

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

**Summary of second response hearing with Hanson held on 23 July 2013**

**Background**

1. Hanson stated that ground granulated blast furnace slag (GGBS) was not a market in its own right, but was rather one product that was substitutional in the wider cement market, including pulverized fuel ash (PFA) and other substitute products, and even cement itself. The GGBS market was heavily influenced by outside factors which resulted in customer choice. For example, a customer could achieve the same technical characteristics using a variety of blends including PFA-based mixes.
2. The Hanson GGBS business in the UK was branded as REGEN. The market for GGBS in the UK had reduced by approximately 50 per cent since 2007, compared with a cement reduction of 30 per cent. The reduction could be explained by the ability to substitute other products for GGBS, for example PFA had a stronger position in the market. [X] The cost of the investment in GGBS reflected the exclusive supply agreements.
3. Hanson expressed concerns with the analysis that the Competition Commission (CC) had conducted to date. For example, the CC's reliance on overseas cases (Bulgaria and Germany), which had contrary or different market structures, were irrelevant to the UK market, in contrast with the express review and approval of the UK GGBS market by the European Commission (as part of Heidelberg Cement's acquisition of Hanson Plc), whose work had been completely disregarded by the CC. Hanson stated that the outcome after intervention in Bulgaria was adverse for the market, and that in Germany GBS prices had subsequently increased threefold, and thus the CC's desire to rely on those cases for useful precedents was not comprehensible to Hanson.
4. The reliance by the CC upon comparison of margins, prices and volumes in cement was not relevant to the analysis for GGBS as GGBS had such different cost structures from cement. Hanson stated this was especially the case since the CC's own work had already shown that Hanson made no amount of excess profit in cement. Hanson also noted the absence of market definition in GGBS in the CC's work to date.
5. The supply agreements had required the exclusivity in order to allow the entrepreneurial investments and the high degree of risk taken. Hanson had invested heavily in GGBS which reflected the innovation by Civil and Marine and the high level of risk. Hanson did not believe that any clear detriment or adverse effect on competition (AEC) had been identified by the CC with respect to GGBS and it was therefore difficult to discuss remedies, even on the theoretical basis desired by the CC since neither the context nor proportionality could be known or understood.
6. The size and significance of the PFA market had not to date been recognized in the investigation.

## Provisional AEC arising from GBS/GGBS supply arrangements

7. Hanson said that once GGBS had been created it was hauled by bulk tanker to the consumer; the majority of consumers were ready-mix, including independent RMX producers as well as major cement producers.
8. GGBS profitability was considered in the context of the investment that had been made in the product and investment in the facilities. In particular, Hanson was focused on developing a brand and national distribution network. Hanson therefore took account of return on capital employed and the life cycle of the investment in considering profitability. Its business was based on volumes, [REDACTED]. The risks were so significant given the state of the steel market that its investment returns ought properly to reflect the risks that had been taken.
9. Hanson believed that the PFA market had grown, although it could not confirm the exact numbers for its overall size. However, it was clear that the CC had very much understated the size of PFA's contribution to the market. The CC ought to obtain data about the size of the PFA market from Hanson's competitors. Hanson stated that competition from PFA was very significant, but did not have a definitive indication of the market size. The PFA market had various products available, such as blended products, and Hanson stated that these products all competed with GGBS. PFA was generally sourced either directly from power stations or through an agent; suppliers included the power stations Drax and Rugeley. There were certain processes that were sometimes required to bring PFA to a usable quality and Hanson believed these were sometimes done through joint ventures between the power station and a cement supplier.
10. The customer had a range of options when purchasing and could effectively mix and match to achieve the best solution it required. A customer could purchase imported GGBS, blend its own PFA or source PFA directly from a power station. Hanson stated that companies such as AI, Lafarge and even some independents all imported GGBS now, and that small independent companies were also procuring PFA. Hanson was therefore focused on the price it could sell its product for in competition with the products available from competitors. As a result of the competition, the position of Hanson's GGBS business had been significantly eroded in recent years. In pricing, Hanson would assess the competitive threat against its product offering and price accordingly. The customer ultimately had a choice over which product and product mix to go with. Hanson had an awareness of the contracts it bid for and lost, however, it did not have full knowledge across the market, nor the exact reasons as to why a customer decided not to go with its products. Hanson explained that its knowledge was often limited given that it had only come to the cement market for the first time several years earlier.
11. Hanson was aware of PFA prices as it bought PFA in various qualities for use in its own concrete products business. PFA was roughly two-thirds the price of GGBS, but pricing would depend on the quality of the PFA. As GGBS was a substitute product, pricing was affected by the alternatives and the construction requirements and standards of the concrete required in the market place. A tonne of PFA could not necessarily be substituted for a tonne of GGBS or a tonne of pure CEM. Taking these factors into account, the usage of the different products and the mixes, the effective prices per tonne for GGBS and PFA were very similar when taking into account the cost to produce a cubic metre of RMX.
12. Pricing was a complicated matrix that was dictated [REDACTED]. In reacting to its competitors in the market Hanson would focus on sales volumes. For example, Hanson would always look to maximize the sales of GGBS by increasing its volume to the majors

and to independents. Hanson recognized the range of opportunities available to the customer. There would be a range of factors why a contract might not be won, for example a GGBS customer would need to have the appropriate silo capacity, although (where it already had silo capacity) customers were able to switch between PFA and GGBS when refilling their silos. All contracts were per job and done on an individual trade-by-trade basis. While contracts might be won or lost, the aim for Hanson was to secure the necessary volume of sold product at the right price to make a return on the investment.

13. Hanson did not have any pricing power in setting GGBS prices but operated in a complex environment whereby it had to react to prices of other products of which ultimately customers could negotiate on or choose to go with alternatives.
14. A new product on the market, Cenin, demonstrated new and additional competition within the market and the opportunity to offer alternatives when substituting cement, in particular within the context of the low-carbon sustainability agenda. Hanson had lost contracts to Cenin, although it noted that all products would have to meet the required standards for construction.
15. Products such as CEM II made with limestone were also substitutes for GGBS and PFA and they could be seen as a suite of substitute products. Hanson saw these products as part of a substitutional market, though noted that there might be certain specific technical instances where customer specifications meant that these products would not necessarily always be interchangeable. However, CEM II made with limestone was a major substitute in the bagged cement market.

### **GBS/GGBS imports**

16. Hanson imported [REDACTED] of GBS from Mittal's own industry, the Mittal subsidiary in Belgium, which was a far better quality product. This allowed for a saving in costs due to decreased grinding time and therefore saved energy costs. Also there were other inherent quality advantages to the product from Belgium. The CC acknowledged it did not know which company was the parent of Sidmar. [REDACTED]
17. Hanson noted that Hope's parent, Mittal, had unlimited access to the raw material granulate and also to GGBS within continental Europe which would affect the market dynamic. Hope, meanwhile, was currently trialling PFA solutions although it was yet to be seen whether this would proceed and how long it would endure. This demonstrated that the customer had a choice and that GGBS and PFA were substitutions. Hanson was not aware of Hope importing any GGBS, although Mittal was already importing GBS (but to Hanson).
18. Hanson stated that there were numerous import options for any customer in competition to Hanson's GGBS product. Hanson did not export GGBS into Europe as it would need to invest heavily to establish the downstream operations and UK facilities needed for large-scale export. The GGBS cost in Europe was also cheaper as a result of far lower employment and energy costs, relative to the higher costs of the UK.
19. Increased competition in the downstream market, substitution with PFA and new entrants resulted in a competitive market of which Hanson required its exclusive long-term agreements to remain competitive and allow it to supply the product to customers in the context of the risks in the steel industry.
20. Hanson believed that the price of GGBS was in part driven by the cement price and therefore if the CC chose to levy a remedy for cement, that would therefore auto-

matically become the remedy for GGBS. The customer had the choice, competitors offered products which were substitutes and therefore Hanson had to react to the environment it was operating in. Prices had been reduced to defend its business, but any reduction was also dictated by having to keep an acceptable margin to recover the investment costs.

## **GGBS contractual arrangements**

21. [REDACTED]
22. The clauses on Hanson with respect to the supply agreement included the requirement [REDACTED]. Hanson noted that during the years around 2007, there had been shortages of GBS supply, although in recent years these shortages had not been seen given the state of the economic situation. However, if steel works shut down then it could cause problems downstream and the GBS shortages in supply could well return.
23. Hanson believed that Tarmac clearly had an incentive to produce GBS rather than dispose of air-cooled residue as it was more profitable. While it had been quoted that 1.5 million tonnes of GBS was stockpiled, Hanson viewed such figures as wholly inaccurate given that its own figure of suitable material to go into GGBS plants was a maximum of 0.5 million tonnes, and that the quality of even that was uncertain. The stockpile level could depend on whether air-cooled material was included: air-cooled material was not cementitious and could not be converted to GGBS. [REDACTED], therefore if two tonnes of raw material only produced one tonne of GGBS, [REDACTED]. Stockpiled produce also degraded over time and this would affect the quality of the final product and the underlying ability to use it. For example, this might result in the need for the importation of higher quality GBS from abroad (as currently imported by Mittal) to produce blended product that satisfied technical specifications. Hanson believed that it was producing and distributing as much GGBS as was currently being demanded by the market.
24. Hanson said it had adequate grinding capacity to meet demand. Grinding capacity included two mothballed mills at Llanwern and Teesport, which gave an overall theoretical grinding capacity of [REDACTED] tonnes. Hanson currently produced [REDACTED] tonnes of GGBS. If required, GBS could be transported (by road) to suitable grinding facilities, albeit at a substantial additional cost per tonne, [REDACTED]. Hanson noted that Llanwern [REDACTED].
25. Customers benefited from having a sole supplier of GGBS as it meant the markets were not solely dependent on a single steel plant based in its own locality. The formation of the original agreement by Civil and Marine represented a risk and therefore the exclusivity allowed for the necessary environment to make the investment in order to build up GGBS nationally to allow customers to substitute cement. The customer benefited from having access to a product on a national basis with national coverage, and the steel industry risk was such that supply could not be guaranteed with availability across the country without the exclusivity if a plant was temporarily out of action. Only a single supplier with access to all three steel plants could provide the required supply and availability should a shut down occur at a steel site.
26. Hanson confirmed its understanding that, under its contract, there were no circumstances in which Tarmac would be able to supply GBS to a third party in the UK for the production of GGBS. Tarmac could only supply Hanson GBS for the production of GGBS in the UK. Hanson believed that Civil and Marine would not have made the

significant investments to develop the GGBS business without the exclusive agreements.

## Remedies

27. Hanson believed that the CC's work and evidence within the provisional findings did not do anything to clearly identify the AEC or to quantify the scale of detriment for GGBS prices. Therefore Hanson believed it was not possible to consider or discuss potential remedies since the AEC, scale of detriment and related proportionality could not be known. In particular, the CC's reliance upon cement margins, as conducted by the CC, did nothing to prove that GGBS prices and margin were too high and therefore conclusions could not possibly be reached on whether the result was higher GGBS prices.
28. Hanson referred to the reasoning of the CC in its provisional findings with regard to the CC's claimed detriment in GGBS. The simple fact that GGBS prices had risen when demand was challenged could not prove that prices were excessive as the CC had stated. The fact that Hanson sold a lot of GGBS to majors could not possibly prove detriment as the CC had stated. The fact that GGBS prices had risen slightly more relative to cement did nothing to prove detriment as the CC had stated. The CC had chosen not variable margins but rather in this instance overall margins as the sole basis for claiming detriment and for claiming excess prices and profit in GGBS. despite the fact that the CC's own methodology stated that the margins analysis was not to be used to determine excessive prices or profit.
29. Hanson stated that it was premature to discuss remedies when nothing had been done to establish detriment or any AEC.
30. Divestiture of one or more grinders would lead to very significant impairment losses. [X] Any divestiture would need to take account of the trading relationship between Tata, Tarmac and Hanson and would need to make a distinction between selling a grinding plant and/or the granulator itself being sold. If a grinding facility was sold but the rest of the supply chain remained intact there would be an inherent risk.
31. Hanson stated that it was the network of plants that provided the value for it and therefore removing part of that network would have a very significant impact on the Hanson operation and on customers. Each plant had strengths and weaknesses, for example, the [X].
32. Any divestiture would take a significant amount of time for reasons discussed at the previous hearing.

## Lafarge Tarmac GGBS remedy proposal

33. Hanson did not think the Lafarge Tarmac remedy proposal was capable of being an effective one, since a weakened GGBS offering could only create even greater business opportunity for cement. The true volumes with regard to available surplus of GBS were not as reported. Hanson did not see a strong demand for product from the steel producers, as it believed that the current arrangements created the demand for GGBS and allowed the supply of GBS to customers in the Great Britain market. Keeping the existing arrangements was beneficial for the consumer as it protected the consumer's access to the supply chain in the face of the risks in the steel industry and therefore gave the consumer choice.

34. A clinker grinding plant could be modified to produce GGBS, but modifications would be necessary with respect to the drying process required for GGBS. While co-grinding (grinding cement from GBS at the same time to produce blended cement) to produce a higher quality output was possible, there were commercial considerations that made this considerably less attractive. The grinding process could be amended to grind both GBS and GGBS, however, the requirements for the storage of clinker were different. A grinding plant did not necessarily have to be adjacent to a steel works.
35. Hanson sold internally and externally as much GGBS as it could, based on the competition within the market for CEM I and PFA. Hanson had invested a very significant amount of money and taken an equally significant degree of risk and therefore still needed to make a return and to a suitable degree. Companies were free, as Hanson was doing, to import GGBS from abroad and there was no restriction of imported GGBS. Hanson stated that it was not stockpiling, and the market was restricted by the current lack of demand for the material.