

AGGREGATES, CEMENT AND READY-MIX CONCRETE MARKET INVESTIGATION

Summary of hearing with the British Aggregates Association held on 10 July 2012

Background

1. The British Aggregates Association (BAA) had been set up approximately 11 years ago prior to the introduction of the aggregates levy. It was constituted to look after the interests of independent quarry operators from all over the UK and to oppose the aggregates levy which had not been vigorously opposed by the major companies who accounted for 75 to 80 per cent of the market.
2. The BAA's membership included many family-owned companies as well as some larger independents, which altogether accounted for around 10 per cent of the production and sales of aggregates, concrete and asphalt in the UK. The BAA acted as a trade association and had members who dealt in the full range of aggregates products including construction aggregates and specialist aggregates, which also included primary, secondary and recycled aggregates.
3. The BAA sat on many of the same national committees as the Mineral Products Association (MPA) and worked closely with it on a number of issues. Many of the BAA's members felt that the agenda of the MPA was dominated by the major operators and that it was not representative of the views of the entire industry. The MPA did not wish to contest the aggregates levy and was not supportive of the BAA's ongoing court case on the issue.
4. Some firms were members of both the BAA and the MPA. In the case of some members this was for historical reasons, while others liked to have a foot in both camps. The BAA did not have any contact with Cembureau.

Aggregates

5. There were large regional variations in the consumption of heavy building materials. Within the M25 the demand for construction products and aggregates had returned to pre-economic downturn levels. In the North-East of England the BAA estimated that volumes were at around 50 per cent of those five years ago. Consumption in other areas was somewhere between those two figures. The industry's future depended on the overall economic outlook for the UK, and this was difficult to predict.
6. The BAA's view was that the supply of aggregates in the UK was being concentrated in the hands of the five major suppliers, but that it was not yet as concentrated as cement production. It considered that it was very difficult for independent suppliers to thrive in such an industry because larger companies were able to rely on international resources to support their businesses and smaller operators' margins had become so tight that it was very hard for them to secure finance to invest in new quarries. The industry trend over the last 50 years had been a gradual reduction in the number of smaller firms and concentration in larger firms. As long as the vertically integrated firms remained in the market the BAA believed that it was difficult to attract new entrants to the industry.

7. Sand and gravel and crushed rock were limited in their substitutability, not least because of where they were located geologically. The South-East of England had primarily sand and gravel, while crushed rock was found in the North and South-West. Gravel was used primarily in concrete, sand was used in both concrete and asphalt and there was some use of crushed gravel in Scotland.
8. Recycled aggregates were very rarely used as higher-specification materials. For example, recycled aggregates might be used for the foundations of a bridge over the Thames but would not be used as key ingredients in the concrete for the bridge. It was hard to ensure that recycled aggregates met quality standards, so it was most unlikely that they would replace virgin aggregates totally. Additionally statisticians had calculated that, based on the amount of buildings demolished and the availability of other sources of recycled aggregates, only 28 to 30 per cent of aggregates used could be recycled. The aggregates levy was a factor in the increased use of recycled aggregates as they were not subject to the levy. By-products of primary aggregate production such as scalping and crushed fines were subject to the levy, unlike by-products of other processes such as silica sand from china clay workings or crushed slate from slate roof production.
9. The substitutability of secondary aggregates was a complex matter because of the variety of the different types of by-products from non-aggregates operations and the fact that each operation was different. There were some concerns about the quality of products made with secondary aggregates; for example the use of china clay sand in concrete, which had been deemed by some structural engineers to be detrimental to the quality of the concrete produced with it. China clay sand was used regularly in concrete production, mostly in small proportions and usually blended with crushed rock sand. There were, however, occasions where job specifications would require that china clay sand must not be used.
10. The BAA thought that the Competition Commission (CC) needed to address the issue of substitutability between different types of aggregates. It suggested that the question of substitutability would have a different answer for every product and production site, and that therefore it was not possible to generalize about the substitutability of primary and secondary or recycled aggregates. The CC would need to look at each product and each site where it was produced and compare it with other specific products. Views would vary across the industry as to whether one material was substitutable for another and engineers in different locations would prefer one material over another based on their research and experience.
11. Substitutability would also depend on the price of materials at a particular time. Numerous product groups and the quality of those products could meet a specification and any final decision on which product to use would then depend upon supply, demand and price, so just because a product was a substitute for another in one instance did not mean it would be a substitute in all cases.
12. The use of crushed construction waste very much depended on the constituents of that material and how it was processed. Industry standards allowed for the addition of small proportions of recycled crushed aggregates to quality-assured ready-mix concretes (RMX) in small proportions. However, most recycling companies, for reasons of efficiency, did not separate out recycled material containing cementitious contaminants, and this material was not suitable for RMX production, though it could be used for capping and sub-base applications. Additionally, most RMX plants did not have more than a couple of aggregates bins, so most plants would need to be modified quite substantially to have a separate bin to blend in small amounts of recycled aggregates. Therefore, it was not practical to separate recycled materials in this manner and for this reason a lot of crushed concrete was used for bulk fill.

13. The supply of recycled aggregates was limited in rural areas compared with large cities like London where buildings were demolished more often. The supply also fluctuated with the health of the economy: if there was a slump in building there was also likely to be a slump in demolition, which would restrict the supply of recycled aggregates. This could lead to massive fluctuations in prices. Another major issue with recycled aggregates was that storage was needed for the material prior to and after processing and that storage of this kind was very difficult to provide in an urban environment.
14. The BAA considered that the substitutability of aggregates was very limited because of the small number of projects where substitutability was feasible. Recycled aggregates would never be likely to make up more than around 30 per cent of the market.
15. How far it was economically viable to transport aggregates would depend upon the specification required. For example, it would be economically viable to transport high-specification aggregates, such as rail ballast or high-PSV (polished stone value) stone, over long distances. Aggregates for concrete production could be economically transported over medium distances, while aggregates used for pipe bedding and capping and sub-base would travel short distances. The aggregates that did not have the aggregates levy or landfill tax applied to them could be transported over longer distances since the cost of their transport would be offset by their exemptions from these taxes.
16. These transport issues applied equally to both independent aggregates producers and the majors. However, the majors were able to use regional variations in pricing and could operate cross-product subsidies of their cheaper products to allow them to sell products at lower prices and greater distances than independents could. Rail connections also enabled aggregates to travel further. However, while both the majors and independents had rail-connected quarries these presented their own difficulties. It was not straightforward to deal with the rail authorities, and a company must have a market to ship directly to so unless you were taking aggregates straight to an asphalt plant, a concrete factory or a concrete plant, it was easier to ship them by lorry.
17. It was possible for [X] to supply rail ballast in the UK despite having to ship it from Norway because of the amount of waste stone from dimension stone workings available in Norway. [X] was a shipping company which was part-owned by [X] parent company, [X], and was able to take advantage of the waste stone in the Norwegian fjords which could cheaply be picked up by a ship, crushed and brought to the UK. Additionally the Norwegian Government had encouraged its quarrying industry to manufacture aggregates for export because it regarded them as good for Norway and its rural economy.
18. Imports from Norway were being brought into the UK on a reasonably large scale but where they were used depended on local pricing. On the east coast, almost all the armour stone used for sea defences came from Norway and was likely to do so for the next 20 years. Traditionally UK aggregates producers had reacted to imported aggregates by dropping the prices of domestic aggregates, but Norwegian quarries could remain competitive because their ability to load directly on to boats meant that they had incredibly cheap haulage costs.
19. Transporting aggregates by water around the UK was relatively cheap, but it had only been done for high-PSV stone from Scotland and Northern Ireland. However, the production of high-PSV 10mm grade material presented difficulties as it included the creation of a by-product of minus 5 grade material which constituted around 30 per cent of the total material produced. Unless the producer had a market for the minus 5

grade material in its local area (as it was not valuable enough to ship elsewhere in the UK) the producer's quarry would eventually get choked up by unsold material. Transport by water was also used to transport armour stone material to some areas on the south-west coast because of restrictions on lorries driving through small villages in that area.

20. While the BAA had not made a formal study, from its members' experience and from talking to relevant people throughout the country, it appeared that there were areas where aggregates prices were higher and areas where they were lower. In the BAA's experience one of the factors that contributed to why prices were higher in some areas was a lack of independent aggregates producers in those places. Areas which had a lot of independents had lower prices. It noted that there were more independents in Scotland than in England. It was difficult for the BAA's members to know their local competitors' prices as competition law prevented them from discussing this, and because a local competitor would have an incentive not to give correct information.
21. Currently prices for aggregates were below the cost of production for two reasons. The first was that there was a lot of competition among suppliers and little demand. The second was that the majors could use other products or aggregates in other parts of the country to cross-subsidize and reduce the price of their aggregates.
22. The BAA's view was that aggregates and RMX production were local in nature because for a number of reasons (weight, shelf life) they could not be transported very far by road. Cement on the other hand was different as it was only made at a few plants in the UK, but in very large quantities, and could be transported long distances. The BAA's view was that the vertically integrated majors which produced all three products could put small aggregates and RMX producers under pressure as they could use profits made in other countries to subsidize their UK operations and squeeze out independents. This meant that when one of the majors became inefficient smaller companies were not able to take advantage and grow as they should, and they were unable to enter the cement market themselves as building and operating cement plants required sums of capital which smaller companies could simply not obtain. In the past, when the majors had been required by the competition authorities to dispose of assets, those assets had always been sold to another major.
23. The BAA's view was that, over the last 20 years the cement companies around the world had consolidated and had used the 100 to 150 per cent profits they made on cement in a number of countries to cross-subsidize their operations elsewhere and to suppress concrete prices in order to grow market share. This consolidation had cost significant amounts of money which could only be obtained from the companies' cement operations as neither aggregates nor RMX were lucrative enough. As a result of this strategy, over the last 20 years the independent sector in every country had gradually dwindled. The BAA's view was that this was bad for consumers because once a regional or national market had been consolidated prices would rise and huge profits would be extracted from consumers.
24. Some of the independent companies had also vertically integrated, having taken the view that in order to protect their aggregate sales they would have to enter the RMX market. Vertical integration in and of itself was not problematic; it was the way that the majors used their vertically integrated operations to manipulate markets.
25. The rise in independents' share of the RMX market over the last few years was likely down to two factors, but it was not necessarily the case that independent companies had individually grown in size. The first factor was that the major companies normally supplied big infrastructure projects and there were fewer of these since the economic downturn. The second factor was that, because the RMX business was local in

nature, relationships with customers were very important, and smaller RMX producers were better at customer service than the large companies which tended to use call centres and provided a less good service. Many independents that had kept up their market share during the recession might have done so at a cost to their profitability because they had no other alternative. This was not a sustainable position.

26. The BAA said that prices for cement in the UK were so artificially high that independent firms would be better off if the Cement Pricing Agreement was still in place. The Cement Pricing Agreement had ended officially in around 1990. It determined a nationally set cement price, so that cement producers would sell cement at the same price to all customers. The agreement had fallen apart because manufacturers did not adhere to it, but the BAA's view was that even a rigged cement market with a single price for everyone would be better than the current position because at least then everyone, majors and independents alike, would be overpaying for cement.
27. The outcome the BAA would most like to see from the CC's investigation would be the reversal of the vertical integration of cement manufacturing with aggregates and concrete manufacturing.

Cement

28. The BAA expressed its surprise at the rise in the market share of independently imported cement not made by UK manufacturers, either in the UK or abroad. There were several small importers working in the market but it was hard to estimate how much the largest two, [X] and [X], imported. One of the issues cement importers faced was security of supply, because if an importer suddenly lost its supply, then it might have serious difficulty in replacing it. Additionally, there were huge risks and expenses involved in building or developing a cement import terminal, especially when an importer was likely to face an aggressive pricing strategy from the majors.
29. Low import prices were driven, in the BAA's view, by the need for European producers, especially in Spain and [X] in Ireland, to keep their kilns at over 50 per cent output. This was also the case for some UK cement producers which imported clinker from overseas. Another Irish cement producer, [X], had exported bagged and bulk cement to the UK, but using bagged cement was not a viable option in the long term for RMX producers. [X]. The BAA did not consider that significant quantities of Irish cement would be imported into the UK.
30. The EU Emissions Trading Scheme had led to cement producers pricing in an opportunistic fashion to ensure sales of the cement the scheme forced them to produce.
31. The 1994 European Commission investigation into the cement market had not changed the market's behaviour. The European Commission was currently conducting another investigation into cement. The amount of cement being imported into the UK by the independents was small and was not organized in any way. These importers either used the cement for their own RMX production or sold it externally. Traditionally, it had been considered necessary for cement importers to have their own outlet for their cement (eg RMX production) to make their business work. The BAA now considered that it might now be possible for an importer that only sold cement externally to have an advantage as independent RMX operators would not regard it as a competitor.
32. The BAA believed that there were differences in the cement prices paid by RMX and pre-cast concrete producers. The BAA did not attribute these differences in price to differences in the quality of the cement provided to each type of producer.

33. There were substantial differences in the structures of the pre-cast concrete and RMX markets. The manufacture of pre-cast concrete required a significant investment in a factory, which meant there tended to be fewer independent producers of it. Consequently, there were a small number of larger plants in fixed locations making pre-cast concrete. Until recently levels of pre-cast concrete production were more stable, and accordingly their cement requirements more predictable than those of RMX producers, which made pre-cast producers attractive customers to cement suppliers.

Planning regime and aggregates levy

34. The Managed Aggregate Supply System applied in England but did not in Scotland. The system attempted to predict the quantity of aggregates needed in different regions and allocated planning consents accordingly. If there were enough mineral reserves with planning permission in an area to meet the predicted demand; then it was almost impossible to get planning permission for a new aggregates site. The BAA was concerned that the Localism Bill would effectively put an end to new quarry planning permissions, and as getting regulatory permission was a necessary requirement for entering the market, there would be virtually no new entrants in aggregates production.
35. The current planning process was very complex, expensive and time consuming. The issues it covered ranged from hydrology, archaeology, ecology, and traffic movements. It was also a political process involving public consultation, so applicants needed to win over local populations.
36. On balance independents did not face greater challenges than the majors did in obtaining planning permission, but it was easier for a major to increase its reserves by buying up smaller competitors.
37. The BAA was seriously concerned by the majors' ability to use land banks to book large quantities of reserves as it would prevent independents being able to access local resources and would reduce competition.
38. The management of aggregates reserves affected how the market operated and in combination with the planning process could create obstacles for any new entrant. The planning system was time consuming and costly and the majors, which had their own planning departments, were better able to navigate it than smaller companies which had to hire individual planning consultants at each stage of the process.
39. The aggregates levy was not charged on by-products of other industrial processes when they were used as aggregates, for example china clay waste and steel slag used as aggregates. The production of these products was monopolized by the majors. These materials' exemption from the aggregates allowed the majors to transport them and compete over far greater distances than the independent companies.
40. The BAA's view was that the aggregates levy disproportionately affected the independent producers as the levy needed to be paid to HM Treasury by producers irrespective of whether they had received payment from their customers. The cash-flow problem this could cause was unlikely to have as large an effect on the major producers which had larger financial reserves.
41. The BAA believed that the reference from the Office of Fair Trading should have included asphalt production, and that the aggregates market could not be considered without taking into account asphalt. It believed there was a system of rebates in place

which meant that the majors could purchase bitumen more cheaply than independents could and that long-term this would threaten independent asphalt production.