was an issue because of the prolonged processing time from extra stands, leading to cobbles and shape control problems, impacting on yield.
- (iv) Using the four stands to produce a beam blank increased both roll costs [CONFIDENTIAL] and required higher roll stocks.
- (v) The time taken to change rolls was up to eight hours dependent on the sections rolled compared to [CONFIDENTIAL]. Roll changeovers involved use of wire ropes/cranes and manual set ups leading to bar tolerance issues on start up. This compromised both process availability and yield.
- (vi) Maintenance cost was high due to the increased number of stands and was exacerbated by the age of the equipment and working environment. Lubrication of rolls relied on an extensive oil/water system which caused environmental problems and was becoming an area requiring considerable effort and spend. Housekeeping, fire prevention and safety were difficult and costly issues in this area.
- (vii) The run out bar length from the stands was restricted to 65m in comparison to [CONFIDENTIAL] which again impacted on both rolling rate and yield (the bars actually went under one of the main arterial road routes into Scunthorpe). Bar manipulation into and between the stands could be difficult and was very dependent on operator experience and skill to avoid serious mill damage. The stands operated with cast "white metal bearings" which had a low life and caused lubrication blockage issues, leading to both broken rolls and restrictions to rolling rate.
- (viii) Modern close-coupled mills [CONFIDENTIAL] produce better quality because of closer bar temperature control and shape control. In the HSM, there was no auto-gauge control and manual control was achieved by two men controlling entry / output from each stand. By comparison, [CONFIDENTIAL].
- (ix) The HSM cooling bank was open to the elements and subject to variable bar cooling characteristics dependent on the weather. This impacted adversely in both availability and yield.

- (x) At HSM, sections from the stands were generally fed along composite plates, rather than a series of roller tables as in the conventional in line mills ([CONFIDENTIAL]). Plate breakages resulted in both safety bar damage and availability problems.
- (xi) Despite all the above issues, the mill was often constrained by the saws (second hand from Glengarnock). Considerable effort went into trying to increase speeds.
- (xii) The HSM was restricted to rolling a narrow beam range from 300-450mm flange length. The two remaining Corus mills can roll 90 to 300mm (MSM) and 300 to 1016mm (TBM). The HSM range was restricted and dependent on export business, which was loss making across the business cycle, to generate volume within its capability.
- (xiii) The complexity of the orderbook increased with project orders (gauge, quality, length) and export batch sizes decreased as orders became non viable. Increasing roll change and set up times made the mill even less efficient. The HSM was not designed for the complex, smaller batch sized orderbook (e.g. parallel flange sections batch size: 300 tonnes, 4 hours rolling, with 8 hours to change stands).
- (xiv) In summary, rolling rate, availability and yield at the HSM were worse than MSM and TBM. By comparison with the other mills, volume which could be economically loaded on HSM was restricted and spend and conversion cost/tonne was higher.

Against this background of design inefficiencies and movements in market requirements, the HSM could have been made more competitive by further investment, but the financial analysis made it clear that the cost of such investment was unattractive (see the response to question 8 of the financial questionnaire).

F. Barriers to entry, expansion and exit

23. (a) *Please describe all barriers to entry and barriers to exit in the supply of HRSSP products. Provide estimates of the cost involved in overcoming these barriers and relate these costs to likely future sales from entry/future savings from exit. In your answer, please explicitly consider issues such as legal or regulatory barriers, patents or know-how, licences, the importance of economies of scale and/or scope, the minimum efficient scale for a business and access to sources of supply. Also consider the role of incumbency advantages in the form of information, reputation and cost as a barrier to entry.*

Barriers to entry: Firstly a production facility is required with a supply of steel semi to feed it. To convert an existing facility producing heavy sections would cost c.£[CONFIDENTIAL]. A new 1mtpa heavy section mill making both sections and piling would cost c.£150 million before ancillary infrastructure

costs. Demand for piling is such that a new facility would be built to do more than just piling. Steel semis are readily available on the spot market.

Rather than starting from scratch a new entrant is likely to seek a manufacturing know-how agreement / licence from a company in the business where there is minimal conflict of interest.(e.g. Jindal in India with NKK Japan). The fact that a large volume of sales go through stockholders and that there is a sizeable reused piling market suggests for this segment of the market there are only low barriers to entry. There are substantial economies of scale given the high fixed costs of a mill. Minimum efficient scale is a question of throughput rather than capacity. For a facility dedicated only to piling (such as Arcelor or Salzgitter) Corus estimates that production of between 350kt and 450kt is economic.

Barriers to exit. The main barrier to exit is the social cost of making the workforce redundant and the political fall-out these redundancies would cause. Secondly any costs involved in returning the manufacturing site to a condition in which it can be reused need to be considered

- (b) *In the light of this, do you think there will be any entry into the supply of HRSSP products in the next three years? Explain the reasoning behind your answer. Similarly do you think there will be any sizeable exit in the next three years? Again, explain the reasoning behind your answer.*

Corus does not believe there will be any new entry into the supply of HRSSP in the next three years. Corus does believe, however, that with new ownership the Eastern EU mills will develop their ranges and service capabilities to become more effective competitors than in the recent past. Corus cannot identify any significant exiters

- (c) *Please list, in order of likelihood, all potential entrants to the supply of HRSSP products. Please give reasons for each.*

Corus cannot identify any specific potential entrants.

24. *What effect, if any, has the expansion of the EU in May 2004 had on your answer to question 17?*

No effect. For reasons of geographic distance, concerns over payment and existence of domestic supply Corus did not regard this area as strategic for the supply of HRSSP.

G The merger

25. *Why have you undertaken this merger?*

Please refer to the response to question 8 of the financial questionnaire.

26. *The merger agreement includes a two-year non-compete clause. Why is this?*

[CONFIDENTIAL].

27. (a) *What would have been the effect on the market if the merger had not taken place?*

This is addressed by the 6 October response to question 4 of the Competition Commission letter dated 20 September 2004.

- (b) *What would have been the effect on Corus's strategic and business plans (e.g. with respect to investment) in HRSSP and other products if the merger had not taken place?*

If the merger had not taken place, then the only impact on HRSSP and other products would have been a short term one, between May 2004 and when Corus decided to close the HSM and exit the HRSSP business.

[CONFIDENTIAL].

On this basis, if the merger had not taken place, it is probable that, through the second half of 2004, less liquid steel would have been converted to feedstock for piling production in any event because Rest of World piling sales would not have been recruited. The liquid steel that has/would have been used to satisfy UK and mainland EU HRSSP sales has/would have been used primarily to satisfy additional profitable slab export sales opportunities.

28. *In your view, are there any features of the market that are conducive to, or that would inhibit, coordinated effects (e.g. conscious parallelism in pricing or output)?*

Corus believes that a number of features of the market make co-ordinated effects highly unlikely:

- pricing is highly untransparent;
- market shares are asymmetric;
- producers have very different cost structures;
- producers have excess capacity which they would willingly use to capture marginal sales; and
- Eastern European producers are likely to become more serious competitors under new ownership.

ARCELOR SA / CORUS GROUP PLC

**RESPONSE TO THE
MARKET QUESTIONNAIRE
DATED 28 SEPTEMBER 2004**

SLAUGHTER AND MAY
One Bunhill Row
London EC1Y 8YY

WJS/TAM

18 October 2004

Arcelor SA / Corus Group plc merger inquiry**Market questionnaire – list of annexes**

1. Outline of the investment programme that was identified for Scunthorpe to increase liquid steel production.
2. Flowchart showing planned activity levels of Corus' long products facilities and the transfer of semi finished products between plants.
3. Extracts from independent market research which address shares for the different alternatives to HRSSP products.
4. Independent attitudinal research.
5. Extent of competition within other key European markets.
6. Nature and extent of competition within the UK market pre-merger.
7. Corus' share of new tonnage bought in 2002 and 2003 for key UK HRSSP players.
8. Corus' tracking of "lost orders" for 2002.
9. Corus' tracking of "lost orders" for 2003.
10. Corus' tracking of "lost orders" up to April 2004.
11. ECSC price list (10th edition) effective from 29 March 1998.
12. Lists of UK tender enquiries and, as an example, a spreadsheet covering German enquiries.
13. Most recent pricing matrix for the UK market which illustrates by product the variations by customer and customer type.
14. Extract from Authority to Commit document.
15. Monthly average gross price for each relevant HRSSP product from January 2000 to September 2004.
16. Annual lists of all customers for HRSSP products in the UK, EU and EFTA from January 2000 to September 2004 by volume and value.
17. Full range of sizes produced for the UK market with the prefix denoting the producing mill.