

**AGGREGATES, CEMENT AND READY-MIX CONCRETE
MARKET INVESTIGATION**

**Summary of response hearing with Sahaviriya Steel Industries UK held on
21 August 2013**

Provisional findings response

1. Sahaviriya Steel Industries UK (SSI) said that it did not have anything further to add in respect of the Competition Commission's (CC's) provisional findings.

Overview of the Great Britain steel market and its key market drivers, including views on historic output and future outlook

2. SSI explained how it acquired the Teesside plant. Corus, now Tata Steel (TS), mothballed the Teesside plant in about March 2010 following the withdrawal from a long-term off-take contract which significantly prejudiced the viability of the Teesside plant. Essentially, the off-take contract was a consortium of buyers which withdrew in breach of contract and which resulted in TS being unable to place the output of Teesside. After extensive consultation and an attempted sales process, TS mothballed the plant. In 2009, TS contacted SSI about the possibility of purchasing the plant but negotiations were not concluded. Then in autumn 2010, SSI and TS recommenced negotiations with a view to SSI purchasing the entire business, assets and mothballed activities of the Teesside plant up to slab production.
3. There was a beam mill at Teesside which was used in the next processing stage after slab. The beam mill was owned by TS and continued in operation throughout the period of mothballing. In essence, SSI did not purchase everything at the Teesside plant, only the processes leading up to and including steel-making.
4. When SSI acquired the Teesside plant, the start-up was delayed by about six months although SSI could not pinpoint any particular reason for the delay and put it down to the nature of large engineering projects. SSI started in about April 2012 and production was ramped up slowly after that. SSI was now producing record quantities of steel which was near to the level it planned to.
5. [☒]
6. SSI did not have complete annual output data. It was aiming for 3.2 million tonnes of steel production a year. It anticipated that the next full year output would be 3.1 to 3.2 million tonnes and envisaged going beyond that although it required significant further investment in the plant.
7. The vast majority of the output from the Teesside plant was consumed by SSI's parent company in Thailand. [☒]
8. SSI was familiar with the steelworks at Port Talbot and Scunthorpe. It knew that Port Talbot was a flat products producer which also produced slab and used downstream rolling mills, which was a similar set up to Teesside with the exception that Port Talbot had two blast furnaces whereas Teesside only had one. It also knew that Scunthorpe was known as a long products producer which used an iron- and steel-making process, which was different to Teesside, and which was subsequently rolled into different products. Port Talbot's output generally went to the production of white

goods and the automotive sector, whereas Scunthorpe's output was typically used in the construction and engineering industry.

9. Approximately 99 per cent of SSI's Teesside output was exported. SSI believed that Port Talbot was predominantly a UK-centric business but it did not know about Scunthorpe.
10. In terms of industry drivers, demand for consumer goods drove demand for flat steel and demand in the construction industry drove demand for long products steel. The long products (sections business) (which was essentially what the Teesside business produced as part of Tata) was operating in line with the construction market at the moment. The flat products part of the business had seen an uptake in demand recently driven by the automotive industry.
11. SSI explained that the demand for its products and prices it could achieve were driven by the economies of the market into which it sold. In SSI's case, that was predominantly South-East Asia. When that market was buoyant, that had assisted SSI especially when the UK market was not so buoyant. SSI considered that it was producing a commodity, the price of which was determined by world markets. The product was homogenous, had no geographic boundaries and was relatively easy and inexpensive to ship. It considered that TS's business model was different as it had extended a long way downstream and was manufacturing many more value-added specialist products compared with SSI's UK business.
12. In terms of the future outlook for the Great Britain steel industry, SSI considered that its product was subject to the worldwide price which was determined by worldwide supply and demand and that the UK market was largely irrelevant to it. It considered that an increase in demand in one area could create a tightening of supply in other areas.
13. SSI considered that there could be volatility in the Great Britain steel market especially where a plant produced very narrow product segments but it was less volatile over the medium term. SSI's products were impacted by the world price. SSI gave the example of the automotive industry where fixed costs were high and where it may likely continue to produce vehicles even when demand was low which provided an element of stability in the steel industry.
14. SSI struggled to see circumstances where it could not sell what it produced. The key issue was the price it could achieve for its output. Steel producers were affected by the price of raw materials which could remain high even though the price of steel might fall. Approximately two-thirds of SSI's costs were made up of coal and iron ore. If raw material prices fell in line with or faster than slab prices, SSI would not make more money but it would lose considerably less than in circumstances where the cycle for raw materials costs was out of sync with that for slab prices. SSI observed that raw materials had not always come down in line with selling prices as quickly as it would like.
15. SSI was confident it could sell its entire slab output.
16. In terms of future visibility, SSI aimed to produce 3.2 million tonnes on an annualized basis by the end of 2013 and the investment in operations in the steel plant would hopefully mean it would produce 4.2 million tonnes. SSI said it needed to produce as much as it could all of the time. SSI produced an almost equal proportion of iron to steel.

17. Regarding the necessary investment in its operations, SSI was in the process of commissioning the pulverized coal injection which enabled it to go further than 3.2 million tonnes but it was restrained by the steel-making bottleneck. With further investment, SSI believed that it could de-bottleneck and produce up to 4.2 million tonnes over the next two to three years.
18. SSI explained that the blast furnace at Teesside was in constant use and therefore there was no seasonality during a given year. The blast furnace was in continual operation and had a useful life of approximately 15 years between relines. As it was not switched off, it produced hot iron continuously. It was possible to 'damp it down' for maintenance which occurred once or twice each year for two or three days at a time but if it was allowed to cool completely, it would need to be relined as the cooling process would make the refractories crack. The relining process took approximately three to six months. There was only one blast furnace at Teesside. SSI did not have any others either in operation or mothballed.

Background to, and rationale for, the agreements in relation to blast furnace slag with Lafarge Tarmac

19. [☒]
20. [☒]
21. [☒]
22. SSI said that the Teesside plant produced two types of slag: blast furnace slag and steel-making slag, the latter of which did not have the same potential for physical reasons. The slag ran out of the side of the blast furnace and either went into the slag pits or the granulator on one side of the furnace or the slag pits or the pellitzer on the other side of the furnace. The granulator was a water-cooled process where slag entered one end and granulated slag exited the other. The pellitzer was also a water-cooled process.
23. From an operational perspective, it was important that the slag pits were cleared especially as it was produced in such large quantities. [☒]
24. SSI considered the length of contract that TS had with Tarmac to be unusually lengthy. [☒]
25. In terms of ownership of the granulator at Teesside, SSI considered that as they were so integral to the business, they should be owned by SSI. Furthermore, SSI could probably operate the granulator itself. SSI considered that the clearing of the slag pits could be carried on as a separate activity. [☒]
26. SSI considered that the price it received for slag took no account of the cyclical nature of the construction market, which was where more of the material ended up. While SSI did not have any hard evidence, it considered that a tolerable price was being paid at the very bottom end of the market but SSI saw no upside at the top of the cycle. Accordingly, a long-term supply agreement would need to average the price through the cycle. [☒]
27. [☒] the chemical composition and consistency of slag produced at Teesside was the most attractive in the UK at the moment.
28. LT purchased SSI's pellite in addition to the slag from which LT produced granulated blast furnace slag (GBS). [☒] SSI understood that LT used the granulated product in

cement whereas the pellite was used in concrete due to its less desirable colour characteristic.

29. SSI explained that pellite was different to granulated slag as the water-cooled pellite-making process resulted in anything from small granules to little stones with half-inch diameter whereas granulated slag was more refined with a sand-like texture. Pellite did not have cementitious properties until it was ground.
30. SSI explained that the granulator and pellitizer were situated either side of the blast furnace. Both the granulator and pellitizer were owned by LT.
31. SSI had the ability to influence the way slag was processed which was largely driven by how the furnace was tapped. There were four tap holes; if the tap holes were opened on one side, the slag would go to the granulator and the pits, but if the other, to the pellitizer and the pits. It was not possible to use just one tap hole and send all the slag to the granulator. However, it was possible to put another granulator in place of the pellitizer. SSI controlled the tap holes on the basis that it was a fundamental part of its operation. Ultimately, SSI had to tap evenly to prevent iron and slag building up on one side of the blast furnace.
32. SSI explained that LT paid a royalty for the slag which was on a tonnage basis and was not dependent upon where the blast furnace slag went. However, [☒].
33. SSI understood that once LT had produced the GBS, it went for grinding at Purfleet. The GBS was produced at the blast furnace and was then transported to a site that LT leased from SSI on the overall Teesside site where it was stocked and later shipped. The site was approximately 50 acres. SSI did not know the current stock levels of GBS and pellite at Teesside [☒].
34. In terms of the transportation of GBS from Teesside to the Hanson plant at Purfleet, there was good road access and the stocking area was right on the Tees. There was a wharf which Tarmac leased so it could use ships [☒]. There was not a direct rail link into Tarmac's stocking area but there was an extensive rail network on SSI's site. It was therefore possible that with SSI's agreement, LT could get a railhead in its leased stocking area. The Teesside steel plant rail connection had national reach.

Remedy options

35. Regarding the exclusive supply arrangements between LT and Hanson, SSI did not know what the arrangements between LT and Hanson were other than what had been disclosed during the CC's inquiry. [☒]
36. SSI considered that more demand would be created for GGBS if there were a freer market with more players in it. With regard to the agreement between LT and Hanson, SSI considered that very few businesses had that kind of security.
37. SSI did not believe that there was technology around the corner that would enable iron to be produced without the production of slag.
38. SSI considered that ownership of GBS plants was not important from a remedy or competition perspective. From an operational perspective, SSI wanted to own the granulation plant itself. It considered that an effective remedy would come in the form of opening up the market. [☒]