
Completed acquisition by Aggregate Industries Limited of Foster Yeoman Limited

The OFT's decision on reference under section 22 given on 20 November 2006. Full text of decision published 28 November 2006.

Please note that the square brackets indicate figures or text which have been deleted or replaced with a range at the request of the parties for reasons of commercial confidentiality.

PARTIES

1. **Aggregate Industries Limited (AI)**, a wholly-owned subsidiary of Holcim Limited based in the UK, is an aggregates, construction and building materials group. It produces and supplies aggregates, asphalt, concrete products, and supplies road surfacing services. In the UK it has 80 aggregate sites ('quarries'), 58 asphalt plants and 83 ready-mix concrete plants.
2. **Foster Yeoman Limited (Foster Yeoman)** is a UK company that produces and supplies aggregates and asphalt, and supplies road surfacing services. It has two aggregates sites (one in the South West of England and one in Scotland), six wholly-owned asphalt plants and has an interest in two other asphalt plants (in Harlow and Northfleet) by virtue of joint ventures. Foster Yeoman's UK turnover for 2005–06 was around £210 million.

TRANSACTION

3. The transaction qualified for examination by the European Commission (the Commission) under the EC Merger Regulation (ECMR) and the parties filed their submission to the Commission on 19 July 2006.¹ On 8 August the Office of Fair Trading (OFT) requested, under Article 9 ECMR, that the

¹ Council Regulation (EC) No 139/2004 (The EC Merger Regulation).

Commission transfer the UK aspects of the transaction to it for investigation. On 6 September the Commission decided to grant the OFT's request.

4. AI acquired the entire issued share capital of Foster Yeoman on 7 September 2006.
5. The OFT sought initial undertakings from AI to hold the AI and Foster Yeoman businesses separate pending the OFT's consideration of the transaction. The OFT accepted the initial undertakings on 16 October pursuant to section 71 of the Enterprise Act 2002 (the Act).
6. The statutory deadline for a decision in the case under the ECMR is 20 November.

JURISDICTION

7. As a result of this transaction AI and Foster Yeoman have ceased to be distinct. The UK turnover of Foster Yeoman exceeds £70 million, so the turnover test in section 23(1)(b) of the Act is satisfied.
8. The OFT therefore believes that it is or may be the case that a relevant merger situation has been created.

SUBSTANTIVE ASSESSMENT

9. The parties overlap in the: production and supply of aggregates in the South West of England; production and supply of asphalt in both the South West and South East of England; and supply of surfacing services.

AGGREGATES

Product scope

10. Aggregates are used for construction purposes. Although they may be sorted and graded differently, previous UK decisions² employed a product

² For example, Completed acquisition by Ennstone plc of Johnston Group plc (March 2005); Anticipated acquisition by Anglo American plc of Johnston Group plc (September 2004); and Anticipated acquisition by Midland Quarry Products Limited of the Griff Quarry currently owned by Hanson Quarry Products Europe Limited (September 2004).

scope for all aggregates, incorporating both primary aggregates (gravel, crushed rock and sand) and secondary or recycled aggregates,³ given the substantial substitutability between different aggregate types for a particular use. The parties support such a product scope.

11. Third parties have drawn a distinction between marine aggregates and other aggregates. In the current case the parties do not overlap in the production and supply of marine aggregates.
12. The OFT has examined the merger on a frame of reference of the supply of all aggregates.

Geographic scope

13. Aggregates have a low value-to-weight ratio and therefore road transport costs limit the geographic scope of inland competition.⁴ The OFT and the Commission have previously taken 30 miles/50 kilometres from the point of production as an appropriate area over which to consider merger effects.⁵ The parties submitted that this remains an appropriate approach.
14. In *Anglo American / Johnston*, the OFT employed the 30 mile radius approach of previous cases to examine the potential competitive effects of the merger, but in light of arguments put forward also considered several wider geographic frames of 40 and 50 mile radii, as well as a 2-hour drive time isochrone. The consequences of a geographic frame for aggregates wider than a 30 mile radius are considered in the competitive assessment in this case.
15. One third party competitor told the OFT that the 80 per cent or more of its aggregate production was supplied over a distance greater than 30 miles, suggesting that the appropriate geographic scope is greater than 30 miles. Another third party competitor did not supply data on the proportion of aggregates supplied by distance but commented that it would depend on

³ Including china clay waste; glass waste; slag; recycled construction/demolition site waste; and recycled railway ballast.

⁴ Sea-borne transport of aggregates between ports may be an option which widens geographic supply options where a quarry is suitably located (e.g. Foster Yeoman's Glesanda quarry in Scotland exports aggregates to a range of European ports).

⁵ For the OFT see: *Midland Quarry / Griff Quarry* (2004); and *Anglo American / Johnston* (2004). For the Commission see: *Anglo American plc / Tarmac plc*, Case COMP/M.1779 (2000); and *Hanson plc / Pioneer Limited*, Case COMP/M.1827 (2000).

the infrastructure available near the quarry (for example, railed aggregates can travel 100 miles or more).

16. Almost all customers told the OFT that the aggregates that they purchase travel around 30 miles or less.
17. The OFT has not found it necessary to conclude on the geographic scope in this case as it does not affect the competition assessment (widening the geographic scope from 30 miles does not add to the increment). However, in the absence of persuasive evidence to the contrary, the OFT has applied a 30 mile geographic scope to this case, as it has done in previous cases.

Horizontal issues

18. The parties overlap in the production and supply of aggregates in the South West of England. AI has three aggregates quarries at Callow Rock, Colemans and Calne, all within 30 miles of Foster Yeoman's sole quarry in the region at Torr, Somerset.
19. The parties' combined shares vary from around 25 to 35 per cent on a 30 mile measure, depending from which quarry the 30 miles is measured. In all cases the increment is around 10 per cent. Major competitors in the region include Hanson plc (Hanson) which the parties estimated has around 30 per cent of supply, Tarmac (a subsidiary of Anglo American plc) and Cemex (both of which are estimated to have around 10 per cent share of supply).⁶ Therefore, as a result of the merger four companies now supply over 80 per cent of the aggregates from this area.
20. The parties told the OFT that in recent years Foster Yeoman has transported around [] per cent of its production from Torr out of the local area. The parties argued to the OFT that this effectively reduces their combined share of supply in the area to around 20–25 per cent. However, the OFT also understands from Hanson that a sizeable proportion of its production at its Whatley quarry is likewise transported out of the region. The OFT's analysis of the data indicates that this does not make an appreciable difference to the parties' calculations.

⁶ The parties' share of supply estimates used throughout this paper are based on figures from the UK's Quarry Products Association and from BDS Marketing Research Limited.

21. One third party raised with the OFT a concern about the concentration of control of 'super quarries' in the UK and the resulting concentration in supply of aggregates that are transported to the South East of England. However, the OFT has no persuasive evidence that identifies 'super quarries' as a distinct and separate competitive set.
22. Shares of supply based on any wider geographic frame of reference (for example, a 40 mile or 50 mile radius) are lower.

Barriers to entry and expansion

23. A new entrant to aggregates requires land suitable for quarrying and the necessary planning permissions both in terms of quarrying the land, and lorry movements from the site. Previous merger case analysis suggests that barriers to entry are high due to the planning regime.⁷
24. The parties accept that barriers to entry are high for new entrants into rock quarrying because of planning restrictions, with very few planning consents issued for new rock quarries in recent years. Expansion of rock quarrying capacity has generally occurred by obtaining planning consent for extensions of existing quarries. The parties submitted that barriers to entry into sand and gravel quarrying are lower and that the cost of entry is significantly lower for suppliers of recycled aggregates.
25. Third parties supported the view that obtaining necessary planning permission and consents represents a barrier to entry in relation to establishing new quarries. The capital costs involved were also identified as a factor.
26. On the basis of the evidence before it, the OFT considers barriers to entry in the production and supply of aggregates to be high.

Assessment

27. The parties' share of supply in aggregates in the South West of England (using a 30 mile measure from their quarries) is around 25–35 per cent. When aggregates transported out of the area are taken into account the parties' share is lower.

⁷ For example, Anglo American / Johnston (2004).

28. The OFT considers that barriers to entry are high. However, after the merger three major competitors will remain to provide a sufficient competitive constraint on the parties.
29. Consequently, the OFT does not consider that it is or may be the case that the merger may be expected to result in a substantial lessening of competition within the supply of aggregates in the UK.

SURFACING

Product scope

30. The parties overlap in the provision of road surfacing services. Road surfacing involves the laying of asphalt on the prepared under-surface of a road. Providers may be vertically integrated companies which produce and use their own asphalt, or may purchase their hot asphalt requirements from unrelated suppliers. The ultimate clients are usually national or local government bodies, although much work is carried out through subcontracting from civil engineering groups.
31. The parties submit that the relevant market should comprise the laying of hard-landscaping materials comprising at least asphalt, concrete block products (CBP) and concrete block materials (CBM). Third parties told the OFT that CBP and CBM are generally not substitutable for asphalt in road-based work. Consistent with previous OFT analysis, the OFT has therefore assessed this merger on the basis of a frame of reference of road surfacing.

Geographic scope

32. The parties submit that the relevant market is Great Britain. Suppliers compete on this basis for contracts put out to tender by the Highways Agency, the Scottish Executive and other major customers (including local authorities). AI competes for business from three main surfacing locations and moves its staff and equipment around the country in response to specific demand. Foster Yeoman's website refers to mobile plants enabling its surfacing division to take on contracts throughout Great Britain.

33. Major third party competitors referred to their surfacing operations as being active throughout the Great Britain.
34. Given that the outcome of the competition assessment does not demand that the OFT concludes on the geographic scope for surfacing, it has not done so. The OFT has assessed this merger on the basis of Great Britain.

Assessment

35. In Great Britain the parties' share of surfacing is less than 10 per cent. Major competitors include Tarmac, Cemex, Hanson and Lafarge. No third party complaints were received in relation to the provision of surfacing services. The OFT does not therefore consider that the merger results in any competition concerns in relation to the provision of surfacing services.

ASPHALT

Product scope

36. Asphalt is produced by heating and mixing bitumen and aggregates, and is primarily used as a surfacing for roads. Different specifications are produced for different uses, but the OFT has previously considered the production and supply of asphalt to be the relevant product scope.⁸ Likewise, the Commission has in the past considered asphalt to be the relevant product scope.⁹
37. The parties have submitted that the appropriate product scope is at least this wide and that asphalt competes with:
 - CBM such as laid concrete, concrete block paving and clay pavers
 - hydraulically bound materials (HBM) (aggregates mixed with hydraulic binder instead of bitumen, as asphalt is), and
 - CBP.
38. However, they estimate, for example that CBM and HBM were substitutes for only around two per cent of asphalt laid in 2005. This is insufficient evidence of substitutability to support widening the product scope. All third

⁸ Midland Quarry / Griff Quarry (2004); and Anglo American / Johnston Group (2004).

party competitors have told the OFT that other materials such as CBM and other hard landscaping materials are substitutable for asphalt in some applications but these applications constitute a small segment of the overall demand for asphalt.

39. Reactions from customers were more mixed. Some told the OFT that other materials are not substitutable for asphalt whereas some told the OFT that they would consider switching to other materials in the event of a price increase in asphalt by around 5–10 per cent. Like competitors, customers drew a distinction between end applications for asphalt in switching decisions. Other materials were not seen as being good substitutes for road related work. Indeed, one customer suggested that the consequence of a price rise would not be switching to other materials but less road work being undertaken.
40. On the evidence presented to it, the OFT has not been persuaded to widen its previous frame of reference from considering the supply of asphalt as a distinct and single product scope. The current case has been examined on this basis.

Geographic scope

41. Asphalt is a highly perishable product (it must be delivered hot to the site of application). The parties told the OFT that this means that asphalt should not be transported for much more than two hours. Consequently, the geographic scope for the supply of asphalt is reasonably local.
42. The OFT has noted previous cases used a geographic scope of 30 miles from the point of production.¹⁰ Further, in *Anglo American / Johnston* the OFT also analysed the proposed transaction using a two hour isochrone centred on the point of production, and in *Ennstone / Johnston* the OFT analysed the proposed transaction on 40 and 50 mile bases in addition to a 30 mile basis.
43. The parties to the current case have argued that given the overlaps in the supply of asphalt predominately occur in and around London, the

⁹ *Anglo American / Tarmac*, Case COMP/M.1779 (2000); and *Hanson plc / Pioneer Limited*, Case COMP/M.1827 (2000).

¹⁰ *Ennstone / Johnston* (2005); *Anglo American / Johnston* (2004); and *Midland Quarry / Griff Quarry* (2004).

appropriate geographic scope should be narrowed from the OFT's previously used 30 miles to a 20 mile radius from the point of production in order to reflect the smaller distances that can be driven in two hours in and around London compared to other areas.¹¹

44. In addition, the parties provided data of the proportion of asphalt supplied by distance for each plant in the South East (excluding Theale which the parties accepted should be considered on a 30 mile basis). On average, [70–80] per cent of the parties' asphalt produced in the relevant South East plants was supplied within 20 miles in both 2004 and 2005. Extending the distance to 30 miles captures [>90] per cent of production. The exception is the Brentford (Middlesex) plant from which around 40–50 per cent is supplied within 20 miles and 55–70 per cent is supplied within 30 miles. The parties told the OFT that this is because the Brentford plant can run through the night, which few plants in London are licensed to do, and so a lot of its outgoing deliveries were made at night when roads are less congested and therefore driving distances within a two hour period are greater than for other asphalt plants.
45. Some London customers supported the parties' assertion that the appropriate geographic scope should be 20 miles. Three customers told the OFT that 80 per cent or more of their asphalt requirements travelled 20 miles or less. However, three further customers told the OFT that a 30 mile radius was required to capture 80 per cent or more of their asphalt requirements (and one further customer told the OFT that while it did not have the information to calculate the proportion of its requirements by distance travelled, 30 miles was an appropriate distance in which to consider the supply of asphalt).
46. Two competitors operating in London told the OFT that around half of their asphalt was transported 20 miles or less whereas a 30 mile measure captured three-quarters or more of their asphalt production. Another made the point that one plant would not usually 'leapfrog' another in the same ownership in order to deliver to a customer, since it would be more economical to serve the customer from the closest plant. Since AI has a number of plants in the South East region that are within 20 to 30 miles of another AI plant, they might not need to deliver further than 20 miles while

¹¹ None of the previous cases the OFT has investigated involved the supply of asphalt in and around London.

still being able to give comprehensive coverage of the region. The parties told the OFT that this is generally true although not always so.

47. To help determine the distance of a typical two hour drive time the OFT (using MapInfo software) mapped and compared the 20 mile radii and two hour drive time distances for each of the parties' asphalt plants in and around London. From every asphalt plant the two hour drive time plotted extended considerably further than 20 miles. However, it is not obvious that these drive time distances would accurately represent the distances and routes that would be available to asphalt delivery lorries (given the nature of the load). AI made the point that its busiest time would usually be early in the morning, seeking to deliver for road surfacing jobs due to commence after the peak morning traffic. Within the South East this was also the period of heaviest local traffic which had an effect on potential delivery distances.
48. On the evidence before it the OFT considers that the appropriate geographic scope for the supply of asphalt should not extend beyond the distance that can confidently be covered in a two hour drive. However, the evidence as to whether this should be represented by a 20 mile or 30 mile radius from the point of production was mixed.
49. Consequently, the principle that the OFT applied in this case was that the greater the proportion of the parties' supply that was delivered within 20 miles of the plant of production the greater the weight the OFT applied in its assessment to a 20 mile measure rather than a 30 mile measure. For example, if 80 per cent or more of the relevant plant's supply occurred within 20 miles then the bias in favour of a 20 mile measure was pronounced. Conversely, if say only 50 per cent of within 20 miles but say 90 per cent was supplied within 30 miles then the bias was in favour of a 30 mile measure (while nevertheless still using the 20 mile measure for sensitivity analysis).
50. The OFT has therefore not found it necessary to conclude on the geographic scope but rather the OFT has considered this merger with regard to the supply of asphalt in and around the London area on a plant-by-plant basis, as the number of overlap areas is small enough for it to do so.

Horizontal issues

51. In the South East of England the merger has given rise to overlaps in relation to 14 sites on a 30 mile measure. Using the parties' preferred approach of a 20 mile measure the merger gives rise to overlaps in relation to nine plants (table 1). In table 1, shares attributable to joint ventures have been allocated to the joint venture partners in proportion to their ownership of the joint venture. Since most of the relevant plants overlap with at least one joint venture, shares of supply quoted in the rest of this paper are placed in ranges reflecting the different methodologies of accounting for joint ventures.¹² Shares of supply are based on estimated actual production in the relevant areas not plant capacity.
52. The parties and third parties told the OFT that there is a significant degree of spare capacity in asphalt production. AI and Foster Yeoman estimate capacity utilisation ranges for their relevant plants as [] per cent and [] per cent respectively. Third parties also frequently mentioned the existence of relatively low capacity utilisation. However, not all of this spare capacity may be usable. AI made the point to the OFT that its asphalt plants tend to be busiest early in the morning and then demand tails off during the day. This suggests that, at peak times, capacity utilisation may be substantially higher than the percentages given, above.

¹² Three methodologies have been employed – treating joint ventures as separate entities, allocating joint venture shares to their owners in proportion to their ownership, and allocating 100 per cent of the joint venture production to the merging parties.

Table 1: Shares of supply of asphalt in the South East of England, 2005 (per cent)

	30 miles		20 miles	
	Combined share	Increment	Combined share	Increment
AI's plants				
West Drayton	[40-50]	[10-20]	No overlap	-
Wembley	[40-50]	[10-20]	No overlap	-
Brentford	[40-50]	[10-20]	No overlap	-
Greenwich	[35-45]	[10-20]	[35-45]	[10-20]
Croydon	[35-45]	[10-20]	[40-50]	[10-20]
Harlow	[35-45]	[10-20]	[15-25]	[1-10]
Chelmsford (JV)	[35-45]	[10-20]	[40-50]	[5-15]
Hertford	[40-50]	[10-20]	[35-45]	[1-10]
Luton	[30-40]	[1-10]	No overlap	-
FY's plants				
Crawley	[45-55]	[1-10]	[70-80]	[20-30]
Northfleet (JV)	[35-45]	[10-20]	[35-45]	[10-20]
Harlow (JV)	[35-45]	[10-20]	[10-20]	[1-10]
Purfleet	[30-40]	[10-20]	[35-45]	[10-20]
Theale	[40-50]	[15-25]	No overlap	-

Source: The parties.

Unilateral effects – Crawley and Theale

53. The OFT has unilateral effects concerns in relation to the local areas centred on two asphalt plants, Crawley and Theale.
54. Foster Yeoman's plant at Crawley overlaps with AI's Croydon plant on a 20 mile basis (where their combined share is [70–80] per cent, increment [20–30] per cent) and, in addition, with AI's plants at West Drayton, Brentford and Greenwich on a 30 mile basis (combined share of [45–55] per cent, increment less than 10 per cent). Around [70-80] per cent of the production from the Crawley plant is supplied within 20 miles. Further, the parties supplied to the OFT information on the distribution of supply from

the plant which showed that supply tends to be []. There are few other plants in the area, especially on a 20 mile basis and AI's Croydon plant was likely to be a close competitor with Foster Yeoman at Crawley. One customer complained to the OFT that the merger would reduce choice in the area and another customer who sources asphalt from the area expressed concern to the OFT about the merger.

55. In Crawley, the OFT considers that Foster Yeoman's closest competitor has been AI at Croydon on both a 20 and 30 mile measure. The merger appears likely to give rise to a substantial lessening of competition in this area.
56. Foster Yeoman's plant at Theale, Berkshire has two co-located asphalt production facilities on the site. Both the OFT and the parties consider that 30 miles is the appropriate geographic scope when analysing this area. It is located close to the M4 motorway. The parties' combined share is [40-50] per cent (increment [15-25] per cent). There are few other asphalt plants in the local area. The nearest competitor (geographically) in Reading is particularly small as is one other in the area – between them they account for around [1-10] per cent of supply on a 30 mile measure. Besides AI, Tarmac at Hayes and Hanson at West Drayton and Sutton Courtenay (both [20–30] per cent each) also operate in the area. The parties supplied information on mapped deliveries from the Theale plant which showed a []. This indicates that AI's plant at West Drayton (a very large plant) is likely to be a close competitor to the Theale plant.
57. In Theale the OFT has analysed the merger on a 30 mile basis which is consistent with the parties' view and the customer distribution data provided by them. On that basis the OFT considers that AI's West Drayton plant has been a close competitor to Foster Yeoman operating from its Theale plant. While there are other competing plants slightly further away, the merger might nevertheless be expected to give rise to a substantial lessening of competition.

Coordinated effects – Hertford

58. From AI's plant in Hertford, 85–95 per cent of production was supplied within 20 miles over the past two years. The OFT has therefore given some weight to the 20 mile data while recognising that the smaller delivery radius this indicates may be because of the preponderance of other AI

plants in the area (rather than because asphalt cannot be transported more than 20 miles within two hours given the road network). At the same time, aerial radii are only a crude proxy for road miles, and at the outer boundary of the 20 mile radius are Cemex and Hanson sites in Dagenham (east London), a large AI plant at Greenwich and a Tarmac plant nearby in Charlton. Flexing down one mile to 19 miles would likely exclude these.

59. Given that asphalt from these plants would have to travel by road (for example, around the M25) these plants appear at best to be fringe competitors. The same applies to a number of plants within 30 miles from Hertford which are situated near the Thames in east London and south London, all of whom would need to travel substantial lengths of the M25 around London to reach Hertfordshire.
60. Allowing for the above, AI has four plants in the area (that is, omitting Greenwich) which produced over [] kT of asphalt last year, Lafarge has three wholly owned plants (at Harper Lane, Ryehouse and Stevenage) and a one third stake and capacity allocation in the Harlow Coated Stone joint venture.¹³ The other two partners in this joint venture are Foster Yeoman (now AI) and Tarmac.
61. The only competitors to AI and Lafarge that do not face road congestion issues around London within 20 miles of the Hertford plant are Tarmac and Foster Yeoman via the Harlow Coated Stone joint venture (allocated around [] kT each).¹⁴ On a 20 mile basis (excluding those plants mentioned above in east and south London) the combined share of supply accounted for by AI and Lafarge is slightly under 90 per cent, with Tarmac and Foster Yeoman accounting for around 10 per cent. Applying the same principle that those plants on the other side of London are at best fringe competitors, the position on a 30 mile measure is not appreciably different.

Susceptibility to coordination

62. The following considers the factors set out in OFT guidance.¹⁵

¹³ The joint venture is Harlow Asphalt Limited but is referred to as Harlow Coated Stone.

¹⁴ Lafarge also has sites at Elstow, Paxton and Cambridge, all of which are closest sites to the north of the relevant area around Hertford but are not included in this analysis.

¹⁵ Paragraphs 4.11 – 4.13 inclusive of the OFT's Substantive Assessment Guidance (OFT516 May 2003) discusses the coordinated effects theory in merger analysis.

63. **Ability to coordinate.** AI submitted that the industry is not susceptible to coordination in the Hertford area. AI told the OFT that prices are not transparent as asphalt is predominately a bidding market and competitors do not know what each other bids. AI also submitted that suppliers are not symmetrical. For example, AI's plants at Hertford, Harlow and Luton are smaller than Lafarge's Harper Lane plant and therefore costs per tonne vary considerably. Furthermore, Hanson's plant in Chelmsford – which overlaps with Hertford on a 30 mile measure – is situated on an aggregates quarry site which means it does not need to transport aggregates from outside the area.
64. However, without more detailed evidence to the contrary, the OFT understands that product differentiation between suppliers of asphalt appears to be limited, and that cost structures are similar, creating the ability and incentive to align behaviour. The OFT considers that while precise pricing on individual bids may lack transparency unless the customer accurately quotes the rival's offer, given the duopolistic structure of supply in this area, AI and Lafarge are likely to encounter each other in bidding for contracts in most cases, and know that a lost job is likely to have been lost due to more favourable terms being offered by the other. As such, the key information will be the relative bid of the other (whether higher or lower), not necessarily its absolute level. In a scenario in which each supplier has one opportunity to bid for a contract it would be reasonable to expect that each party may seek to undercut the other. However, in repeated interaction between AI and Lafarge in this local area (as is the case here) there may be a realisation – by both of them, formed independently – that less aggressive bidding will be mutually beneficial in the long run.
65. Transparency may also exist in terms of production volumes (third party market intelligence provides detailed accounts of production volumes of individual plants) and capacity expansion. Coordination could therefore take the form of a common understanding not to make new capacity investments (or otherwise restrict output) in the area, to keep the supply/demand balance as tight as possible to facilitate higher prices.
66. **Incentives to maintain coordination.** By taking into account each other's accommodating reactions, it may be more mutually profitable for Lafarge and AI to price less aggressively and lose a number of contracts to the other, than to seek aggressively to win every contract. In the long run, the

equilibrium this establishes may entail pricing above the competitive level, even if prices for individual jobs are individually negotiated. Detection of a trend by either party to deviate from this understanding may be observable in relation to the plant production volumes of each competitor, for which there is industry transparency, and retaliation could take the form of expanded output from existing plants and/or capacity expansion to increase output.¹⁶

67. Punishment of deviation by either party from a common understanding not to increase investment could take the form of 'retaliatory' investment (or output depending on existing spare capacity) by the other. As this would be harmful to both, the incentive to maintain coordination may be present.
68. AI submitted that any coordination would be unsustainable as detecting cheating and punishing it would be difficult (prices are not transparent) and the fringe competitors would in any case supply more within the area if prices were to rise.
69. **Disruptive factors.** Given the small positions of Tarmac (which is in any event in asphalt joint venture relationships with Lafarge at Harlow and at Elstow) and Foster Yeoman, the OFT does not believe that either of these suppliers can be expected to disrupt coordination in Hertfordshire between Lafarge and AI; the same applies to fringe competitors on a geographic basis in south and east London.
70. While some customers may be large, this is not universally true and the OFT does not consider that buyer power would be sufficient to disrupt coordination between the two principal suppliers in the area except possibly for major jobs nearer to the M25 which may attract multiple bidders whose offers they can leverage.
71. Finally, new entry cannot be expected to be timely, likely and sufficient to disrupt coordination (see below).

¹⁶ The Quarry Products Association and independent research companies (e.g. BDS Marketing) provide data on the output of the industry in the UK.

Effect of the merger on coordination

72. The merger creates a structural link between Lafarge and AI inasmuch that AI will substitute for Foster Yeoman and join Lafarge as mutual participants in the Harlow Coated Stone production joint venture, along with Tarmac.¹⁷ AI will therefore have access to the same transfer pricing terms, and knowledge of the joint venture cost structure, as Lafarge already does.
73. The joint venture also provides a vehicle for improved understanding between AI, Lafarge and Tarmac on each others' views of investment decisions: for example, whether it would be in their individual or collective interest to expand production capacity via their joint venture shares, rather than do so unilaterally. [], as Foster Yeoman's only capacity in the area came via its joint venture share, while AI and Lafarge as existing suppliers may have a mutual incentive to restrict third party expansion of output in the relevant area via Tarmac's share of the joint venture. (They may also have a mutual incentive not previously present to try to decrease capacity or indeed wind up the joint venture, or at least more speedily than absent the merger.¹⁸)
74. Finally, joint venture contact may provide a conduit for coordination in respect of other competitive variables relating to each of AI and Lafarge operations in the area.
75. In light of the above, the OFT believes that supply of asphalt around Hertford may be susceptible to coordinated interaction between Lafarge and AI, and that the merger materially increases the risk of coordination on pricing, output or investment by creating a structural link between AI and Lafarge via the joint venture at Harlow.
76. The OFT therefore believes that it is or may be the case that the merger may be expected to result in a substantial lessening of competition in the Hertford area.

¹⁷ The running of the joint venture is discussed in paragraph 110.

¹⁸ [].

Entry and expansion

77. According to evidence collected from the parties, and based on what third parties told the OFT, the investment required to set up an asphalt plant does not form a significant barrier to entry. This is consistent with previous OFT decisions.
78. In the current case, third parties told the OFT that the barriers to entry were obtaining planning permission, the initial set up capital costs and gaining access to a reliable source of competitively priced aggregates. Additionally, existing excess capacity provides a disincentive to enter. The OFT considers that obtaining planning approval will severely limit the timeliness of new entry.
79. Additionally, the parties did tell the OFT that environmental regulations and local authority regulations governing the hours in which an asphalt plant can operate are further hurdles for entrants to overcome.
80. One third party explained that large companies are better able to provide a flexible service to customers by switching orders between plants to maximize capacity utilisation. Single unit operators need to have spare capacity built in to allow for larger orders to be met. It had built a plant with capacity to produce 200,000 tonnes, but current sales volume is half this. This may serve to increase the costs of small-scale entry, relative to costs of geographic expansion by existing producers with a portfolio of plants.
81. The parties consider barriers to entry and expansion to be low. AI gave an example of recent entry, Hanson in Essex. Hanson has also recently expanded its plant at Dagenham. Another example of entry (albeit not in the South East) given was Morris & Perry in Gurney Slade, Somerset.
82. Overall, on the basis of the evidence before it the OFT considers that while entry, and (perhaps more significantly) expansion by existing producers, may provide some level of competitive constraint it is not apparent to the OFT that it is likely that sufficient and timely new entry would counteract any adverse concerns arising from increased local concentration.

Areas raising no competition concerns

83. The OFT has analysed each of these overlaps on both a 20 and 30 mile measure. On the evidence presented to it, the OFT has concluded that the majority of overlaps do not give rise to a substantial lessening of competition either because of the presence of major competitors in the areas, or because the parties did not appear to be particularly close competitors or their shares of supply (or increments to shares of supply) are not especially large.
84. In the local area centred on AI's plant at **West Drayton**, the parties do not overlap on a 20 mile basis but do overlap when a 30 mile measure is applied. On the latter measure, combined shares of supply are high (around [40–50] per cent) and the increment significant ([10–20] per cent). Numerous competitors are present, particularly to the east and north east of the plant. Around 75–80 per cent of the plant's production was supplied within 20 miles in both 2004 and 2005 indicating that Foster Yeoman has not been an especially close competitor to AI at this plant.
85. From AI's **Wembley** plant, there is no overlap between the parties on a 20 mile measure but on a 30 mile measure the parties' combined share of supply is [40–50] per cent (increment [10–20] per cent), although much of this increment comes from Purfleet and Northfleet in east London. Almost all of this plant's production was supplied within 20 miles for the past two years, indicating that the parties are not particularly close competitors in this area.
86. AI's **Brentford** (Middlesex) plant is the only one of the parties' plants which is able to run at night time. As such, the proportion of its production being supplied within 20 miles is significantly lower (40–50 per cent) than other plants in the South East (since roads are less congested at night). If analysed by the time of day, the merger presents no overlap in night time production and supply. During the day, the parties' combined share and analysis on a 30 mile basis (and overlap plants) is the same as for Wembley, above.
87. In the **Greenwich** local area around 85–90 per cent of AI's plant's production is supplied within 20 miles. On this basis, the parties' combined share of supply is [35–45] per cent (increment around [10–20] per cent). Tarmac and Hanson both supply in the local area (accounting for around 20

per cent each), as does Lafarge (around 10–15 per cent). On a 30 miles basis the combined share increases to [35-45] per cent (increment [10–20] per cent). However, the OFT considers that sufficient competitive constraints remain in this area after the merger.

88. AI's plant at **Croydon** supplies around 90 per cent of its production within 20 miles. On this measure the parties' combined share is around [40–50] per cent. However, Hanson and Tarmac account for around 20 per cent of supply each in this area. On a 30 mile measure the parties' share falls a little to [35–45] per cent with most competing plants lying to the north and east of the Croydon plant. However, the OFT considers that sufficient competitive constraints remain in this area after the merger. AI has proposed to divest this plant in order to remedy the competition concerns identified in the Crawley area (discussed in paragraphs 54 and 55 above).
89. The parties' **Harlow** plants supply around 65–75 per cent of their production within around 20 miles. The parties' combined share of supply is around 20–30 per cent on a 20 mile basis and 40–50 per cent on a 30 mile basis (with Lafarge, Tarmac and Hanson accounting for around 10–15 per cent each). Hanson has recently begun production at a new medium-sized plant situated near its sand and gravel aggregates site at Bulls Lodge in Chelmsford, Essex (which has not been taken into account in these figures). The OFT considers that sufficient competitive constraints remain in this area after the merger
90. AI's plant at **Chelmsford** is a 50/50 joint venture with the Clifford Group.¹⁹ Around 85–90 per cent of the plant's production is supplied within 20 miles. The overlap with Foster Yeoman on this basis is with Foster Yeoman's joint venture at Harlow. The parties' combined share on a 20 mile basis is [40–50] per cent.²⁰ Tarmac is the parties' main competitor in the area (with 20–25 per cent share of supply). On a 30 mile basis, the parties' combined share is around [35–45] per cent. Hanson's new plant (discussed in paragraph 89 above) has recently opened in the area.
91. AI's plant at **Luton** does not overlap with any Foster Yeoman plant on a 20 mile basis but does on a 30 mile radius, where their combined share is [30–40] per cent. However, the increment arising from the merger is in this

¹⁹ The joint venture is known as Mid-Essex Asphalt.

area is very small (around [1-10] per cent) and therefore this local area does not raise competition concerns.

92. Foster Yeoman's **Northfleet** plant is a 50/50 joint venture with Ringway. It supplies around 65–70 per cent of its production within 20 miles. The parties combined share on a 20 mile basis is around 35–45 per cent (increment around 15 per cent), and on a 30 mile basis the parties' combined share is around 30–40 per cent (increment around 20 per cent). Northfleet is located near the river Thames on the south side. It is not clear to the OFT what extent the plant supplies customers to the north of the river (no information on the distribution of supply was given to the OFT).²¹ On the southern side of the river the closest AI plant is at Croydon. Other competitors remain in the area including Hanson which has a 15–20 per cent share of supply (on either measure). The OFT considers that sufficient competitive constraints remain in this area after the merger.
93. Foster Yeoman's **Purfleet** plant is located near its Northfleet plant but on the northern side of the river. Around 70–75 per cent of its production is supplied within 20 miles where the parties have a combined share of [35–45] per cent (increment [10–20] per cent). Their combined share on a 30 mile measure is much the same at around 35–45 per cent (increment around 15–20 per cent). Like Northfleet, it is not clear to the OFT how much production is supplied across the river. The nearest AI plants are at Greenwich and Croydon, both south of the river. Like Northfleet, numerous other competitors remain post merger, including Hanson and Tarmac (15–25 per cent each).

South West England

94. In the South West of England the parties overlap in the supply of asphalt on a 30 mile radius from AI's plants at Bristol and Colemans, as well as from Foster Yeoman's Torr plant. Their combined shares range around 20–30 per cent (increments 5–10 per cent). Hanson (over 30 per cent) and Tarmac (25–30 per cent) are the parties' main competitors and will provide sufficient competitive constraint to AI. One third party was concerned that asphalt prices will rise as a result of the merger.

²⁰ If 100 per cent of the production of the parties' respective joint venture is attributed to them their combined share rises to around 75–80 per cent.

²¹ The parties submitted that deliveries north of the river are made from plants north of the river and deliveries to destinations south of the river are made from plants south of the river.

95. The OFT does not consider that the merger raises competition concerns regarding the supply of asphalt in the South West of England. The increment resulting from the merger is reasonably small and Hanson and Tarmac remain to provide sufficient competitive constraint to AI.

VERTICAL ISSUES

96. Vertical issues may be a factor in this case. Potential vertical links involve: the supply of aggregates for use in asphalt; the supply of aggregates for use in concrete; and the supply of asphalt for use in road surfacing.
97. However, vertical concerns only arise when market power exists or is created in one or more markets along the supply chain.²² For the supply of aggregates, the OFT considers that significant market power does not already exist, nor has it been created as a result of the merger (see the above discussion). The OFT has been told that asphalt and concrete producers in the South West of England (Tarmac, Lafarge and Cemex) generally produce their own aggregates and on the basis of the evidence before it the OFT considers that those in the South East of England will continue to be able to source their aggregates from a number of regions.
98. In the supply of asphalt, the OFT has identified those areas in which the merger raises competition concerns (see the above discussion). However, given the parties' low share in the supply of surfacing services and that surfacing operates on a wider than local basis the OFT does not consider that the merger raises vertical concerns.

THIRD PARTY VIEWS

99. All asphalt customers in the South East of England who responded to the OFT, except for one, are concerned about the proposed merger. Indeed, the supply of asphalt in and around London was the source of most third party concern in regard to this merger. One customer told the OFT that the merger will pose particular problems to the south of London (Croydon and Crawley).

²² See for example, the OFT's Substantive Assessment Guidance, paragraphs 5.1–5.6 (OFT516 May 2003).

100. Customers told the OFT that they were concerned that the merger would lead to higher prices for asphalt in the London area. One was concerned that the merged entity would give preferential treatment to its own downstream activity and squeeze out small to medium sized road maintenance contractors. Another customer commented that Lafarge and Cemex do not have a substantial presence in London and so the merger has led to an effective reduction from four to three large suppliers.

101. Some customers were concerned about the merger in regard to the supply of aggregates in the South West (see above) but the majority were unconcerned.

ASSESSMENT

102. For the reasons set out above, the OFT does have competition concerns in relation to the supply of asphalt in local areas centred on three asphalt plants: Crawley; Theale; and Hertford.

103. The OFT believes that it is or may be the case that the merger has resulted or may be expected to result in a substantial lessening of competition within a market or markets in the United Kingdom.

UNDERTAKINGS IN LIEU

104. Where the duty to make a reference under section 22(1) of the Act applies, pursuant to section 73(2) of the Act the OFT may, instead of making such a reference, and for the purpose of remedying, mitigating or preventing the substantial lessening of competition concerned or any adverse effect which has or may have resulted from it or may be expected to result from it, accept from such of the parties concerned undertakings as it considers appropriate.

105. The OFT has therefore considered whether there might be undertakings in lieu of reference which would address the competition concerns outlined above. Undertakings in lieu of reference are appropriate only where the competition concerns raised by the merger and the remedies proposed to address them are clear cut, and those remedies are capable of ready implementation.

106. AI has indicated to the OFT that it is willing to divest a range of asphalt plants to address the competition concerns identified by the OFT in the three local areas at paragraph 102 of this decision. Namely, AI has proposed to divest:

- the asphalt plant at Croydon in order to remedy the competition concern in the Crawley area
- one of the two co-located asphalt plants at Theale in order to remedy the competition concerns in the Theale area, and
- its share holding of the Harlow Coated Stone joint venture in order to remedy the coordinated effects competition concern in the Hertford area.²³

107. The OFT considers these proposed divestments to be sufficiently clear cut and are able to be implemented readily enough to remedy the substantial lessening of competition identified.

108. In relation to the coordinated effects concerns in the Hertford area, AI has offered to divest the shareholding in the joint venture it has acquired via Foster Yeoman. This clearly removes the structural link created by the merger and the concerns, outlined above, associated with it.

109. However, AI has also informed the OFT that []. The OFT therefore needed to consider at this stage whether this divestment is sufficiently clear-cut in line with its undertakings in lieu standard in published guidance. [].

110. The parties supplied the joint venture agreement and other documents relating to the Harlow Coated Stone joint venture. []. Accordingly, any residual concerns about the proposed divestment remedy in light of [] are removed. While the merger also removes Foster Yeoman as a small (around [] kT by volume) independent presence in the area, this effect is not considered by the OFT to have a material impact on competition and therefore it is not necessary that the divestment remedy address this point.

111. In accordance with section 73 of the Act, the OFT has therefore decided to exercise its discretion to seek undertakings in lieu of a reference to the Competition Commission.

²³ [].

DECISION

112. The OFT's duty to refer the completed acquisition by AI of Foster Yeoman to the Competition Commission pursuant to section 22 of the Act is suspended because the OFT is considering whether to accept undertakings in lieu of reference under section 73 of the Act. However, pursuant to section 34A(3) of the Act this decision does not prevent the OFT from making a reference in the event of no such undertakings being offered or accepted.