

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

Summary of response hearing with Lafarge Tarmac held on 3 July 2013

Provisional findings response

1. Lafarge Tarmac (LT) said that from the top down it was a new and different company from that of Lafarge and Tarmac, and that any suggestion that it would simply continue with Lafarge's previous strategy was incorrect. LT's executive team and board had been drawn from both organizations.
2. LT did not recognize the cement market as described in the provisional findings and it did not believe coordination existed between Cemex, Hanson and Lafarge in the cement market, or that the price of cement was above the competitive level. LT believed that the cement market was highly competitive and noted there was an absence of customer concern. LT noted that the price of cement had been falling in real terms in recent years.
3. LT was concerned with the profitability assessment adopted by the Competition Commission (CC) in its provisional findings and cited the report it commissioned by Professor Chris Higson (London Business School). LT believed that the profitability analysis was flawed, in particular in that the cement industry was earning excessive profits. LT did not recognize the figures the CC had calculated for Lafarge's return on capital employed and believed there were flaws, as identified by Professor Higson in the model used by CC in calculating this. For example, the use of an unsubstantiated estimate for the base cost of a cement plant, an overly aggressive and mechanical depreciation of the value of assets and the exclusion of tangible and intangible assets resulted in overstating the profitability of the industry.
4. In the case of the base cost of a cement plant, LT noted that the CC's estimate was significantly lower than LT's estimate and the examples from which the CC drew its conclusions were not comparable. In addition, the CC's assumptions did not bear any relation to market value estimates and recent transactions, for example the purchase by Mittal Investments of the Hope cement works.
5. The assumption used by the CC in its depreciation analysis was that older plants were less valuable and less efficient than newer plants. LT believed this was incorrect and that technology, rather than age, determined the efficiency of a plant. The lifespan of a cement plant was not dependent on the age of its kiln but on the availability of associated limestone reserves.
6. The CC's calculation of assets did not include all relevant assets associated with the revenue relied on by the CC in its analysis. The CC's analysis excluded capital expenditure, the cost of downstream blending facilities, costs of building and operating clinker and cement import terminals, the exclusion of costs associated with plastic packing, grinding and milling facilities and rail siding capabilities. The CC relied upon revenues from the sale of cement but its asset base included only facilities associated with the production of clinker.
7. LT disagreed with the CC's estimates on consumer detriment which it believed was driven entirely by the extreme assumptions within the CC's profitability assessments. There was no valid basis to conclude that there had been consumer detriment or that the Great Britain cement industry had earned excessive profits. LT stated that minor,

but entirely reasonable sensitivity tests of the CC's model show that the CC could not conclude that Great Britain cement industry profits had been excessive over 2007 to 2011.

8. The CC's analysis had focused on the market between 2007 and 2011 and not the market as it was today. Since 2011 the market had changed with the creation of Lafarge Tarmac and the creation of Hope Construction Materials (HCM). The cement import market within Great Britain had also grown significantly since 2011, and this was marked most recently in 2013 with the acquisition by CRH of the cement import facilities of Dudman. The CC's analysis had not adequately taken into account these recent developments.
9. With the establishment of HCM, changes had been seen in the cement market, reflecting how different HCM was to Tarmac. HCM had 50 per cent more cement capacity than Tunstead, had a plant with two kilns and had excellent rail links. LT expected HCM to sell at least [redacted]kt into the open market in 2013, and to sell around [redacted]kt into the open market from 2015. By contrast, Tarmac existed primarily to supply itself (with 90 per cent of its cement production used to supply its internal ready-mix concrete (RMX) activities), was a net buyer and sold very little cement to the open market. HCM was already competing aggressively for business, demonstrated by LT's wins and losses for 2013. HCM was building up its packing capacity and had the capacity to increase its cementitious offering through its blending facilities. The divestment and creation of HCM had gone much further than simply replicating the previous existence of Tarmac as it had created a substantially different competitor and this was in order to address some of the wider competition concerns flagged by the CC through the merger, even if no conclusions were reached on co-ordination.
10. LT stated that imports had increased over the last few years and CRH had made significant investments in the UK through acquisitions of import terminals previously owned by Dudman and Southern Cement, giving it national coverage. On price, LT noted that in real terms prices fell from 2009 to 2011 and were even lower in 2013.
11. LT believed that divestiture of an LT cement plant would not be justified and would not be an effective remedy. There was already increased competition within the market through the introduction of HCM, which had significant capacity and market share. LT did not understand how a fifth competitor would increase competition, in particular as LT's plants were already operating at full capacity. Consequently a new competitor owning such a plant would find it near impossible to increase output or reduce prices and therefore the remedy would have no impact on prices. Due to increased competition as a result of recent developments (ie HCM and importers) there was no need for divestment and other remedy options were available such as restrictions on price increase letters or by opening up the granulated blast furnace slag (GBS) and ground granulated blast furnace slag (GGBS) markets. LT stated that any divestiture of an LT cement plant would harm efficiencies within the market and for LT, for example, by reducing buyer power in bulk purchasing, thereby increasing input costs, and this would ultimately harm consumers by raising the overall costs to the industry. [redacted], LT did not believe that there would be any suitable buyers for a divestiture and this would affect the market value. In addition, any divestiture requirement placed on LT would undermine the basis on which the JV proceeded.
12. GGBS gave CC the opportunity to create additional competitive constraints by increasing the volume of cementitious material available in Great Britain. LT's current role in GGBS was granulating the slag to produce GBS with LT the intermediary between the steel producers (Tata and SSI) and Hanson. LT saw an opportunity for it to exit from the supply chain by transferring the granulation role to the steel

producers, allowing steel producers to sell GBS to the open market but also to grind and sell GGBS to the open market. LT believed the consequence of freeing up the GGBS supply chain would be to drive down cement prices in the Great Britain market given that GGBS was a cement substitute.

13. LT stated that it was still in the process of integrating the two operations of Lafarge and Tarmac, and winning customers, and was therefore not focused on wider strategy at this stage. [✂] LT was focused on becoming a solution-driven company, driven by innovation and was working with universities in the UK to help achieve this aim.
14. The impact of the Emissions Trading System (ETS) on cement production in Europe had had an impact. For example, cement producers aimed to have at least 60 per cent production to keep their carbon credit and this had resulted in over capacity in Europe. LT stated that because producers must produce at a minimum of 50 per cent of capacity to retain 100 per cent of their carbon allowances, this created an incentive to maintain production at 50 per cent of capacity, even where domestic demand fell well below that. Production in excess of demand, in particular in countries such as Republic of Ireland and Spain was exported to Great Britain. Great Britain imports to the bulk independent sector had increased from 13 per cent to 18 per cent between 2007 and 2010. LT expected imports to increase in coming years as a result of CRH's investment in acquiring Dudman's and Southern's import facilities which provided it with the ability to import cement into Great Britain.
15. It was inevitable that the CO₂ prices would rise and that this would impact on the price of cement but not on the price of GGBS, which was another benefit in looking at remedies in the GBS/GGBS market.

Inconsistencies with the CC's decision approving the JV

16. Important parts of the CC's provisional findings were inconsistent with conclusions reached in the Anglo/Lafarge merger review. By way of example, LT said that it was not open to the CC in the market investigation to conclude that HCM might choose to align itself with the alleged coordinating group since, if the CC believed that this was a reasonable prospect, it would not have been able to approve the JV. Similarly, the remedies on which the JV approval was conditioned were intended to differentiate the vertical integration of LT from that of Cemex and Hanson by increasing its exposure to the external market, yet the CC now sought to argue that the fact of LT's increased exposure to the external market gave it the incentive to lead any coordination. Finally, LT noted that the contribution of the Tunstead cement plant to the JV was a fundamental part of the contribution made by Anglo American without which the JV would likely never have been completed.

Divestiture of cement plants

17. LT believed that following the JV and introduction of HCM into the market, competition had changed substantially and as LT was only six months into the JV then the full impact on the market had not yet been seen. LT was currently operating at capacity across the majority of its plants. HCM was selling at a substantially increased volume externally relative to Tarmac and CRH was increasing its presence in Great Britain.
18. LT believed that a cement plant divestiture did not also require a ready-mix divestiture, as there was no shortage of available independent ready-mix customers to be serviced and there were a number of ready-mix producers with no cement,

Breedon, for example. As a result of divestments required by the CC in the JV inquiry, HCM had a level of vertical integration of around 50 per cent. LT referred to comments made during the JV investigation that a level of 15 to 20 per cent was an acceptable level, based on customer consultation.

19. LT stated that any divestiture of an LT cement plant would result in a significant loss of efficiencies and would not have an effect on competition as LT was currently at full capacity.
20. A divestiture of a cement plant would not necessarily require a rail link and one without a rail link could be purchased at a lower cost. However, a plant with no rail link had a more limited network and so less opportunity to sell to customers. Plants could be fully rail linked with sidings within the plant or partially rail linked whereby either a rail connection was close (and would therefore give rise to additional logistical costs) or would not give the producer the ability to service the whole of Great Britain.
21. LT did not consider that divesting any of its plants would be beneficial to customers or to end users (consumers), as together they provided an efficient network offering different products to its customers nationally. An additional player with only one cement plant would only be able to produce a limited number of products and it would not gain efficiency through having a network. LT believed the CC's proposed divestiture remedy in the market investigation was in contrast to the CC's decision in relation to the JV [redacted] and divestiture would therefore be inconsistent with the CC's approval of the JV.
22. LT considered that divestiture of one of its plants which was operating at full capacity would not have an effect on the market. LT could not see the cement market significantly improving over the next two years. It noted that production was higher in 2007, however, it now had reduced levels of capacity following the closure of two of its plants, Northfleet and Westbury, which was part of a strategy to switch production from less efficient and more costly wet-process plants (to more efficient dry-process plants located further north) and maintain profitability, and to rely upon cement imports. LT did have planning permission to build a new plant in Medway but this would be on a greenfield site and at the time this was considered the cost estimates to build this were in the region of £[redacted] million, which was a significant investment [redacted]. In addition, Medway would have been a semi-dry process plant that would not have fitted within Lafarge Tarmac's sustainability strategy of reducing its CO₂ emissions. [redacted]
23. LT did not believe there would be a suitable buyer for any cement plant divestiture. The market had changed following the entry of HCM (owned by Mittal Investments) and the significant growth of importers, and therefore any potential investor would be more likely to invest in a developing market rather than in Great Britain. There were few possible cement buyers who were entirely new entrants to the market and who did not have activities in another country. Since its acquisition of Dudman's import facilities, CRH posed a greater competitive threat than Dudman ever did since, as a result of its existing cement manufacturing facilities in other countries, it was a much more credible cement supplier offering customers greater certainty of the quality and supply of cement and with national coverage. Dudman, on the other hand, only ever imported cement that it acquired from third parties and had no manufacturing facilities that it owned.
24. Any cement plant divestiture could not take effect before 2016 in order to achieve a fair market price. The divestiture from the JV was able to proceed on an accelerated timetable because of the scale of the efficiencies that were to be achieved through

the merger. There would also be difficulties in selling in the current market to a restricted buyer community and complications in separating the various assets associated with the particular cement plant.

Divestiture of RMX plants

25. LT did not believe that you could compare its level of vertical integration, which was low at 15 per cent as a result of the JV and divestiture of a large number of its RMX plants, with the rest of the market which was much higher. LT saw no market for a large RMX business that was stand-alone from a cement business.
26. The growth of importers over the past five years was linked to the growth of independent RMX businesses. The major producers were able to achieve synergies in terms of assets and having an effective national network and this ensured that the cost of RMX did not go up substantially. Having a larger addressable market allowed for more cement to be sold to independent downstream RMX producers. However, this might not be achievable in practice as there were unlikely to be buyers for a large number of RMX plants.
27. LT highlighted the difference between entry in RMX and entry in cement. With low barriers to entry into RMX, small operators could easily set up a local business, however, these small operators could not necessarily buy a large number of plants in one go or have the expertise and nationwide coverage to be able to compete effectively.

Structural measures to address the AEC in relation to GGBS/GBS production in Great Britain

28. LT had an exclusive contract with Hanson for the supply of GBS until 2029. LT could only export GBS to third parties in certain circumstances, ie once its stockpiles exceed a specified amount; provided that Hanson was given first refusal to supply the identified customer; only the amount which exceeded the specified stockpile might be sold; and that the GBS was sold to someone who would not use it for the production of GGBS or other cementitious applications within Great Britain, or for resale into Great Britain.
29. LT had agreements with Tata Steel and SSI to remove all slag produced at the steel plants and LT proposed a potential remedy involving the steel producers with respect to the adverse effect on competition identified in the GGBS/GBS production in Great Britain. LT proposed that, as was the case with Tata in Europe, the steel producers would own and run the granulators and then sell GBS directly to the open market, as opposed to the current position whereby LT sold the GBS under certain exclusive agreements.
30. LT stated that by removing LT from the supply chain and opening up the sale of GBS by removing the exclusivity that Hanson had to purchase GBS, this would allow the steel manufacturers to sell GBS to the open market. GBS could then be sold to existing players with grinding facilities and third parties who could gain access to grinding facilities on a toll-grinding basis or by investing in grinding facilities themselves, allowing a greater number of potential purchasers to have access to GGBS at a more competitive price.
31. Pulverized fuel ash (PFA) was a by-product of coal production. PFA differed from GGBS, a manufactured product. Both products were used differently and had

different properties and performances. Over time, as the country moved away from coal power, PFA would not be as readily available.

32. LT noted that there was 2.5 million tonnes of GBS produced a year, yet only one million tonnes of GGBS was sold and therefore there was a large amount of stock which was available to the market and could be opened up. LT was contractually obliged to remove all of the slag and watercool it, therefore the existing stockpile could all be sold and converted into GGBS. LT currently imported GGBS from Spain as it was cheaper than buying it locally. LT sold it on as blended cement called Cemergi. LT had a stockpile of excess GBS [⌘]. As a result of the contract, Hanson had exclusive rights to the GBS and rights over the stockpiles. By allowing the steel producers to release the spare 1 million tonnes of GBS into the open market, LT believed that competition in the cement market would be increased. After the hearing, LT confirmed that 1 MT of currently stockpiled GBS could be ground to produce approximately 750,000 tonnes of GGBS.
33. LT believed that the steelworks which owned GBS would have several target audiences. For example, existing cement producers could grind the GBS themselves using their existing cement grinding facilities (or in the case of Hanson using its GBS grinding facilities). Alternatively, independent investors could buy the GBS, grind it themselves and sell it to any willing purchaser, including independent RMX producers, concrete products manufacturers and cement manufacturers. This was a business model which already existed in other countries such as France and Republic of Ireland, and this had been the business model of Civil and Marine prior to its acquisition by Hanson (Castle). Even if GBS was only sold to the existing four cement companies then this would still have the effect of driving down the price of cement because of the additional supply of cement possible as a result of greater quantities of GGBS being supplied.
34. LT assumed that the steel producers themselves were the most likely purchasers of the granulators which produced GBS on the basis that the granulators used to produce GBS were physically bolted on to the steel plant, and could not be physically separated.
35. Potentially some of the existing cement players such as HCM or Cemex might be interested in acquiring grinding facilities from third parties or could construct their own.
36. If LT's proposed remedy was to be effective then it was recognized that it would have to provide an effective constraint on the price of cement.

Creation of a cement buying group or groups

37. LT did not believe that the establishment of a cement buying group would be an effective remedy. LT was striving to develop its individual customer relationships and not to be a commodity-driven company. Buying groups already existed in the form of the National Buying Group in relation to packed cement. The larger customers would not willingly become part of a buying group as this would mean they could not differentiate themselves from their competitors by exercising their procurement expertise. Most customers believed they could gain competitively by negotiating themselves and not on par with their competitors. Buying groups would not necessarily benefit the customer, and if it were to be of benefit to customers then there was nothing currently preventing a buying group being set up.

Prohibition on Great Britain cement producers sending generalized cement price announcement letters to their customers

38. LT was ready to stop sending generic price announcement letters. In future price announcement letters would be individualized for each customer based on the products that the customer bought, specifying a proposed price per ton rather than a general percentage increase. LT noted that price announcement letters were still in demand from customers for budgetary and negotiating purposes, but considered that these letters did not need to be generic. Any changes should be adopted for all cementitious products. Changes from standardized letters would result in small additional administration costs, but it would also be of benefit to the industry as it would focus cement companies on negotiating individually with their customers.

Restriction of MPA and BIS data

39. LT was broadly supportive of this remedy proposal. [✂]
40. The ETS data was not only available on cement but covered other products such as asphalt and other industries' data such as power stations. If ETS data was published at a more aggregated level it would not have any adverse consequences on LT.

Other possible remedies and relevant customer benefits

41. The Code of Conduct remedy could potentially be more beneficial than the CC had considered, particularly if the CC were to change significantly the overall structure of the supply of GGBS. For example, it could include provisions covering access to pricing and contractual supply of GGBS.
42. LT did not believe cross-sales were an issue for its business due to its existing network and limited demand from the other majors to buy externally. LT purchased de minimis amounts of cement from Hanson and Cemex.
43. LT did not believe that information firewalls between the RMX and cement divisions of its businesses would be a viable remedy. Any firewall would need to be strong and LT would likely lose efficiency across its business in terms of its ability to manage its businesses. In addition, LT valued the ability of the businesses to work together to enlarge its offering to customers. Implementation of a firewall would also be difficult.
44. The divestment of a stand-alone grinding station would attract more potential buyers than the divestment of a cement plant. However, there would need to be a ready supply of clinker for any stand-alone grinding station. Clinker could be imported from outside of the ETS area. Imported clinker would have to be ground whereas imported cement was a ready product to be placed on the market so LT could not understand why it would be more beneficial for companies to import clinker rather than cement. The high price of electricity in the UK would also be a disadvantage to any potential purchaser of a grinding station to locally grind clinker.