OFFICE OF FAIR TRADING

PROPOSED JOINT VENTURE BETWEEN ANGLO AMERICAN PLC AND LAFARGE S.A

ME/5007/11

Decision under section 33 of the Enterprise Act 2002

2 November 2011

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

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EXECUTIVE SUMMARY

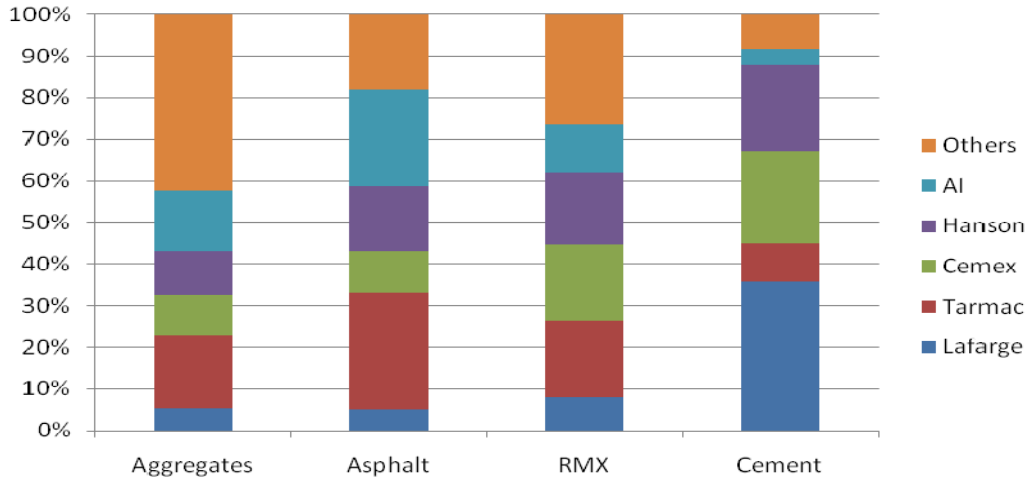
Introduction

1. Anglo American plc (Anglo American), through the operation of its UK subsidiary Tarmac Limited (Tarmac), and Lafarge S.A. (Lafarge) propose to combine the bulk[1] of their respective construction materials businesses in the UK in the form of a 50:50 joint venture.

2. The parties' principally overlap in the production and supply of aggregates, asphalt, ready-mix concrete (RMX), and cement. These products are described in detail in the main part of the decision.

3. The parties are two of the five significant, vertically-integrated suppliers of construction materials in the UK. Their respective positions in the products above, together with those of their key vertically-integrated competitors, are shown in Figure 1 below.

Figure 1 – Shares of supply of the vertically-integrated competitors in Great Britain (2009)



Source: OFT based on parties' data, BDS data and MPA estimates

4. The OFT has assessed the competitive effects of the proposed transaction with respect to three theories of harm, namely horizontal unilateral effects, vertical effects and coordinated effects. The OFT summarises its findings in each of these areas below. The detailed

[1] Certain assets are excluded: see footnote 6 below for full details.

reasoning in relation to market definition and competitive assessment, incorporating analysis of the parties' arguments and third party views, are set out in the main part of the decision.

Horizontal unilateral effects

Aggregates

5. The OFT considered it necessary to assess competition by reference to three alternative product scopes, namely: (i) 'all-aggregates', assessed on a local basis using 30-mile radii; (ii) primary aggregates, assessed on a local basis using 30-mile radii; and (iii) crushed rock, assessed on a regional basis.

6. In addition, the OFT considered separately, at a national level, the supply of: (i) high PSV stone; (ii) rail ballast; and (iii) high purity limestone, with particular regard to its use in flue gas desulphurisation (FGD).

7. The large number of overlap areas in relation to the supply of all aggregates and primary aggregates meant that the OFT could not carry out a bespoke analysis of local overlaps but instead needed to use some form of filter.[2] In this regard the OFT considered combined market shares in excess of 33 per cent to identify potentially problematic markets. This is a more conservative approach relative to the 40 per cent indicator referred to in the OFT/CC's *Merger Assessment Guidelines*.[3] The OFT considered this level to be more appropriate since: (i) differing levels of closeness of competition may exist between suppliers located in different positions within a given radial, thereby meaning that suppliers are geographically differentiated; (ii) transport costs indicate a significant cost differential between differently located production sites; and (iii) the parties' gross margins in the supply of aggregates are high.

8. Applying a simple 33 per cent filter rule to the parties' combined local shares using a 30-mile radial led to the identification of: (i) 43 sites for the supply of 'all aggregates'; and (ii) 81 sites for the supply of primary aggregates, where the OFT considered that the test for reference was met.

[2] The same reasoning applies in relation to consideration of asphalt and RMX local overlaps.
[3] OFT 1254 (Merger Assessment Guidelines), at paragraph 5.3.5.

9. With respect to crushed rock assessed on a regional level, the OFT identified two areas, the East Midlands, and Yorkshire & Humberside, where the proposed transaction gives rise to a realistic prospect of a substantial lessening of competition.

10. On a national level, the OFT did not consider the proposed transaction would give rise to competition concerns in the supply of high PSV given Lafarge's limited volumes in this market. With respect to the supply of rail ballast, the OFT considered that the proposed transaction would create a realistic prospect of a substantial lessening of competition given the high combined market share of [65-75] per cent, the existence of only one other major supplier and the inability of the principal buyer to sponsor new entry. In relation to high purity limestone, the OFT received mixed views from third parties about the likely competitive effects of the proposed transaction with respect to its application for FGD. Given its overall conclusions on the proposed transaction, the OFT did not consider it necessary to conclude on whether the test for reference would be met in relation to this specific product.

Asphalt

11. The OFT considered that a distinct product market exists for the supply of asphalt. However, it also considered whether regard should be had to overlaps concerning plants benefiting from planning consent for night time and weekend ('24/7') operating hours. With respect to the relevant geographic scope of asphalt supply, the OFT assessed competition on the basis of a 30-mile radius around each of the parties' sites, although in the Greater London area it had regard to a narrower 20-mile radial to take into account greater traffic congestion and slower speeds which impact effective delivery distances.

12. The OFT considered it appropriate to apply a decision rule to identify potentially problematic local areas in which the parties would have a combined market share in excess of 40 per cent to assess asphalt overlaps (compared to the 33 per cent threshold for all aggregates and primary aggregates) on the basis that: (i) any specific characteristics of particular asphalt plants would be assessed separately, such that asphalt could be considered to be a homogenous product; (ii) gross margins being made by the parties are considerably lower than in the supply of

aggregates; and (iii) transport costs relative to price are significantly lower than for aggregates.

13. On this basis, the OFT identified 22 local areas in which the test for reference is met where the parties have a combined share above 40 per cent on a 30-mile radius, and one in Greater London, [ ], where the parties' shares exceed this level on a 20-mile radius.

14. In addition, the OFT identified six sites where, post-transaction, only three or fewer 24/7 asphalt producers would remain within a given local area. However, given its overall conclusions on the proposed transaction, it did not consider it necessary to reach a firm view as to whether a realistic prospect of a substantial lessening of competition would arise in these six areas.

RMX

15. The OFT considered that a separate product market exists for the supply of RMX. It assessed the effects of the proposed transaction using 10-mile radii around each of the parties' sites.

16. The OFT considered it appropriate to apply a decision rule to identify potentially problematic local areas where the parties' combined market share would be in excess of 40 per cent in the supply of RMX since: (i) RMX is a homogenous product; (ii) the parties' gross margins are very low; (iii) volumetric trucks exert an additional constraint on RMX suppliers; and (iv) the shares of independent, non-vertically-integrated RMX suppliers are increasing over time.

17. On the basis of 10-mile radii where the combined shares of the parties exceed 40 per cent, the OFT identified 64 areas where the test for reference is met.

Cement

18. The OFT considered that a separate product market exists for the supply of bulk grey cement, and that the competitive effects of the proposed transaction should be considered at both a regional and national level.

19. On a national level, the OFT noted that the proposed transaction will result in a reduction of domestic cement suppliers from four to three and

that the combined entity would have [40-50] per cent market share post-transaction (increment of [10-20] per cent). The OFT did not consider that importers of cement exert a significant constraint on the domestic suppliers. On a regional level, Lafarge has three cement plants located within a 100-mile radial of Tarmac's single cement plant in Tunstead (one of which, Lafarge Hope, is in very close proximity). The OFT considered that: (i) in the region around the Tunstead plant, the parties could be regarded as close competitors, and their combined shares of supply would be likely to be significant (given that their shares in the relevant Economic Planning Regions (EPRs) around the Tunstead plant for which the OFT has data are [50-60] per cent); (ii) the parties' gross margins are very high (around [ ] per cent); (iii) barriers to entry are very high and the only known expansion plans [to the OFT] relate to the parties' plants. On this basis, the OFT identified a realistic prospect of a substantial lessening of competition in the supply of bulk grey cement at regional and/or national level.

Remedies to horizontal unilateral effects

20. The parties offered to remedy horizontal unilateral effect concerns identified by the OFT as meeting the test for reference through the divestment of quarries or plants in each relevant local area with respect to:[4] (i) primary aggregates; (ii) 'all aggregates'; (iii) asphalt, including the Hayes plant; and (iv) RMX.

21. With respect to rail ballast, the parties offered to remedy concerns through the divestment of [ ]. In relation to crushed rock, it was not clear to the OFT that the parties had offered the necessary remedy to resolve concerns in the East Midlands, and Yorkshire & Humberside.

22. To address concerns in the supply of bulk grey cement, the parties offered to divest [ ].

23. The OFT considered that the parties' offers of undertakings in lieu were capable, in principle, of remedying unilateral horizontal concerns created by the proposed transaction.[5] The OFT noted that the scale and nature of

[4] The parties offered to divest quarries or plants constituting the entire increment in each local area, save that this offer was not made with respect to all aggregates.
[5] The OFT noted, however, the uncertainty as to whether the parties were prepared to offer the necessary structural remedies in relation to 'all aggregates' and crushed rock.

the remedies offered in relation to the unilateral horizontal effects would have raised the question of whether these were of such magnitude in absolute terms and/or complexity that their practical implementation would require unworkable resources at first phase. However, the OFT did need to consider this issue given its findings as summarised below.

Vertical unilateral effects

24. The OFT assessed the extent to which the proposed transaction could give rise to vertical input foreclosure effects by the combined entity charging higher prices for cement and/or refusing to supply cement to its independent rivals in downstream RMX production. It analysed the ability, incentive and effect of the combined firm engaging in such behaviour.

25. The OFT considered that the combined firm would have the ability to engage in input foreclosure in those regional parts of Great Britain where it would have significant market power in cement supply. The OFT did not consider that customers would be able to switch away from the parties to alternative producers sufficiently to eliminate the parties' market power, nor did it consider that customers could fully switch to alternative cementitious products.

26. The OFT also considered that the combined entity could have the incentive to foreclose downstream RMX rivals. The OFT noted that RMX markets are local, and the combined entity may need only a [25-35] per cent market share in RMX supply in any local area to generate a level of diversion identified by the parties as making a foreclosure strategy profitable. It was clear that the parties' local RMX shares (in certain overlapping RMX plant areas) would be above this level. The OFT was not able, within the constraints imposed by a first phase review, to investigate whether the parties' shares were above the level in non-overlapping areas. However, it concluded that there was no reason to believe that their shares would not exceed this level in non-overlapping areas.

27. With respect to the effect of such a foreclosure strategy, the OFT considered that the reduction in competition in certain local downstream RMX markets may result in higher prices to end customers, particularly since there is limited scope for RMX customers to switch to alternative products.

28. Overall, the OFT concluded that, although it had not at first phase been able to specify the set of potentially affected local RMX markets, the proposed transaction would give rise to a realistic prospect of a substantial lessening of competition by foreclosing non-integrated RMX customers in certain local areas by raising their costs, or restricting supply, and ultimately harming end-customers.

29. The OFT also gave some consideration of the extent to which downstream asphalt and RMX rivals who purchase aggregates from the parties as a key input for the production of such products could be foreclosed. However, given its overall conclusion on the competitive effects of the proposed transaction, it did not consider it necessary to conclude on this point.

Remedies to vertical unilateral effects

30. The parties offered the divestment of [ ] as the remedy to the OFT's vertical concerns. They argued that this would provide the purchaser with a strong incentive to distribute its product widely. However, the OFT did not consider that this remedy, even if taken in conjunction with the RMX plant divestments offered to address horizontal local overlaps, would suffice to resolve its concerns in a clear-cut way. The OFT considered that the combined entity may still have regional market power in cement post-divestment and could not be confident that the RMX divestments offered would capture all the local areas where the parties would have a sufficient RMX share of supply to generate potential concerns. In addition, the OFT was mindful that there may be overlapping areas that the parties have not offered to divest (as the share of supply in RMX is above 33 per cent) but where their shares are nevertheless sufficiently high (that is, potentially in the range of [25-35] per cent) to generate foreclosure concerns.

Coordinated effects

31. The OFT considered whether the proposed transaction would create or enhance coordination in the supply of bulk grey cement.

32. The OFT noted a number of factors that led it to consider that pre-existing coordination may exist, including: (i) the extent of consistent third party complaints; (ii) the contents of a document supplied by Tarmac discussing

cement supply, margins and the risk of regulatory intervention by antitrust authorities in the UK; and (iii) the parties' own margin data for cement which shows high gross margins.

33. More generally, the OFT considered that there was sufficient evidence to indicate at phase one that national cement suppliers (Hanson, Cemex, Lafarge and Tarmac) could reach and monitor terms of coordination given that:

(a) there are only four domestic suppliers of cement, making it easier to reach a common understanding between few firms

(b) the construction materials industry tends to be transparent in that customers and suppliers generally know who supplies to whom

(c) national suppliers send out regular price announcement letters which are typically sent around the same time and announce similar price increases, enabling them to coordinate around the timing and general scale of headline prices and to signal to each other that they have complied with the terms of coordination. The OFT noted that unlike the other products considered in this case, at the aggregated level, prices always increased following the issuances of such letters

(d) there are a number of structural links through joint ventures and cross-supply relationships between each of the domestic cement suppliers, making markets more transparent to monitor deviations, and

(e) numerous customers of the parties complained that the national suppliers either refuse to quote for their cement requirements, or price disproportionately high – a strategy to allocate specific customers to particular suppliers would make any deviation from coordination easy to detect were customers to switch to a rival supplier.

34. The OFT went on to consider whether coordination would be internally sustainable amongst the national cement players, and concluded that it would since: (i) profits of coordination would be high among four national cement suppliers; (ii) sufficient capacity existed to allow for punishment,

particularly at the local level; and (iii) multimarket geographic contacts would enable coordinating firms to punish deviation more effectively where they are strong, as part of a localised retaliatory 'tit-for-tat' strategy.

35. The OFT also found that coordination would be externally sustainable given that: (i) barriers to entry and expansion in the supply of cement are very high; (ii) customers do not have much buyer power; and (iii) importers do not provide a significant constraint on the national suppliers.

36. In terms of the effect of the proposed transaction on the prospects for coordination, the OFT concluded that the proposed transaction would increase the symmetries of the national players by making the combined entity's position more aligned to the positions of Hanson and Cemex across the four markets. Pre-merger, Lafarge is long in cement, but short in RMX, whereas Tarmac is short in cement, but a leading supplier of RMX. In particular, the OFT noted that Tarmac's unique position as a net purchaser of cement may currently moderate its incentives to maximise cement prices but that the proposed transaction would likely remove this moderating influence and thereby potentially increase the effectiveness of coordination. The OFT observed in this context that coordination between suppliers in a market does not have to take place on an 'all or nothing' basis; rather the existence of previous coordination, and the prospect of future coordination, may be likened to a continuum, which in turn may be made weaker or stronger by the proposed transaction.

37. The OFT therefore concluded that the proposed transaction would give rise to a realistic prospect of a substantial lessening of competition by increasing the prospects for stable and effective coordination going forward.

Remedies to coordinated effects

38. To address coordinated effects concerns, the parties offered the divestment of [ ].

39. The OFT noted the apparent attraction of a remedy that would open up the cement market to a new entrant to supply downstream RMX producers. However, it was not clear to the OFT whether such an entrant would or would not in fact have an incentive to benefit from, or

participate in, any ongoing coordination. In this context, the OFT considered whether an alternative purchaser might be able to replicate Tarmac's existing position, as a net purchaser of cement, to ensure that it would have a similar, more muted, incentive than the other national cement suppliers to coordinate. However, it was not confident that the parties' offer in terms of RMX plant divestments would not allow any purchaser to replicate the same scale or coverage as Tarmac.

40. As such, the OFT concluded that the divestment of [ ] would not remedy, mitigate or prevent coordinated effects concerns arising from the proposed transaction in the supply of bulk grey cement to the necessary clear-cut standard.

Conclusion

41. For the reasons summarised above, the OFT concluded that the proposed transaction should be referred to the Competition Commission (CC) for a second-phase review.

PARTIES

42. **Anglo American plc** (Anglo American) is a global mining company incorporated in England and Wales with primary listing on the London Stock Exchange and secondary listings on the Johannesburg Stock Exchange, Swiss Exchange, Botswana Stock Exchange and Namibian Stock Exchange. In 2009, its worldwide turnover was €[ ] billion. In the UK, Anglo American operates through various subsidiaries, including the Tarmac Group (Tarmac). Tarmac's principal UK activities include the production and sale of aggregates, asphalt, cement, ready-mix concrete (RMX), as well as asphalt surfacing and maintenance services and waste management services, all of which will be contributed to the joint venture. For the financial year 2009, the UK turnover of Tarmac's operations that will be contributed to the joint venture was €[ ] billion.

43. **Lafarge S.A** (Lafarge) is active in the supply of building and construction materials in 78 countries around the world. It is headquartered in France and is listed on the Paris Stock Exchange. Its business is divided into three main divisions: cement; construction aggregates and RMX; and gypsum. The cement business accounts for approximately 60 per cent of its total worldwide sales. For the financial year 2009, Lafarge achieved

consolidated worldwide turnover of €15.9 billion. For its UK operations that will be contributed to the joint venture, it achieved approximately €[ ] million turnover. Following the proposed transaction, Lafarge will retain its current holdings in assets operating outside the UK.

TRANSACTION

44. The parties signed a framework agreement on 18 February 2011 pursuant to which a 50/50 joint venture will be created which will combine the parties' respective construction assets in the UK.[6]

45. The extended statutory deadline for the OFT to reach a decision is 5 September 2011.

46. No filings are being made in any other jurisdiction.

JURISDICTION

47. The proposed transaction qualifies for review under the EU Merger Regulation (EUMR). The parties made a request under Article 4(4) of the EUMR for the transaction to be referred in whole to the United Kingdom. On 14 April 2011, the OFT informed the European Commission that it would accept the referral request. Subsequently, on 16 May 2011, the European Commission referred the proposed transaction in full to the OFT.

48. The OFT believes that the proposed transaction would result in two or more enterprises ceasing to be distinct under section 23(1) of the Enterprise Act 2002 (the Act). The UK turnover of the parties' respective assets being contributed to the joint venture exceed £70 million so the turnover test in section 23(1)(b) of the Act is met. The OFT therefore considers that the proposed transaction qualifies for review under the Act.

[6] This excludes Tarmac's assets in Ireland. Tarmac has a mothballed aggregates quarry in the Republic of Ireland (that currently has no turnover). Lafarge's 50 per cent interest in a cement import terminal in the Isle of Man is also excluded. Neither is Tarmac Building Products Ltd (TBP), Tarmac's heavy building products business, being contributed to the joint venture. Anglo American states that its intention is to divest itself of its interest in TBP once an appropriate sale can be agreed.

MARKET DEFINITION

49. The parties submitted that the principal product areas affected by the proposed transaction are:

    (a) aggregates, which are used as base materials in the construction of roads, buildings and other infrastructure, including primary aggregates (quarried from land or dredged from the sea), secondary aggregates (derived from waste products or other mining or industrial activities), and recycled aggregates (derived from recycled sources such as demolition sites and construction waste)

    (b) asphalt, produced from aggregates and bitumen and primarily used in asphalt surfacing and maintenance activities

    (c) ready-mix concrete (RMX), which comprises a mix of aggregates, cement and water supplied in a ready-mixed form, and

    (d) cement, which is a fine powder produced from limestone, alumino-silicate and other constituents.

50. The parties will also contribute to the joint venture their activities relating to asphalt surfacing and maintenance, and waste management services. In the course of the OFT's market investigation, no material third party concerns were raised with respect to waste management services or asphalt surfacing and maintenance. The OFT therefore does not consider these areas further.

Aggregates

Product market

51. Aggregates consist of crushed rock, sand and gravel (land-sourced and marine-dredged), as well as secondary and recycled aggregates. Primary aggregates are produced solely from the minerals extracted without the addition of other materials and may be quarried from land or dredged from the sea. Secondary aggregates are derived from the waste products of other mining or industrial activities and recycled aggregates are derived from recycled sources such as demolition sites and construction waste.

52. Aggregates have a variety of uses, including:

(a) construction uses (which are estimated by the parties to account for 95 per cent usage) including:

(i) as a sub-base (the layer of stone which forms the foundation for many construction projects) and for other structural fills

(ii) in the production of RMX and other concrete products and

(iii) in the production of asphalt, including high polished stone value (PSV) materials and

(b) other specialist applications such as rail ballast, limestone, and high purity limestone used in chemical processes.

Previous decisional practice

53. In previous cases in this industry,[7] the OFT has typically used a product scope including all aggregates, based on a degree of substitutability between the different types of aggregates in their use. However, in its most recent decision, *Aggregate Industries/Atlantic Aggregates and Stone Haul*,[8] the OFT specifically analysed the transaction with respect to secondary aggregates.

54. The European Commission's recent assessment in *Eurovia/Tarmac* focused on an overlap in primary aggregates, noting that 'in general secondary aggregates are not substitutable to primary aggregates across the whole range of applications (including asphalt)'.[9] Further, it observed that '[t]wo main types of primary aggregates can be distinguished: sand and gravel in one hand and crushed rock on the other hand.'[10]

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[7] See, for example, Completed Acquisition by Aggregate Industries Limited of Foster Yeoman Limited, 20 November 2006; Anticipated Acquisition by Midland Quarry Products Limited of the Griff Quarry currently owned by Hanson Quarry Products Europe Limited, 27 September 2004; and Anticipated Acquisition by Anglo American plc of Johnston Group plc, 29 September 2004.
[8] Completed Acquisition by Aggregate Industries UK Limited of Atlantic Aggregates Limited and of Stone Haul Limited, 2 March 2009.
[9] M.5803 *Eurovia/Tarmac*, Commission decision dated 10 June 2010, paragraph 11.
[10] M.5803, paragraph 12.

The parties' arguments

55. The parties submitted that there is a single relevant product market for all construction aggregates, including recycled and secondary, and also marine-dredged aggregates. They supplied some examples where they had quoted for projects based on primary aggregates but had lost these tenders to suppliers of recycled or secondary aggregates. The parties also noted that [ ].

56. The parties further stated that 28 per cent of the supply of aggregates in 2009 (and 2010) came from secondary and recycled materials, and that these figures have grown as a proportion of total aggregates production in recent times. Moreover, they submitted that secondary and recycled aggregates have cost advantages over primary aggregates, based on factors such as production cost and fiscal treatment. They noted that in structural fill and sub-base applications (the largest construction use segment by volume), the MPA estimates that over 40 per cent is accounted for by secondary and recycled aggregates.

57. The parties submitted that, within primary aggregates, crushed rock grades are interchangeable with sand and gravel grades in nearly all mainstream applications. They provided data to show that the relative proportions of crushed rock and sand/gravel used in RMX production vary significantly between regions, driven by differences in local availability.

Third party views

58. Very few third parties agreed with the parties that there is a high degree of substitutability between secondary/recycled aggregates and primary aggregates. A significant number of third parties noted limitations on the substitutability between primary and secondary/recycled aggregates for certain applications. Several third parties also identified potential factors that related to demand for specific types of primary aggregates only. In particular, the OFT notes from third party comments that:

    (a) some Highways Agency specifications for asphalt effectively limit the proportion of recycled product which customers are prepared to accept

(b) customers active in RMX production have strong preferences for primary aggregates

(c) customers active in asphalt applications have strong preferences for crushed rock (as opposed to sand and gravel) for asphalt applications

(d) some customers have specific demand for high PSV materials for certain road surfacing applications

(e) some customers have specific requirements for particular specifications of sand for producing concrete products, imposing strong limitations on alternative supply side options

(f) rail ballast is a specific type of crushed rock used by Network Rail which is not substitutable for any other product (and which the parties indicate is most likely to form a distinct product market), and

(g) some customers have specific requirements for high purity limestone for chemical stone applications which, as identified by the parties, cannot be substituted for other aggregates products (and which the parties indicate is most likely to form a distinct product market).

OFT assessment of aggregates market definition: all aggregates and primary aggregates

59. The data submitted by the parties on functional interchangeability demonstrated that different types of aggregates can be used to a certain extent in relation to all the different types of applications. However, it is important to examine whether this substitutability is sufficient for the different types of aggregates to be regarded as part of a single product market. In this regard, the data indicated that:

(a) a high proportion of the aggregates (74 per cent) used in asphalt production is accounted for by crushed rock (as opposed to sand/gravel or secondary/recycled)

(b) primary aggregates account for 84 per cent of all aggregates used in asphalt production, and

(c) 88 per cent of aggregates used for RMX are primary aggregates.[11]

60. On the basis of these data, and in line with third parties' views discussed in paragraph 58 above, the OFT understands that the use of secondary and recycled aggregates is weighted heavily towards lower value structural fill and sub-base applications rather than 'value-added' applications.

61. If there were no significant limitations on switching, one might expect the penetration of secondary and recycled aggregates in asphalt and RMX to be closer to their penetration in general construction applications. The data, backed by third party comment, however, do not bear this out. Given the apparent cost advantages in favour of recycled and secondary aggregates, it may be that much of the switching which is feasible in value-added applications has already occurred and that small relative price changes may not generate substantial further switching in these applications.

62. It is not clear to the OFT that the ability of some (marginal) customers to switch demand between different types of aggregates would necessarily protect (infra-marginal) customers with more specific aggregates demand requirements against prospective price increases by a hypothetical monopolist in primary aggregates. The price per tonne of specific aggregates types varies significantly between those used mainly in general construction and those which command a premium.

63. It is important to understand that aggregates producers are likely to have knowledge of their customers' aggregates applications (such as asphalt or RMX production) and supply alternatives, and be able to take these into account in shaping their pricing negotiations with specific customers.

64. In relation to the example of switching described in paragraph 55 above, the OFT considers that the tenders lost by the parties to suppliers of secondary or recycled aggregates appear heavily weighted towards

[11] RBB paper, Preliminary assessment of the relevant product market, page 3.

general construction applications where the scope for substitution seems more prevalent.

65. On the basis of the above, the OFT considers that it is appropriate for it to examine the proposed transaction not only with respect to 'all aggregates' but also to examine whether particular concerns arise in relation to the supply of primary aggregates. The information referred to above also suggested that the OFT should examine whether it is appropriate to assess separately specific types of primary aggregates.

OFT assessment of aggregates market definition: distinctions between different types of primary aggregates

66. With respect to crushed rock, the OFT notes from third party comments that it is transported significant distances by road and rail into London and the South East (discussed further in paragraph 76 below in relation to geographic market implications). Indeed the parties acknowledged that crushed rock travels further than sand and gravel for reasons of natural geological availability. This would indicate to the OFT that substitution options to locally-available aggregates sources are limited for certain downstream demand applications. In addition (as noted in paragraph 59 above), a high proportion of the aggregates used in asphalt production is accounted for by crushed rock (as opposed to sand/gravel or secondary/recycled).

67. The OFT therefore believes that it should consider specifically whether competition concerns arise in relation to the supply of crushed rock.

68. As referred to in paragraph 58 above, high PSV stone, rail ballast and high purity limestone are further distinct types of aggregates. For the reasons set out below, the OFT considers that each individually may satisfy the hypothetical monopolist test, to the extent that monopoly suppliers of these products may be able to raise prices without prompting material switching to other aggregates, whether lower price/quality primary aggregates or secondary/recycled. In particular, the OFT notes the following:

    (a) PSV stone is a high value aggregate particularly used in the production of asphalt for a surface course on highways to deliver a required level of skid resistance. End customers may specify whether PSV is to be included in an asphalt surface. There are a

number of grades of PSV stone which can alter the level of skid resistance. Given the specific demand-side requirements identified by a number of customers, the OFT considers it likely that high PSV forms a distinct product market

(b) rail ballast is a crushed rock which is used as a bedding material underneath railway tracks. These are igneous rocks that are resistant to pressure and breakage. The parties stated that there are only around eight quarries in the UK that can supply rail ballast to Network Rail. On this basis, the OFT considers that it is likely that a separate market exists for the supply of rail ballast, and

(c) high purity limestone is a type of limestone with a calcium carbonate content of 95 per cent or above, which can be used as chemical stone for the production of soda ash, and in applications relating to flue gas desulphurisation (FGD), precipitated calcium carbonate, and sinter, or it can be used to make limestone powders which are sold for a range of chemical and industrial uses. The parties provided market share data on the basis of high purity limestone, rather than with respect to its end application, on the basis that the same primary material is used for each of these end uses. Certain customers noted that specific grades of high purity limestone are required for use in power stations to clean sulphur emissions (FGD), and in chemical manufacturing processes (soda ash). The OFT notes that there may be some supply-side ability to produce different grades of high purity limestone for specific end-uses. However, the OFT leaves open the precise product scope in this case, considering the effect of the proposed transaction in relation to the supply of high purity limestone, and also taking account of a narrower possible scope of supply of product for use in FGD (see paragraphs 127 to 130 below).

OFT conclusion on aggregates product market definition

69. The OFT considers that, irrespective of the parties' actual market position in the different types of aggregates, the lack of substitutability between them for a number of applications emphasises the shortcoming of relying on a broad 'all aggregates' (or even 'all primary aggregates') product market definition for the OFT's competitive analysis.

70. Overall, and notwithstanding the evidence submitted by the parties in relation to certain substitution possibilities and examples, the OFT considers that, based on the overwhelming and consistent third party comments received, a number of alternative aggregates product scopes should be assessed in this case. The OFT also notes that there are likely to be asymmetric constraints between broad and narrower sets of products. For example crushed rock is likely to constrain prices of sand and gravel within a primary aggregates product scope, whereas a hypothetical monopoly supplier of crushed rock may not be constrained by availability of sand and gravel in supplying to customers for asphalt applications.[12]

71. On the basis of the above, the OFT considers in its competitive assessment each of:

    (a) the supply of all aggregates (comprising all primary, secondary and recycled aggregates)

    (b) the supply of primary aggregates (including sand and gravel, and crushed rock) and

    (c) the supply of crushed rock.

72. In addition, on the basis of the different demand- and supply-side characteristics from other types of aggregates, the OFT considers that distinct product markets exist for:

    (a) high PSV stone

    (b) rail ballast and

    (c) high purity limestone.

[12] The parties noted, and the OFT acknowledges, that the OFT characterised aggregates as homogenous in its Aggregates Report on the market study and proposed decision to make a market investigation reference August 2011 (OFT1358). However, this comment was made in respect of the different types of aggregates: 'Whilst there are various types and grades of aggregates, there are no significant differences in quality between producers (for example Type-1 aggregate is the same product whether purchased from one company or another)' (paragraph 4.33). The OFT does not therefore consider that the views expressed in the Report mean that it is inappropriate for the OFT, in the context of a merger assessment, to differentiate between different types of aggregates in its analysis.

Geographic market

73. In general, transport costs dictate that aggregates compete on a local basis. In terms of (road) delivery catchment areas, the parties' data show that Tarmac delivered 80 per cent of its external aggregates supply to customers within [20-30] miles of the point of production; and the equivalent distance for Lafarge deliveries was [30-40] miles.[13]

74. Previous OFT cases in the sector have typically used a 30-mile radius as an initial basis for examining local aggregates overlaps.[14] Different radials have been used on occasion to test sensitivity of overlaps and market shares to flexing the scope, in cases where the number of overlap sites was relatively limited.[15]

75. The delivery catchment area data for aggregates was notable in that it identified a wide range of reported catchment areas and certain aggregates sites with 80 per cent catchment delivery distances significantly in excess of the average (some in excess of 100 miles). The parties noted that greater delivery distances may reflect production of, and demand for, particular types of aggregates. These included quarries producing high PSV aggregates required for certain asphalt applications.

76. Many third parties also noted that, while the majority of aggregates supply is on a local basis, some types of aggregates are transported over much longer distances, namely rail ballast, high purity limestone and high PSV stone. A significant number of third parties also noted that, since crushed rock is frequently transported by rail from the Midlands to London and the South East area where no such rock is available, a purely local analysis of crushed rock supply would not be appropriate.

77. The OFT notes that the transport of the products (referred to in paragraph 76 above) on a wider basis is due to both the higher value of such products, and the lack of local production availability of certain aggregates types due to geology. Indeed, one aggregates producer stated that the 'size of the actual geographic market for a quarry will vary widely depending on a number of factors including quarry location, local demand,

[13] RBB paper, Geographic radials for the purpose of the competitive assessment, Table 1.
[14] See Completed acquisition by Aggregate Industries Limited of Foster Yeoman Limited 20 November, 2006, paragraphs 13 to 17.
[15] See Anticipated acquisition by Anglo American plc of Johnston Group Plc OFT decision of 29 September, 2004, paragraph 16.

quality of local transport infrastructure and traffic levels, the stone type produced and where demand for the relevant stone type is centred.'

78. Given the above discussion about distinctions between aggregates types, and related delivery distances, the OFT notes that application of a single geographic radial to the parties sites may not capture some potentially relevant quarry overlaps. However, the OFT considers that a 30-mile radial is a reasonable starting point in general terms to assess competition between aggregates supplied on a local basis. However, the OFT also notes that competition in the supply of some aggregate types is likely to take place on a regional, inter-regional or national basis (as is accepted by the parties with respect to the supply of rail ballast).

79. In framing its analysis of competitive effects, the OFT has therefore used a 30-mile radial around the relevant site for analysing 'all aggregates' and primary aggregates. Crushed rock is considered on a regional basis (albeit without defining a fixed size), given that it is transported from the Midlands by rail into London and the South East. For each of high PSV stone, rail ballast and high purity limestone, the OFT assesses competition on a national basis.

Rail-linked quarries and depot networks

80. The parties operate rail-linked quarry/depot networks, allowing them to deliver aggregates products into areas of the country which lack relevant indigenous resources (for example supplies of crushed rock into London area demand centres). This raises a methodological question of how rail-shipped aggregates should be accounted for in a local market analysis, since competitive constraints applying in the area of delivery may not be captured by a quarry-centred (production) approach to the geographic scope of markets.[16]

81. One approach would be to consider the depots to which railed aggregates are delivered as 'virtual quarries' which compete in a market local to their proximity. In response to this suggestion, however, the parties submitted that the majority of the aggregates supplied via railheads/depots are used for their internal production of asphalt and RMX, and further, that external customers would still have the option of obtaining aggregates from

[16] Some similar issues may arise with respect to aggregates extracted in one area but transported by sea for supply in other areas through marine wharves.

numerous other local sources (including primary aggregates sites and competitors' rail depots) within the local areas around depots.[17]

82. Nevertheless, the OFT notes that the fact that a proportion of supply is taken and used by the parties internally does not fully negate the competitive impact of the rail depots. Internal supply of aggregates has been included for the purposes of considering the parties' presence in local areas more generally.

83. The OFT also notes that some third parties indicated that control of rail-linked depots and the ability to establish downstream (asphalt or RMX) operations at such sites gives the owners of rail-linked depots a significant competitive advantage in downstream markets against competitors reliant on road-hauled aggregates.

84. In light of its overall conclusions, the OFT has not had to determine precisely how rail-linked quarries should be accounted for in terms of its analysis. However, it has not been able to conclude that the existence of the parties' rail-linked quarry networks does not give rise to additional issues beyond those identified in this decision.

Asphalt

Product market

85. Asphalt is produced by heating and mixing aggregates and a viscous binding agent, usually bitumen (which, in the UK, is predominantly obtained from petroleum processing). It is used in the surfacing of roads, car parks, footpath pavements and other surfaces, as well as airport runways and sporting arenas. The specification of each type of asphalt is a function of the mix of aggregates, bitumen and additives, and is made according to a producer's proprietary design mix, to BS / EN standards, to specifications set by the Highways Agency or to one of a series of standard European Union asphalt mix specifications.

86. The OFT has, in previous cases, taken the view that a distinct, single product market exists for the production and supply of asphalt.[18]

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[17] Parties' response of 2 August 2011 to OFT's Fourth Information Request, page 17.
[18] See for example completed acquisition by Aggregate Industries Limited of Foster Yeoman Limited 20 November 2006, paragraph 36.

Although there are different specifications of the product depending on the particular end use, production assets can be used flexibly to meet specification requirements. The parties agreed with this approach (subject to noting that asphalt competes with other surfacing materials for certain applications).

87. During the course of its investigation, the OFT has not received compelling arguments to support an alternative candidate product market. The decision will therefore assess the competitive effects of the proposed transaction on the basis of the production and supply of asphalt.

88. Within a single asphalt product market, the OFT has, however, in its competitive assessment, had regard to comments received during its investigation that suppliers whose plants benefit from planning consent for night time and weekend ('24/7') operating hours within which to produce asphalt, should be regarded as particularly close competitors in the supply of asphalt for certain projects (in particular, night-time road surfacing activities).

Geographic market

89. Asphalt is transported hot and is best laid within two to three hours of dispatch, indicating that competition to supply asphalt typically occurs on a local basis. The parties submitted that they each conduct price negotiations through local sales teams, guided by internal pricing materials which provide a starting point for local negotiations.

90. Previous OFT cases have typically used a 30-mile radius to assess local overlaps between asphalt plants to measure concentration.[19] However, on occasion,[20] wider and/or narrower radials have also been considered as part of the OFT's assessment. For example, in *Aggregate Industries/Foster Yeoman*, for certain plants in the Greater London and surrounding area, the OFT placed some weight on shares of supply on a 20-mile basis to take into account the impact of greater traffic congestion and slower road speeds within the region on effective delivery distances.

[19] See, for example, Completed acquisition by Anticipated acquisition by Anglo American plc of Johnston Group plc 29 September 2004, paragraph 11.
[20] See Anticipated Acquisition by Midland Quarry Products Limited of the Griff Quarry currently owned by Hanson Quarry Products Europe Limited, 27 September 2004 and Completed acquisition by Anticipated acquisition by Anglo American plc of Johnston Group plc 29 September 2004, paragraph 16 and Annexe.

In that case, the OFT applied a flexible approach, however, since there were a relatively limited number of overlap areas under review.

91. In the present case, the parties provided data on road delivery distances from their respective asphalt plants, with particular focus on the distance from production sites within which 80 per cent of volumes are delivered (the 80 per cent catchment area). For Lafarge's asphalt plants, the volume-weighted mean distance for 80 per cent catchment area is [10-20] miles (median [10-20] miles). For Tarmac, the mean distance is [20-30] miles (median [20-30] miles).

92. The parties argued that the adoption of a 30-mile radius in this case would be consistent with previous cases and would take a conservative approach to the identification of competitive constraints. They considered that a 30-mile radius was narrower, or at least not substantially greater, than those that would emerge from the application of a SSNIP test to identify the narrowest geographic market centred on a point of production, including for locations in the South East.

93. The OFT noted, however, that with respect to the Greater London area, it may be appropriate to assess competition using a narrower radial since delivery distances are likely to be shorter relative to the amount of time travelled. The OFT notes that the average 80 per cent catchment area for the parties' asphalt deliveries from all plants located in the South East is a distance of [10-20] miles.

94. Third parties also viewed asphalt markets as local. Many agreed that 30 miles would be a reasonable basis for initial assessment, although a number of third parties noted that actual effective delivery distances can differ significantly between plants.

95. Overall, the OFT considers that a 30-mile radius is a reasonable starting point within which to assess local competition aspects. However, for the purposes of its competitive assessment, the OFT has regard to shares of supply data based on a 20-mile radius in the Greater London area due to the comparatively lower 80 per cent catchment data in relation to the South East, and because the OFT's experience of evaluating local asphalt markets in other cases indicates that distance may be particularly reduced given road conditions and congestion in the Greater London area.

RMX

Product market

96. RMX is concrete that is manufactured at the supplier's site for delivery to a customer's construction site in a freshly mixed and unhardened state. It is a mixture of Portland cement and/or other cementitious materials, water and aggregates comprising sand and gravel, crushed rock, secondary or recycled products.

97. The parties submitted that all grades of RMX should be considered to form a single relevant product market since they use the same raw materials (in varying quantities) and can be produced at the same plants.

98. The OFT has previously considered that a separate product market exists for the production and supply of RMX.[21]

99. The parties noted that RMX suppliers are constrained by 'volumetric trucks', which are an on-site mixed concrete vehicle (carrying aggregates, cement and water in separate compartments, to be mixed into concrete at the customer's site). Although the parties did not argue that such trucks should be included in the relevant product market, they did note that the volumetrics sector has increased considerably in the past decade such that the constraint from them should be taken into account in the OFT's substantive analysis.

100. Third parties agreed that it would be appropriate to assess competition on the basis of a single product market for the production and supply of RMX. However, they did not express views about the constraint offered from volumetric trucks.

101. The OFT sees no reason to depart from its previous approach in relation to the relevant product market for the supply of RMX. It therefore considers that a separate market exists for the supply and production of RMX, but has regard to any constraint exerted from volumetric trucks in its competitive assessment.

[21] Proposed acquisition by Hanson plc of Pioneer plc, 19 April 2000; and Proposed acquisition by Anglo American plc of Tarmac, 18 February 2000.

Geographic market

102. RMX is both heavy and highly perishable. Once prepared, it must be delivered within a short period. The parties therefore stated that RMX supply takes place on a localised basis. Consistent with previous OFT decisional practice,[22] the parties argued that a 10-mile radius around points of production is an appropriate basis to assess local competitive overlaps.

103. The parties provided data on the catchment areas for external direct sales of RMX delivered by road. The 80 per cent catchment area distances are [0-10] miles for Lafarge and [0-10] miles for Tarmac.[23] The parties noted that plants comprising a network of several plants in a local area with sufficient demand would typically deliver product over shorter distances, due to the coverage provided by other plants in the network. Given that these delivery distances reflected the fact that distances may be substantially shorter in areas that are particularly dense with RMX sites, the parties argued that a 10-mile radius was a reasonable basis on which to assess local overlaps.

104. Third parties broadly agreed that a 10-mile radius is a reasonable basis to address local competition issues with respect to RMX supply.

105. The OFT therefore assesses competition for the production and supply of RMX on the basis of a 10-mile catchment area.

Cement

Product market

106. In Great Britain, grey cement is supplied to RMX producers, builders' merchants, concrete product manufacturers and producers of mortar stabilisation products. Cement can be produced in grey or white form, and can be supplied either bagged or in bulk.

[22] Ibid.
[23] RBB paper, Geographic radials for the purpose of the competitive assessment, Table 1.

107. The parties relied on previous OFT and European Commission decisional practice[24] to argue that separate product markets exist for grey and white cement. With respect to grey cement, they argued that no distinction should be made between different types or grades of grey cement or between domestic and imported grey cement since demand-side preferences suggest that they are interchangeable. They argued that cementitious products are partially substitutable for cement, being used in the production of RMX and concrete products. However, they considered that, on a conservative basis, such products serve as an important constraint on the supply of grey cement, rather than forming part of the same relevant product market.

108. Further, and in accordance with previous OFT decisions,[25] the parties considered that separate markets exist between bulk and bagged cement since they typically serve different customers (bulk being used by RMX and concrete product manufacturers, and bagged cement typically being supplied to builders' merchants and DIY outlets).

109. Third party views on the substitutability of imported grey cement were mixed. Some third parties viewed imported grey cement to be interchangeable with domestic cement. Others stated that the quality of imported cement was less reliable for their specific needs than grey cement produced domestically. With respect to cementitious products, third parties did not consider such products to be fully substitutable with cement. Moreover, third parties overwhelmingly agreed that demand-side preferences dictate that bulk and bagged grey cement are not substitutable.

110. The OFT sees no reason to depart from previous decisional practice in this case. Given that the parties do not overlap in the supply of white cement, the OFT has, on a cautious basis, considered the effect of the proposed transaction in grey cement only. In addition, since third parties did not raise material concerns in the supply of bagged grey cement, the OFT goes on to assess the competitive effects of the proposed transaction on

[24] See, for example, COMP/M.4719 *Heidelberg Cement/Hanson*, Commission decision dated 7 August 2997; COMP/M.3572 *Cemex/RMX*, Commission decision dated 8 December 2004; COMP/M2317 *Lafarge/Blue Circle II*, Commission decision dated 1 March 2003; Anticipated acquisition by Lafarge Cement UK of West Thurrock, 27 June 2005; and Anticipated acquisition of Lafarge Cement UK of Port Land Cement Company Limited 21 October 2005.
[25] Anticipated acquisition by Lafarge Cement UK of West Thurrock, 27 June 2005; and Anticipated acquisition of Lafarge Cement UK of Port Land Cement Company Limited 21 October 2005.

the cautious basis of the supply of grey bulk cement only.[26] On the basis of both the parties' submissions and third party comments, the OFT does not consider that cementitious products form part of the bulk grey cement market. However, it analyses the constraints from both cementitious products and imported cement as part of its competitive assessment.

Geographic market

111. Relying on previous OFT cases,[27] and in contrast to the European Commission's view of the cement market being at least national or even EEA-wide (albeit a cement product market wider than only bulk grey cement), the parties acknowledged the regional and national aspects of the bulk grey cement market in the UK by providing data on both a national and regional basis. The parties argued that the supply of bulk grey cement is becoming increasingly national in scope, since domestic cement producers and importers compete on a wider scale and transport cement over long distances. However, they noted that in contrast to bagged cement, grey bulk cement has a regional as well as a national dimension.

112. The parties provided data to demonstrate that, in relation to distances travelled by road for direct sales made from production sites, 80 per cent of Lafarge's external sales of bulk grey cement were delivered within [100-110] radial miles and 80 per cent of Tarmac's volume was delivered within [60-70] radial miles of its Tunstead plant. The parties noted, however, that cement can be transported over substantially greater distances through the use of rail-linked depots (used by both Lafarge's Hope plant and Tarmac's Tunstead plant).

113. Third parties generally agreed that cement is supplied over much longer distances than RMX and asphalt, many citing between 100 to 150 miles, although a few customers noted that national coverage of bulk grey cement supply is particularly beneficial. However, third parties did not view the market to be wider than national.

[26] References to 'cement' for the remainder of this document are to 'bulk grey cement', unless otherwise specified.
[27] See, for example, Anticipated Acquisition by Lafarge Cement UK of Portland Cement Company Limited, 13 October 2005.

114. The OFT notes the 80 per cent catchment distances discussed above, but also acknowledges that the use of rail depots will enable cement to be distributed more widely. However, further evidence provided by the parties indicates that, notwithstanding the rail network and the use of depots, market shares are dissimilar amongst suppliers in different regional areas of Great Britain. In particular, the parties' shares are typically higher in regions where their cement plants are located. Tarmac, for example, has market shares for external bulk grey cement supply of [10-20] per cent in East Midlands and [10-20] per cent in the North West, but just [0-10] per cent in the South East and [0-10 per cent] market share [ ] in the South West (in 2009). Shares of supply held by other cement suppliers (including the other UK producers) also vary widely between different regions. The OFT notes that these regional disparities exist over time.

115. Some of the evidence would therefore tend to support the view that the market is regional in nature, and that assessing closeness of competition in terms of geographic proximity is necessary. The OFT therefore considers it appropriate to consider the competitive effects of the proposed transaction on a 100-mile radius around Tarmac's Tunstead plant, as well as at a national level. However, given that it does not have available sales volume market share data on the former basis, the OFT has regard to data provided by the parties on an regional, EPR basis, and at the national level for the purposes of its competitive assessment.

COMPETITIVE ASSESSMENT

I. UNILATERAL EFFECTS – HORIZONTAL EFFECTS

Aggregates

Analysis at a national level

'All aggregates' and primary aggregates

116. The parties submitted that in 2009, they together accounted for 22 per cent of national aggregates supply volume (Tarmac 17 per cent; Lafarge five per cent). Other major players are Aggregate Industries, Hanson and Cemex. There are numerous smaller regional and local quarry operators,

and suppliers of secondary and recycled aggregates, together accounting for 41 per cent of sales.

117. With respect to primary aggregates, the parties estimated their combined share in 2010 at [20-30] per cent (Tarmac [15-25] per cent; Lafarge [0-10] per cent).[28]

118. Third parties did not raise specific concerns about the reduction of competition arising from the proposed transaction with respect to the supply of all aggregates or primary aggregates on a national basis.

119. The OFT considers that, on the basis of the parties' share of supply data, the limited increments created by the proposed transaction, and the fact that numerous independent aggregates suppliers exist (representing 45 per cent of the 'all aggregates' market in 2009, and 27 per cent of the primary aggregates market in 2010), the proposed transaction does not give rise to concerns in the supply of all aggregates or primary aggregates at a national level.

High PSV stone

120. A number of third parties identified possible competition issues with respect to the limited number of aggregates producers able to supply high PSV stone aggregates required for certain specifications of asphalt. In particular, third parties identified that the proposed transaction may give rise to high concentration of high PSV quarries in South Wales and Yorkshire.

121. The parties submitted that Lafarge's production of high PSV stone from its two sites at [ ] and [ ] is of only limited volume ([ ] kt in 2009). The parties noted that several different types of high PSV stone can be identified, depending on specification: 60-64 PSV, 65+ PSV and 68+ PSV. For supplies of 65+ specification PSV, the parties estimated their shares as: Tarmac [30-40] per cent; Lafarge [0-10] per cent. The parties stated that Lafarge had [ ].

122. The OFT has considered the parties' respective positions in high PSV stone in the round, both on a national basis and with respect to any

[28] Based on BDS 2010 data.

regional aspects that may be relevant. The OFT concludes that there is sufficient competition from other suppliers of high PSV stone to alleviate concerns about the combined scale of the parties' high PSV assets.

(a) On a national level, the OFT notes the small increment to Tarmac's existing share in 65+ specification PSV, and that, for all other specifications, there is no post-transaction effect.

(b) Even if the OFT were to look at the specific regions identified by third parties as potentially problematic, the OFT notes that there will remain at least three alternative suppliers of relevant specification high PSV stone in each of the regions where the parties have relevant production assets.

123. For the reasons considered above, the OFT does not consider that the proposed transaction gives rise to competition concerns in the supply of high PSV stone.

Rail ballast

124. Tarmac's activity in rail ballast arises through its MQP joint venture with Hanson. The parties estimated that the combined share of supply of Lafarge ([40-50] per cent) and MQP ([20-30] per cent), and hence over which the combined entity would have some degree of control, would amount to [65-75] per cent nationally. The only other supplier of significant size is Aggregate Industries ([20-30] per cent). The parties noted that there are only a few quarries in the UK with appropriate geology and logistics infrastructure to supply rail ballast.

125. The vast majority of rail ballast sold in the UK is purchased by Network Rail Infrastructure Limited. Whilst this might be expected to confer a degree of pre-merger bargaining power on Network Rail, the OFT considers that a reduction in competition created by the proposed transaction from three suppliers of rail ballast to two may diminish Network Rail's negotiating strength and incentivise the combined entity to seek and achieve higher prices, particularly given the limited available supply options, and the fact that Network Rail is not obviously able to sponsor an entrant as might be the case in relation to other products.

126. The OFT notes that the parties did not provide a substantive response to the concerns raised in respect of rail ballast in the issues letter. As a result, the OFT has received comparatively little information on the competition assessment applicable in respect of this particular type of product. Based on the limited information available to it, the OFT considers that the proposed transaction gives rise to a realistic prospect of a substantial lessening of competition with respect to the supply of rail ballast on a national level.

High purity limestone

127. Some concerns were raised with the OFT about the potential reduction in competition arising from the proposed transaction in the supply of high purity limestone, specifically for use in flue gas desulphurisation (FGD) applications. One customer noted that the proposed transaction would lead to a reduction of suitable suppliers from three to two. Another significant FGD customer, however, specifically considered that there would be sufficient alternative suppliers remaining post-transaction.

128. As noted in paragraph 68(iii) above, the parties submitted that on the supply-side, high purity limestone can be used for a number of applications, such that it should be treated as a single product market. They estimated their combined share to be [40-50] per cent in relation to the wider supply of high purity limestone (but with an increment of only [0-10] per cent). With respect to the specific use of high purity limestone for FGD, the parties submitted that contracts with power stations are long-term and subject to competitive tenders, such that there is significant variation of market share between tenders.

129. The OFT notes that, in addition to the supply options identified by the concerned third party for supply of limestone for use in FGD, the OFT's investigation indicates that there are other suppliers of high purity limestone that market their product for FGD use.[29] That said, the OFT is conscious that at least one customer did not appear to recognise these alternative suppliers as effective competitors in this segment.

130. The OFT has received relatively limited information in the supply of high purity limestone to come to a firm view on the likely effects of the

[29] Singleton Birch - www.singletonbirch.co.uk/limeuses_environmental_fluegastreatment.htm and Longcliffe - www.longcliffe.co.uk/markets/environment-applications.asp.

proposed transaction in this market. Given its overall findings in the other product markets, the OFT does not consider it necessary to reach a conclusion as to whether the test for reference is met with respect to the supply of high purity limestone.

Analysis at a regional level[30]

Crushed rock

131. As discussed in paragraph 58 above, third parties stated that there is specific demand for certain types of crushed rock favoured in the production of asphalt, and that in some circumstances, these products might be delivered over longer distances for general construction uses. In particular, a number of third parties noted the prevalence of crushed rock geology, and the reduction of competition created by the proposed transaction in the Midlands, Yorkshire and Lincolnshire areas.

132. Data on regional shares of crushed rock supply may have some bearing on this issue (albeit that it may not fully capture the relative strengths of constraints between producers). The parties submitted data which showed that their combined shares of crushed rock production (in areas where both parties are active) would be approximately [35-45] per cent in two regions: East Midlands ([30-40] per cent, increment [10-20] per cent); and Yorkshire & Humberside ([40-50] per cent, increment [0-10] per cent). In these regions, the OFT's investigation indicates there are only two other main alternative suppliers on the basis of the parties' data.

133. Given the extent of the third party concerns identified (see paragraph 131 above), the level of the parties' combined market shares and the absence of evidence of more than two significant alternative suppliers in these regions, the OFT considers that, on a cautious basis, the proposed transaction gives rise to a realistic prospect of a substantial lessening of competition in the East Midlands and Yorkshire and Humberside regions.

[30] Note: all aggregates and primary aggregates are assessed at a local, rather than regional level (see paragraphs 73 to 79 above).

Analysis at a local level

Introduction to assessment of competition at a local level in relation to the supply of all aggregates and primary aggregates[31]

134. A large number of third parties raised concerns about the post-transaction consolidation of the parties' aggregates assets on a local basis. These included customers involved in asphalt and RMX production, and also aggregates merchants/hauliers that source and resell aggregates on their own account.

135. The parties acknowledged that the OFT might identify competition concerns arising in relation to the supply of aggregates at local level and provided the OFT with data to identify overlapping areas in which competition concerns could arise. Local production share data for 30-mile radials around each of the parties' overlapping aggregates sites was supplied, incorporating where relevant (in the examination of competition in the supply of 'all aggregates') an allocation of market share to secondary and recycled aggregates (for which detailed local output data is less readily available).

136. The parties submitted that there are 132 aggregates sites (on an all-aggregates basis) in total which give rise to an overlap with the other party on the basis of 30-mile radials around each site. This scale precludes any detailed area-by-area consideration of competitive conditions in local overlap areas at first phase review. Nevertheless, the combined market share of the parties, when compared with their pre-merger market shares, may provide an initial indication of the change in market power resulting from the proposed transaction.

137. The parties submitted that the OFT should use a market share benchmark to identify local area concentrations that should not give rise to competition concerns. They argued that the assessment of the aggregates markets should be considered in light of the statement in the Merger Assessment Guidelines that, '[i]n relation to market shares, previous OFT decisions in mergers in markets where products are undifferentiated suggest that combined market shares of less than 40 per cent will not

[31] The OFT notes that a number of the issues considered in relation to the assessment of competition at a local level in relation to the supply of all aggregates and primary aggregates are relevant also to consideration of local competition in asphalt and RMX.

often give the OFT cause for concern over unilateral effects.'[32] The parties also noted that the OFT has, in some previous cases,[33] used a 33 per cent market share rule to filter out areas unlikely to raise competition concerns.

138. The OFT notes that the indicative 40 per cent figure quoted in paragraph 5.3.5 of its Merger Assessment Guidelines is stated to be relevant only where the defined market is the narrowest that satisfies the hypothetical monopolist test and when products are undifferentiated. In this respect, catchment areas are likely to be no wider than the narrowest market satisfying the hypothetical monopolist test.

139. The OFT therefore considered to what extent different suppliers of aggregates may, at a local level, be differentiated. The parties argued that construction materials markets are characterised by suppliers who are not unique in terms of their ability to supply aggregates, and that the parties have lost substantial contracts to independent suppliers.

140. The OFT noted the different product mixes produced by different quarries and the fact that specific demand patterns exist for particular types of aggregates. However, the OFT considers that this degree of product differentiation in terms of types of aggregates has been addressed by considering primary aggregates, and specific types of primary aggregates, separately (see paragraph 71 above).

141. Separately, the OFT noted that there were some indications received from the OFT's investigation that service levels, or other quality measures not directly related to the product itself, may vary between suppliers (and that this accounts for the presence of intermediaries in the supply of these products). However, the OFT did not receive any indication that the parties should be seen as particularly close competitors in this dimension, and hence this has not been considered further in the analysis.

142. The OFT therefore discusses below the extent to which there is *geographic* differentiation between different suppliers of aggregates.

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[32] Merger Assessment Guidelines, paragraph 5.3.5.
[33] Anticipated Acquisition by Anglo American plc of Tarmac, 18 February 2000; and Proposed Acquisition by Hanson plc of Pioneer plc.

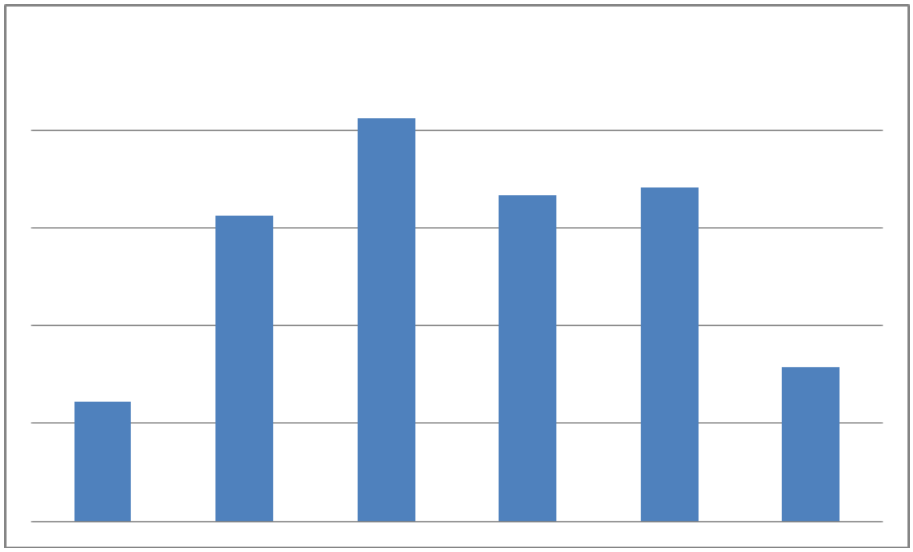
Closeness of competition: geographic differentiation

143. With respect to geographic closeness of competition, the parties provided evidence[34] purporting to show that being the closest site to a job is not a material advantage to winning the job, since for only a limited proportion of the parties' sales were they identified as being one of the closest suppliers to the sales location.

144. The parties submitted that the OFT should not be concerned that relative locations may drive closeness of competition between plants. Similarly, they argued that all suppliers located within the 30-mile radial are able to exert an equivalent competitive constraint on the parties, irrespective of their precise location.

145. The parties provided further data[35] relating to deliveries to aggregates customers by distance band (zero-five miles, five-10 miles, etc.) and submitted that this showed that jobs won by the parties are 'spread relatively evenly across a 30-mile radial'. This is shown in Figure 2 below.

Figure 2 – Tarmac aggregates percentage volumes delivered by distance band (2009)



Source: Parties'
[Axes have been redacted]

[34] Parties' response of 10 June to OFT information request of 20 May.
[35] Parties' Response to Issues Paper.

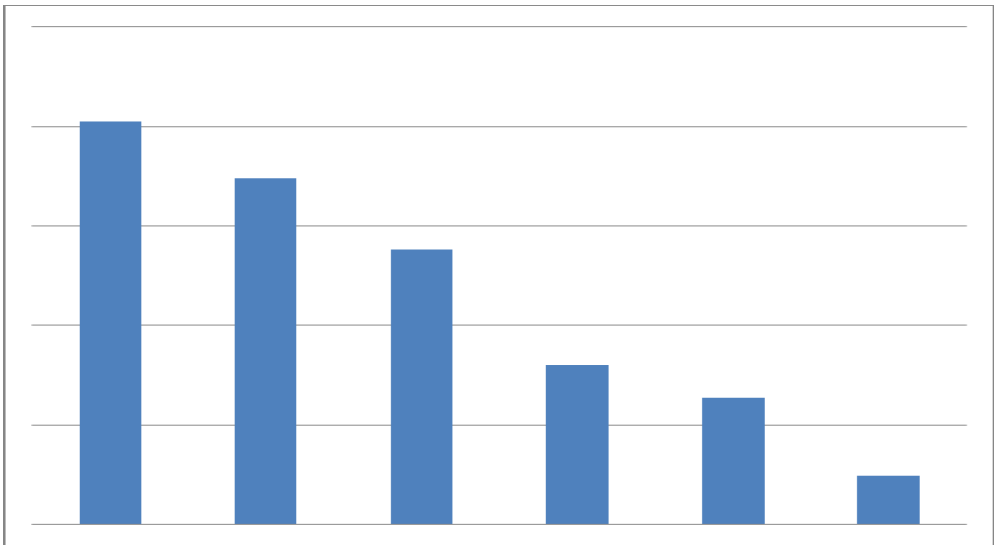
146. The OFT noted the arguments and data provided by the parties, but is not persuaded that they provide sufficient support for the conclusions drawn by the parties. In particular, the OFT considers that:

(a) the parties' proposed approach would treat the competitive strength of a site located right on the edge of a radius as being equivalent in strength to a plant that is located right next to the target in question, which seems to the OFT to be an unrealistic approach. It would also not account for the competitive strength of a plant located immediately outside a given radius

(b) the data does not establish that a supplier at the edge of a 30-mile radial is equally likely to win a bid to supply near the centre of the radial as is a supplier located at the centre, and

(c) since the area of a circle (πr^2) increases in proportion with the square of the radius, the area of a distance 'band' increases when moving out from the centre of the circle. Hence while the zero – five-mile distance band has an area of 25π, the five-10-mile band has an area of 75π (that is, 100π-25π). If contracts won were genuinely distributed evenly across a 30-mile radial area, this would imply a higher number of customers in each successive larger outer distance band. Adjusting for this area effect, the parties' data shows that, on average, customers are more densely located towards the centre of the relevant 30-mile radials (that is, in the proximity of the production site). This is shown in Figure 3 below.

Figure 3 – Tarmac aggregates percentage volumes delivered by distance band (2009) adjusted for area of distance bands



Source: OFT based on the parties' data
[Axes have been redacted]

147. As demonstrated from Figure 3 above, the data presented by the parties in fact appear to show a clear relationship between distance from the parties' plant and the (volume-weighted) number of customers that they were successful in winning, relative to the area accounted for by each radial distance band.

148. The OFT also notes that the parties' own estimates of variable transport costs support the proposition that location within radials matters for assessing the competitive constraint between sites. The parties estimated the variable transport cost per tonne per mile at £[ ]. For a delivery distance of 30 miles this would amount to £[ ] compared with an average price per tonne for aggregates of £[ ]. Hence even within a 30-mile radial, transport costs could account for a significant cost differential (up to [20-30] per cent of average price) between differently-located production sites.

Conclusion on use and level of a market share threshold

149. On the basis of the evidence considered above, the OFT does not consider it possible to exclude the prospect of differing levels of closeness of competition between different suppliers located within the 30-mile geographic radial based on location. This is relevant in so far as

identifying a simple market share filter rule risks understating (or indeed overstating) the importance of competitive constraints between specific sites, both inside and outside the radial. This might imply that any such rule should be applied cautiously at first phase.

150. A further reason for applying a cautious rule is that the parties' reported gross margins in the supply of aggregates are significantly higher (at [35-45] per cent) than those of their other construction products supplied in local markets. For a given level of market shares, higher margins may indicate greater potential price effects from a merger.

151. Taking all the evidence in the round, the OFT considers it appropriate to use 33 per cent market share as a filter to identify local overlap areas where there is no realistic prospect of competition concerns arising.

Use of an increment threshold to rule out concerns in local areas

152. The parties also argued that the OFT has previously cleared local overlapping areas where the market share increment resulting from a concentration is low. They submitted that the OFT should clear local overlaps where the market share increment resulting from the concentration is below five per cent.

153. With respect to the suggestion of a 'small increment rule', the OFT is not convinced it would be appropriate to clear automatically all overlaps where the increment falls below a particular level, particularly in areas where the combined market share is high and where there may therefore be very few remaining players in a given local area. Nor does the OFT consider that a five per cent threshold is necessarily the appropriate figure to use. In particular, the OFT notes that:

(a) the significance of the increment depends upon other competitive factors (such as post-transaction combined share, geographic closeness of competition between the parties, and the strength of other constraints), and

(b) in previous cases, the OFT has found competition concerns where the increment created by a merger is less than five per cent.[36]

154. The OFT is not of the view that it would be practicable to conduct a bespoke area-by-area analysis to ascertain the significance of the increment in each area (see paragraph 136 above). As a result of the above, the OFT not consider it appropriate to apply the proposed increment threshold to rule out competition concerns arising in particular local areas.

155. The OFT has therefore examined each of 'all aggregates' and primary aggregates to determine local areas in which the parties have a combined market share in the 30-mile radius around one of the parties' quarries in excess of 33 per cent.

All aggregates

156. Applying a simple 33 per cent filter rule (based on all aggregates production volume) to local overlaps identified on a 30-mile radial basis, leads to 43 problematic sites, in relation to which the test for reference is met.

157. As discussed above, the OFT notes that an 'all aggregates' market is unlikely to be sufficient in itself to identify all the competition concerns that arise at local level. It therefore has regard to primary aggregates at local level.

Primary aggregates

158. The OFT also considered it appropriate to consider local area shares of supply for primary aggregates separately from all aggregates, since this is likely to better-reflect the principal supply options for customers requiring aggregates for certain specific applications.

159. The parties provided local production share data restricted to primary aggregates. On this basis, the parties would have combined local shares

[36] See, for example, Proposed Acquisition by Dorf Ketal Chemicals AG of the titanate and zirconate business of Johnson Matthey plc, 19 November 2010.

using a 30-mile radial in excess of 33 per cent for 81 sites,[37] hence the proposed transaction gives rise to a significantly higher number of overlap sites when looking at the supply of primary aggregates compared with the supply of all aggregates. The OFT therefore considers that the test for reference is met with respect to these 81 sites.

Barriers to entry in aggregates

160. Previous decisions have indicated that barriers to entry in aggregates are high, in particular due to the planning regime.[38] The parties recognised that new entry into primary aggregates is not a common occurrence. However, they stated that there are low barriers to expansion from existing production sites since productive capacity can be readily scaled and the number of hours for which a plant is in operation can be easily increased without the need to incur additional fixed costs, thus utilising excess capacity. They considered that entry into production of recycled aggregates is straightforward and that no substantial investments are required.

161. Third parties who responded in this case identified barriers to entry relating to required significant investment in reserves, as well as planning, regulatory and environmental policies.

162. While entry or expansion may provide some level of competitive constraint, at least in relation to the supply of all aggregates, it is not clear that sufficient and timely new entry would be likely enough to counteract competition concerns. The OFT notes that barriers to entry in the supply of marine aggregates may be lower than for new quarries, but cannot place significant weight on this as a countervailing factor, given the limited product range offered by marine aggregates (essentially limited to sand and gravel). Nor does the OFT have sufficiently detailed information to determine where entry is likely to take place in relation to particular local areas. The OFT has therefore not been able to place weight on the possibility of entry for the purposes of its competitive assessment.

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[37] Parties' Response to the OFT's Fourth Information Request, 2 August 2011.
[38] See Completed acquisition by Aggregate Industries Limited of Foster Yeoman Limited 20 November 2006, paragraph 23.

Asphalt

National market shares

163. The parties submitted that, at a national level, the proposed transaction will give rise to a [30-40] per cent combined market share (increment of [0-10] per cent) based on 2010 estimates. Other significant players are Aggregate Industries, Hanson, Cemex and Breedon.

Table 1 – National market shares for the production of asphalt

Supplier	2007 share (per cent)	2008 share (per cent)	2009 share (per cent)	2010 share (per cent)
Tarmac	[20-30]	[20-30]	[20-30]	[20-30]
Lafarge	[0-10]	[0-10]	[0-10]	[0-10]
Combined	**[30-40]**	**[30-40]**	**[30-40]**	**[30-40]**
Aggregate Industries	[20-30]	[20-30]	[20-30]	[20-30]
Hanson	[10-20]	[10-20]	[10-20]	[10-20]
Cemex	[5-15]	[5-15]	[5-15]	[5-15]
Breedon	[0-10]	[0-10]	[0-10]	[10-20]
Others	[10-20]	[10-20]	[10-20]	

Source: Parties' (rounded), using BDS data for third party shares

164. Whilst Tarmac has asphalt production plants throughout Great Britain, Lafarge's asphalt activities are more focused on specific regions.

165. Third parties did not raise concerns about the effects of the proposed transaction on a national level.

166. Given the lack of such third party concerns, the level of the parties' combined market shares, and that the OFT understands that competition in the supply of asphalt primarily takes place at a local level, the OFT considers that competition concerns do not arise at a national level in the supply of asphalt.

Local level analysis[39]

167. In previous cases considering overlaps in the supply of asphalt at local level, the OFT has had regard to a 33 per cent market share threshold in order to eliminate concerns arising below that level.[40]

168. The parties argued that such a threshold is cautious and conservative, and cited the OFT's guidance for the proposition that in markets where products are undifferentiated (such as in the case of asphalt), the OFT would normally take the view that combined market shares of up to 40 per cent can exist without giving rise to competition concerns in relation to unilateral effects.

169. As discussed in relation to aggregates above (see paragraphs 138 and 139 above), the reference to the 40 per cent indicator in the OFT's guidance is of relevance only where products are undifferentiated and where market shares are applied by reference to the narrowest market that satisfies the hypothetical monopolist test.[41] The OFT considers that asphalt is a homogeneous product. In terms of the potential differentiation that can exist in terms of the supply of asphalt, the OFT is of the view that:

(a) the parties have provided good evidence to indicate that, outside Greater London, the use of a 30-mile radius corresponds to the narrowest market satisfying the hypothetical monopolist test

(b) in relation to Greater London, the OFT has taken account of narrower delivery distances by looking at 20-mile radii in the area (see paragraph 95 above)

(c) in relation to different working patterns and conditions of asphalt plants, the OFT has had specific regard to plants that are able to operate on a 24/7 basis (see paragraphs 178 to 180 below), and

[39] See the discussion at paragraphs 143 to 154 above, which is also relevant here.
[40] See Anticipated acquisition by Anglo American plc of Johnston Group Plc 29 September, 2004, paragraph 24 and Anticipated acquisition by Midland Quarry Products Limited of the Griff Quarry currently owned by Hanson Quarry 27 September, 2004, paragraph 20.
[41] Merger Assessment Guidelines, paragraph 5.3.5.

(d) transport costs relative to price are significantly lower for asphalt than for aggregates.

170. The OFT also considered the gross margins being made by each of the parties in relation to the supply of asphalt. The OFT notes that these margins are low at [10-20] per cent in 2010, and are considerably lower than those achieved by the parties in the supply of aggregates (see paragraph 150 above). Such reduced margins mean that the parties' incentive to increase price would arise only at materially higher share thresholds (corresponding to higher diversion ratios) than would be the case in relation to the supply of aggregates.

171. On the basis of the above, the OFT considers that, in relation to the supply of asphalt, the OFT is able to exclude the prospect of local unilateral effects arising on a 30-mile radius where the combined share of the parties does not exceed 40 per cent.

172. On the basis of a 30-mile radius around each party's asphalt plants, the parties identified 49 local areas of overlap. Out of these areas, there would be 22 areas where the parties would have a combined production share in excess of 40 per cent.

173. The parties argued that competition concerns could be discounted in a number of these areas on the basis that the increment to the market share was below five per cent. However, for the same reasons provided in relation to the aggregates assessment (see paragraph 153 above), the OFT does not consider it appropriate to discount individual local areas on the basis of the size of the increment. Such an analysis requires more bespoke consideration of the local areas concerned, and this is not possible in a phase one case in the context of the number of overlaps presented by the parties for consideration.

174. As noted in paragraph 95 above, the OFT considered that a narrower catchment area assessment may be appropriate for those plants located within the Greater London area. The OFT notes that there is only one additional site that leads to combined shares of supply in asphalt above 40 per cent on the basis of a 20-mile radial in the Greater London area, namely [ ] (combined share of [40-50] per cent).

175. The OFT received comments from third parties indicating that significant combined shares of supply in specific local areas may raise competition concerns. The parties' strong combined position in East Anglia was noted by several as particularly problematic, notably, Norfolk, Suffolk, Essex, Cambridgeshire and Hertfordshire. In addition, Norwich, Ipswich, Greater Manchester, and North London were cited by several customers as being areas where Tarmac and Lafarge are the main players and where the proposed transaction may give rise to competition concerns. The OFT considers that these comments will be taken account of in the local 30-mile radius analysis considered above.

176. Given the above, the OFT considers that the test for reference is met in relation to the 22 local areas in which the parties have a combined share above 40 per cent on a 30-mile radius and in the one area of Greater London [ ] where the parties' shares exceed this level on a 20-mile radius.

177. The OFT has proceeded to examine whether particular issues arise in relation to the supply of asphalt from plants with particular operating hours and conditions.

Specific characteristics of certain asphalt plants

178. A number of third parties raised particular concerns during the course of the OFT's investigation about the potential concentration in ownership of plants that have planning consent for night time and weekend ('24/7') operating hours within which to produce asphalt. Third parties noted that this is of particular significance given the demand for asphalt for night-time road surfacing activities.

179. The parties overlap in 20 local areas on a 30-mile radius around 24/7 asphalt plants. The parties noted that the OFT has not sought to define a distinct market for the supply of asphalt from 24/7 asphalt sites, and argued that, in any event, customers demanding overnight supply capabilities would have at least four distinct suppliers (fascia) available to them following the proposed transaction in the majority of the radials in which their 24/7 plants currently overlap. Four suppliers should be regarded as enough to ensure sufficient competition remains in the supply of asphalt to customers requiring supply from 24/7 plants.

180. The OFT notes the parties' arguments, although it also observes that there remain a small number of sites where only three or fewer 24/7 asphalt producers would remain post-transaction.[42] In these areas, it would be appropriate to consider the extent to which the parties' 24/7 asphalt plants would be constrained by other 24/7 plants, as well as by plants without extended operating hours.

181. However, given the OFT's conclusion that the test for reference is met in relation to the supply of other products, and that undertakings in lieu of reference should not be accepted in relation to those concerns, the OFT has not needed to reach a view as to whether a realistic prospect of a substantial lessening of competition arises in relation to the supply of asphalt in these six particular areas.

182. Finally, comments from third parties also noted that asphalt plants with rail or wharf access to aggregates deliveries have a meaningful cost advantage over those plants reliant on aggregates delivered by road such that the combined firm may be advantaged in supplying the London area. The OFT considered this issue carefully, but was able to identify no reason why – to the extent that such a cost advantage does exist – this would not already be reflected in the comparatively stronger supply position of the parties in the relevant local areas in London. As such, to the extent that this concern exists, it is already taken account of in the OFT's existing analysis.[43]

Barriers to entry

183. Potential barriers to entry into asphalt production identified in previous cases, such as *Aggregate Industries*/*Foster Yeoman* included: obtaining planning permission; environmental regulations and local authority regulations governing operating hours; the initial set up capital costs; and gaining access to a reliable source of competitively priced aggregates.

184. The parties submitted that barriers to entry are low since the cost of investment to set up an asphalt plant is not substantial, and there is

[42] These are the local areas centring around [ ].
[43] The OFT notes that, were it to consider seeking undertakings in lieu from the parties to resolve local unilateral effect concerns in the supply of asphalt, then the issue of rail- or wharf-linked aggregate quarries would potentially need to be considered further to ensure that the remedy in a relevant local area was fully effective.

significant scope for expansion of production by existing competitors due to current under-utilisation of capacity. The parties submitted that mobile asphalt facilities provide an additional way for new asphalt competitors to enter the market and for existing asphalt competitors to expand their production (for example, by supporting existing fixed asphalt plants), particularly in relation to airfield work and major road building projects. The parties provided some examples dating from 2006 to 2010 of certain firms opening or expanding into asphalt production, including examples in 2010 firms 'backwards integrating' (from asphalt surfacing into asphalt production) or 'forwards integrating' (from aggregate production into asphalt production).

185. Third parties identified barriers to entry to include: obtaining planning consents; access to suitable sources of aggregates supply (especially in East Anglia and the South East); the potential need to purchase aggregates from vertically-integrated competitors; and volume-related aspects to costs of bitumen supplies (a disadvantage for small asphalt players).

186. The OFT notes that the existing excess capacity in the market may provide some disincentive for new entrants. While entry or expansion may provide some level of competitive constraint, it is not clear to the OFT that any sufficient and timely new entry would be likely to counteract competition concerns. Most importantly, nor does the OFT have sufficiently detailed information to determine where entry is likely to take place in relation to particular local areas where competition concerns have been identified. The OFT has therefore not been able to place weight on the possibility of entry for the purposes of its competitive assessment.

Conclusion on horizontal unilateral effects in the supply of asphalt

187. The OFT believes that the test for reference is met in relation to the 22 local areas in which the parties have a combined share above 40 per cent on a 30-mile radius and in the one area of Greater London [ ] where the parties' shares exceeds this level on a 20-mile radius.

RMX

National shares

188. The parties submitted that, at a national level, they account for [20-30] per cent of RMX sales (Tarmac [10-20] per cent; Lafarge [0-10] per cent) on the basis of 2010 data. Other major suppliers are Cemex ([10-20] per cent), Hanson ([10-20] per cent) and Aggregate Industries ([10-20] per cent).

Table 2 – National market shares for RMX production

Supplier	2007 share (per cent)	2008 share (per cent)	2009 share (per cent)	2010 share (per cent)
Tarmac	[15-25]	[15-25]	[10-20]	[10-20]
Lafarge	[0-10]	[0-10]	[0-10]	[0-10]
Combined	**[20-30]**	**[20-30]**	**[20-30]**	**[20-30]**
Aggregate Industries	[10-20]	[10-20]	[10-20]	[10-20]
Hanson	[10-20]	[10-20]	[10-20]	[10-20]
Cemex	[15-25]	[10-20]	[10-20]	[10-20]
Others	[20-30]	[20-30]	[20-30]	[20-30]

Source: Parties' (rounded), using BDS data for third party shares

189. Third parties did not raise concern about the effects of the proposed transaction on a national basis.

190. Given the absence of third party concerns, the level of the parties' combined market shares, and that the OFT understands that competition for the supply of RMX takes place at a local level, the OFT does not consider that competition concerns arise at a national level in the supply of RMX.

Local competition analysis

191. The parties identified 189 plant-centred catchment areas on a 10-mile radius basis where their RMX activities overlap. This indicates the need for a filter to identify areas raising potential competition concerns.

192. Unlike for aggregates and asphalt, the parties told the OFT that no site-level volume data is available for third parties.

193. The parties submitted that 40 of their RMX plants in total would fail a filter based on the thresholds previously applied by the OFT in three cases in 2000-2001.[44] This rule applied by the parties entails clearing local overlap areas where:

    (a) the merged entity operates up to 40 per cent of the RMX plants (by number) within any 10-mile catchment area; or

    (b) the merged entity operates between 40 per cent and 50 per cent of the RMX plants (by number) within any 10-mile catchment area and there are at least four other RMX competitors active in the same catchment area, at least one of which is not a national player.

194. The OFT notes that the CC/OFT *Merger Assessment Guidelines* refer to 40 per cent as a level of combined market share which will not often raise concern where products are undifferentiated and where those shares are based on the narrowest market that satisfies the hypothetical monopolist test.[45] More generally, the guidelines state that even when market shares are not considered for the purposes of ruling out competition concerns, the OFT will have regard to how widely the market is drawn when interpreting market shares.[46] In light of this, the OFT considered whether a decision rule filter set at this 40 per cent share may be appropriate in the context of the supply of RMX at local level in this case.

[44] See Proposed Acquisition by Hanson plc of Pioneer plc, 19 April 2000; Proposed Acquisition by Anglo American plc of Tarmac, 18 February 2000; and Proposed Acquisition by RMC Group plc of Alexander Russell plc, 20 May 2001.
[45] Merger Assessment Guidelines, paragraph 5.3.5.
[46] Merger Assessment Guidelines, paragraph 5.3.2, third bullet.

195. The parties argued that the application of a 40 per cent decision rule in relation to RMX is conservative and cautious given that:

(a) RMX is a homogenous product

(b) not all of the smaller RMX players from each local market may have been identified in the figures presented by the parties and

(c) the data presented by the parties on an area-by-area basis does not take account of the significant competitive constraint exerted from volumetric trucks, which:

(i) has grown considerably in the last decade such that it accounted for an estimated nine per cent of national RMX sales in 2010

(ii) are owned by a significant number of smaller independent suppliers[47]

(iii) are increasingly delivering to customers and jobs that have been traditionally supplied by plant mixed companies (including motorway safety barrier work), and

(iv) typically operate at higher capacity utilisation rates than traditional concrete plants.

196. The OFT notes these points and, in addition, considers that the parties' RMX gross margins are relatively low at below [ ] per cent, which is considerably lower than that achieved by the parties' in the supply of aggregates. Further, the OFT notes from the parties' data that market shares of independent RMX suppliers are increasing over time, both on a national level (at around 27 per cent in 2009), and across most regions (between 17 to 48 per cent in 2009). This would tend to indicate that independent RMX suppliers exert some degree of constraint on the national players. In addition, the OFT notes that catchment areas are likely to be no wider than the narrowest market satisfying the

[47] The parties stated that BDS estimates that that there are between 500-600 volumetric trucks operating in GB, operated by 200 companies, of which only around a dozen have fixed RMX plants (the remainder operate volumetric trucks only).

hypothetical monopolist test, such that more weight may be attached to the 40 per cent threshold than may otherwise be the case.[48]

197. These factors would tend to point in favour of a decision rule potentially in excess of the 40 per cent figure quoted in the Merger Assessment Guidelines. Set against this, however, are the following considerations:

(a) the OFT notes that one shortcoming in considering shares based on plant numbers is that it may not accurately reflect shares of either capacity or output if plant sizes differ significantly. The parties argued that plants within any given locality (whether operated by national suppliers or independents) will tend to be of a similar size and have similar (low) levels of capacity utilisation. Accordingly, all competitors would have similar levels of excess capacity and would be able to achieve throughput required by customers such that all competitors would constrain each other. However, one third party explicitly considered that plant count metrics may be misleading due to significant differences in output and capacity. Indeed, BDS told the OFT that capacity can differ from plant to plant, from around 5,000 cubic metres to 50,000 cubic metres, and

(b) although the OFT is aware that volumetric trucks account for a reasonable share of the market for RMX supply on a national level, the constraint offered from volumetric trucks in the supply of RMX on a local level was not a feature of the market identified by third parties.

198. The above factors mean that the OFT is cautious about being willing to accept that a threshold **higher** than 40 per cent should be adopted in considering the supply of RMX at local level.

199. The OFT considered also the second part of the decision rule proposed by the parties (referred to in paragraph 193 above). However, the OFT has not been able to assess to any meaningful degree the extent to which the presence of a non-national player will affect the competitive dynamic within a given local area such as to warrant a higher market share threshold being applied in that area.

[48] Merger Assessment Guidelines, paragraph 5.2.25.

200. On balance, the OFT considers it appropriate to exclude the prospect of local unilateral effects arising in the supply of RMX on a 10-mile radius where the combined share of the parties does not exceed 40 per cent.

201. On the basis of a 10-mile radius around each party's RMX plants, there would be 64 areas where the parties would have a combined production share (measured by plant count) in excess of 40 per cent.

Barriers to entry

202. The parties submitted that barriers to entry in RMX are low given that capital costs are not high and planning consents can generally be acquired within three months. Citing BDS data, they stated that approximately 23 RMX suppliers have commenced operation between 2005 and 2009. That said, the OFT was informed by BDS that in 2010, 40-45 RMX plants were closed, resulting in net closure rather than increased entry.

203. Barriers identified by third parties included the ability to site plants at suitable locations, and in particular, gaining access to competitive aggregate and cement supplies given that required resources are controlled by the major national players. In addition, the OFT notes that the existing excess capacity in the market may provide some disincentive for new entrants.

204. While entry or expansion may provide some level of competitive constraint, it is not clear to the OFT that any sufficient and timely new entry would be likely to counteract competition concerns. Nor does the OFT have sufficiently detailed information to determine where entry is likely to take place in relation to particular local areas where competition concerns have been identified. The OFT has therefore not placed weight on any entry for the purposes of its competitive assessment.

Conclusion on horizontal effects in the supply of RMX

205. The OFT considers that the test for reference is met in relation to the 64 local areas in which the parties have a combined share (measured by plant count) above 40 per cent on a 10-mile radius.

Bulk grey cement

National shares and analysis

206. The parties argued that the proposed transaction does not give rise to a substantial lessening of competition in the supply of bulk cement in Great Britain since Tarmac is a small player in the market, and the joint venture therefore creates only a small increment (approximately [0-10] per cent on the basis of external supply in 2009) to Lafarge's existing share. Although Lafarge accounts for [40-50] per cent of the bulk grey cement market on a national level based on 2009 external volumes, the parties stated that several alternative cement suppliers exist (in addition to the national players, Lafarge, Hanson, Cemex and Tarmac), including Cementos Portland Valderrivas, Titan, CRH plc, Dudman, Sherburn Stone, Thomas Armstrong, Quinn and Lagan.

207. The parties argued that the OFT should assess the likely effects of the proposed transaction on the basis of external sales. In particular, they argued that [ ].

208. The OFT does not agree that the market should be assessed on the basis of external volumes only. It considers it necessary to look at the supply of total bulk grey cement (including internal sales) since national suppliers have the ability and incentive to adjust their levels of internal and external cement volumes when it is commercially profitable to do so. For example, where the demand for cement increases, Tarmac could at no additional cost, adjust its internal/external supply levels to increase its sales to the external market. Although Tarmac may have [ ], the OFT sees no reason why it would not be capable of switching larger volumes to external supply as and when market demand recovers.

209. In addition, the OFT is aware that Tarmac Building Products is not being contributed to the joint venture. Post-transaction, its cement requirements would therefore be externalised.[49] In 2009, Tarmac sold [ ] tons of bulk grey cement to Tarmac Building Products, representing approximately [10-20] per cent of its overall sales.

[49] Although the parties stated that the joint venture will continue to supply cement to it under the terms of a supply agreement to be put in place.

210. For these reasons, the OFT therefore considers that to look only at Tarmac's external volumes downplays Tarmac's current position in the cement market and would therefore understate the combined firm's market position.

211. On the basis of shares of supply for total bulk grey cement sales in Great Britain, the proposed transaction leads to a reduction in the number of domestic suppliers (that is, excluding importers) from four to three, with the parties having a combined market share of [40-50] per cent (increment of [10-20] per cent), as shown in Table 3 below.

Table 3 – Shares of supply of bulk grey cement in Great Britain

Supplier	2007 Share (per cent)	2008 Shares (per cent)	2009 Shares (per cent)
Lafarge	[35-45]	[30-40]	[30-40]
Tarmac	[0-10]	[0-10]	[10-20]
Combined	**[40-50]**	**[40-50]**	**[40-50]**
Cemex	[20-30]	[20-30]	[20-30]
Hanson	[20-30]	[20-30]	[20-30]
Others	[0-10]	[10-20]	[10-20]

Source: OFT based on parties' data

212. A considerable number of the parties' customers of cement raised concerns about the reduction of supply options brought about by the proposed transaction, in a market with an already limited number of suppliers. The vast majority of customers cited Lafarge, Hanson, Cemex and Tarmac as the only credible suppliers of cement in the UK, and said that the joint venture would effectively reduce the number of players from four to three on a national basis. One or two customers stated that importers, such as Dudman and CPV (Dragon), could supply cement, but mainly in smaller volumes.

Regional shares and analysis

213. On the basis of a 100-mile radius centring around Tarmac's single Tunstead cement plant, the parties estimated that they will have [30-40] per cent (increment of [five-15] per cent) of total cement capacity. Based

on a radius of 150 miles, the combined figure would be [30-40] per cent (increment of [0-10] per cent). The OFT notes that these figures include capacity allocated to import facilities in addition to cement production plants.

214. The parties also provided market share estimates across several EPR regions on the basis of external cement volumes. Table 4 below shows significant increments to Lafarge's market share in East Midlands and the North West of approximately [10-20] per cent and [10-20] per cent respectively.

Table 4 – EPR regional shares of external bulk grey cement (2009)

Region	Tarmac (per cent)	Lafarge (per cent)	Combined (per cent)	Hanson (per cent)	Cemex (per cent)	Others (per cent)
East Anglia	[0-10]	[20-30]	**[20-30]**	[20-30]	[20-30]	[30-40]
East Midlands	[10-20]	[40-50]	**[50-60]**	[10-20]	[20-30]	[0-10]
North West	[10-20]	[20-30]	**[40-50]**	[30-40]	[0-10]	[10-20]
Northern	[0-10]	[50-60]	**[50-60]**	[20-30]	[0-10]	[20-30]
Scotland	[0-10]	[50-60]	**[50-60]**	[20-30]	[10-20]	[0-10]
South East	[0-10]	[40-50]	**[40-50]**	[10-20]	[30-40]	[5-15]
South West	[0-10]	[50-60]	**[50-60]**	[0-10]	[10-20]	[20-30]
Wales	[0-10]	[30-40]	**[40-50]**	[20-30]	[0-10]	[0-10]
West Midlands	[0-10]	[40-50]	**[50-60]**	[10-20]	[20-30]	[10-20]
Yorkshire & Humberside	[0-10]	[20-30]	**[20-30]**	[30-40]	[10-20]	[20-30]

Source: Parties' estimates

215. On the basis of the regions defined for the data presented above, the combined firm will have in excess of 50 per cent share of supply in East Midlands, Scotland, West Midlands, the South West and Northern regions and in excess of 40 per cent with a sizeable increment in the North West and Wales regions.

216. The OFT notes that the parties' combined shares may be significantly higher in certain regions on the basis of total volumes for bulk grey cement (including internal sales), although the parties did not provide regional data on this basis.

217. These national and regional shares are high enough to give the OFT cause for concern over unilateral effects.

Closeness of competition

218. The parties argued that they cannot be regarded as particularly close competitors in the supply of bulk grey cement. They stated that, in the regions where their combined shares exceed 40 per cent, there were, at most, [ ] non-integrated customers of cement which were supplied by both the parties in 2009, and that combined volumes to these customers were insignificant at less than [ ] tons. The parties argued that they therefore cannot be regarded as particularly close competitors even in regions where they have a higher combined share. Further, they stated that there is considerable evidence of multi-sourcing, and that on a 100-mile centring around Tarmac's single cement plant in Buxton, there are five other cement plants in operation (excluding Lafarge's Hope plant) and six import terminals which currently compete with the parties. In addition, they noted that the majority of Lafarge's lost volumes from RMX customers that switched suppliers in 2009 were primarily won by [ ] ([ ] per cent), compared to Tarmac's win of [ ] per cent of volumes captured.[50]

219. Although the parties may not currently share many common customers, the OFT does not believe this negates the ability for them to be close competitors. Indeed, from the third party responses the OFT received, little or no evidence of multi-sourcing arose, suggesting that customers prefer to source their cement volumes from one supplier at any given time, although some examples of switching between Tarmac and Lafarge were cited. Given that, on this basis, customers do not appear to buy from more than one supplier, the limited overlap between the parties' current customers is not probative of a lack of competition between them.

[50] In relation to 2009 switching data for concrete products, Lafarge lost share to (in order of significance) [ ].

220. With respect to the switching data provided by the parties, the OFT notes that almost [ ] per cent of [ ] volumes won from Lafarge in 2009 were due to [ ] taking its external cement volumes in-house for reasons apparently unrelated to competition with rival cement suppliers. Given the skewed data to this one customer (where [ ] also has the ability to flex its internal and external volumes whenever profitable to do so), the OFT does not consider the parties' switching data to be a meaningful proxy of diversion ratios. However, the OFT notes that Tarmac was the second closest supplier after [ ] in relation to switching for RMX customers.

221. As is clear from Figure 4 below, Tarmac's Tunstead facility is located extremely close to the largest Lafarge cement plant in the UK, Hope. On a regional level, the OFT considers that the parties are close competitors, particularly for those customers who source cement from the parties' overlapping cement plants in the East Midlands and North West area (that is, around Tarmac's Tunstead plant and Lafarge's Hope, Cauldon and Barnston plants). This is also reflected in the parties' EPR shares of supply where the increments to Lafarge's shares in the East Midlands and North West from Tarmac are [10-20] per cent and [10-20] per cent respectively in terms of external bulk supply.

Figure 4 – Cement plants and import terminals in the UK (2010)

Source: Parties

Profit margins

222. The OFT notes that gross margins reported by the parties in relation to the supply of cement in 2010 were in the range of [50-60] per cent. Gross margins at this level typically make unilateral effects more likely, even at relatively modest market share levels, because the value of sales recaptured by the merged firm will be less costly, making post-merger price rises less costly, including in circumstances where other players have spare capacity with which to respond to higher prices.

Additional constraints

223. The parties stated that the OFT should not ignore the strength of importers of bulk grey cement into Great Britain, which represent a significant constraint on the parties both on a national and regional level. In particular, they noted that importers accounted for at least 20 per cent of external bulk cement volumes to non-vertically integrated RMX producers in every region, with the exception of Scotland. In Scotland, the parties argued that they would be constrained by the existence of high levels of spare capacity, as well as by the established positions of both Hanson and Cemex, who together accounted for 40 per cent of external bulk cement sales in Scotland in 2009.

224. Many third parties were of the view that importers are not viable alternative suppliers of cement since they tend to be more unreliable in terms of guaranteeing terms of supply (often due to transportation or other logistical issues, or exchange rate fluctuations) or quality. A few customers stated that limited competition is sometimes offered from a few importers of cement, but only with respect to certain regions such as East Anglia and South Wales. However, these customers did not consider that importers constrained the national suppliers to any significant degree.

225. The OFT notes that importers' market shares have increased in recent years on a national basis (14 per cent in 2009 from eight per cent in 2007 on the basis of total bulk cement supplied in Great Britain). However, market shares for importers in some regions are significantly lower than the average across Great Britain. Table 4 above highlights that in 2009, importers only accounted for [0-10] per cent market share in Scotland, [0-10] per cent in West Midlands and Wales, and [0-10] per cent in East Midlands. In these areas, the OFT notes that the combined

entity's shares are large. Furthermore, the OFT notes that importers' shares generally are likely to be lower on the basis of total bulk grey cement supply, rather than external bulk supply, were such data available.

226. The OFT also considers that additional transportation costs involved in importing cement imply that import capacity and volumes may generate a price umbrella for UK domestic producers. If so, then while imports may place an upper bound on the scope for post-transaction price rises they would not prevent unilateral effects. Moreover, Tarmac's Tunstead plant, by contrast, has [ ],[51] and would therefore be well placed to compete aggressively against Lafarge for incremental sales opportunities.

227. In addition to the constraint offered from importers, the parties argued that there is excess capacity in the market, and that customers' ability to switch to cementitious products also serves as effective constraints on the combined firm.

228. The OFT notes that there is excess capacity in the cement market, with Hanson and Cemex currently utilising [ ] per cent and [ ] per cent respectively of total capacity. This equates to [ ] kt per annum of unused volumes which could be supplied to customers. However, the OFT does not consider that such spare capacity will countervail the lost competition brought about the proposed transaction. The OFT notes that existing spare capacity has not led to margins being eroded significantly and there is no indication that this capacity would defeat a price increase above current levels.

229. Customers did not refer to any substitutability between cementitious products and bulk grey cement, nor the extent to which they could switch to such products for use in their downstream activities. The OFT therefore cannot conclude with any degree of certainty the extent to which cementitious products will effectively constrain the combined firm post-transaction.

[51] As noted by a Tarmac internal document, [ ].

Expansion by the parties

230. During the course of its investigation, the OFT received details [ ] of plans (irrespective of the proposed transaction) to expand [the parties'] existing capacity. These plans are detailed in summary form below.

(a) In January 2011, Tarmac received planning permission for a second kiln at its Tunstead site, which will allow it to double its capacity to 2,000 kt per annum. [ ]. However, the OFT considers that, absent the proposed transaction, Tarmac would have had the ability to increase its market share and become more competitive in the medium- to long-term. Indeed, third parties told the OFT that the Tunstead plant is one of the most efficient and modern plants in the country.

(b) Lafarge has [ ] in developing a new 1,400kt per annum cement plant at its greenfield site in Medway, Kent. Although [ ], the OFT notes that planning permission has already been granted, which [ ].

231. As is stated in the Merger Assessment Guidelines, the OFT generally adopts the prevailing conditions of competition as the counterfactual against which to assess the impact of the merger; however, it will assess the merger against an alternative counterfactual where, based on the evidence available to it, it considers that there is a realistic prospect of a counterfactual that is more competitive than prevailing conditions.[52] [ ].

232. Ultimately, however, given the OFT's conclusion that competition concerns arise in relation to the supply of bulk cement even without taking any account of the parties' potential expansion plans, the OFT has not had to reach a conclusion on this point.[53]

Barriers to entry or expansion

233. The parties stated that barriers to expansion for importers are low (requiring a capital investment of roughly £100,000 to £400,000 where facilities already exist, and between £600,000 to £1 million to establish a

[52] Merger Assessment Guidelines, paragraph 4.3.5.
[53] Note that these expansion plans would potentially have been relevant in a scenario in which the OFT were minded to seek undertakings in lieu from the parties to resolve unilateral horizontal effect concerns in the supply of cement (see footnote 103 below).

new terminal building with flat storage and warehouses)[54] and there is currently excess shipping, storage and haulage capacity. However, for the reasons set out above, the OFT does not consider that the constraint from importers is sufficient to alleviate competition concerns arising from the proposed transaction.

234. Third parties consistently stated that barriers to entry are very high in the cement market, not least due to high capital costs of plant and equipment, difficulties in obtaining planning consent, as well as significant legislative and environmental obligations. The OFT has received no evidence to indicate that third party entry or expansion into cement is timely, likely and sufficient to prevent competition concerns from arising. Indeed, the only evidence on potential entry or expansion received by the OFT during the course of its investigation pertained to potential expansion by the parties themselves, as set out above.

Conclusion on the supply of bulk grey cement

235. The OFT considers that the proposed transaction gives rise to a realistic prospect of a substantial lessening of competition as a result of horizontal unilateral effects arising in the supply of bulk grey cement which would be felt, in particular, on a regional level where the parties' cement plants materially overlap. This is likely to be captured in the 100-mile radius around Tarmac's Tunstead plant. The OFT does not consider that any constraints offered by cementitious products, by importers or the constraint from third party suppliers with excess capacity are likely to be sufficient to countervail the competition lost between the parties through the proposed transaction. The OFT considers it important to safeguard existing levels of competition in a market currently served by only four domestic suppliers of cement, particularly where barriers to entry to domestic production are very high.

II. UNILATERAL EFFECTS - VERTICAL EFFECTS

236. Since both parties are already vertically-integrated, the proposed transaction does not create new vertical overlaps at national level, but

[54] See also Anticipated acquisition by Lafarge Cement UK of Port Land Cement Company Limited, 21 October 2005, paragraphs 29 to 30, where the OFT stated that 'the balance of evidence suggests that barriers to entry [for importers wishing to supply grey cement in Great Britain] are low'. However, it did not need to conclude definitively on this point.

may change the pattern of vertical relationships, in either a product or geographic sense, such that vertical concerns arise. Such concerns may occur particularly at the local level. The OFT recognises that the scope for such concerns may be limited by the foregoing assessment of horizontal issues, since vertical concerns only arise where market power exists or is created in one or more markets along the supply chain.

237. In line with the framework set out in the OFT's guidance,[55] an assessment of potential vertical effects must analyse the combined firm's ability to harm rivals, its incentive to do so, and whether the effect of its actions would substantially lessen competition in the affected market.

Cement inputs into RMX

238. With respect to the RMX supply chain at national level, the proposed transaction combines the existing leading upstream cement producer with [30-40] per cent of bulk volumes (with a limited position downstream in RMX of [0-10] per cent) with one of the leading national RMX producers with [10-20] per cent downstream (with a more limited position upstream in cement production of [10-20] per cent). The combined entity would therefore have an increased market share in cement and greater presence in local RMX markets than Lafarge did pre-merger, which may alter its incentives with respect to downstream customers (who are also its competitors).

239. Concerns were raised by a number of third parties that the proposed transaction would make input foreclosure of downstream RMX competitors more likely. In particular, Scotland was identified as an example of a region where the proposed transaction would be likely to foreclose local RMX competitors given Lafarge's position as the only cement manufacturer in Scotland, and its high share of regional cement supplies (estimated at [50-60] per cent of bulk external supply by the parties). Third parties were concerned that, post-transaction, the joint venture would raise the cement price to downstream RMX competitors (partial input foreclosure) or would refuse to supply (total input foreclosure).

[55] Merger Assessments Guidelines, paragraph 5.6.6.

240. The OFT assesses the ability, incentive and effect of the combined firm engaging in input foreclosure to its rivals in downstream RMX production. In this respect, it is important to note that whilst the geographic market for the supply of bulk grey cement is regional or national in nature (see paragraphs 111 to 115 above), RMX is supplied in very localised markets, which the OFT has captured in the form of 10-mile radials (see paragraphs 102 to 105 above). Hence in addressing potential vertical issues affecting downstream markets, it is necessary to consider local competitive conditions and not just regional positions.

Ability

241. The parties argued that vertical concerns did not arise in any part of the UK, including in Scotland (which was the area in which the OFT had received most third party concerns with respect to vertical foreclosure effects). The parties argued they would not have the ability to engage in input foreclosure even in Scotland since the proposed transaction does not give rise to an increment in market power as a result of the small increment to the parties' external sales.[56] Further reasons for the argued lack of the ability to foreclose were that non-integrated RMX producers could source cement from the parties' rivals (both domestic producers and importers), who have substantial spare capacity, and customers could switch to cementitious products (which the parties do not currently supply to any substantial degree).

242. The OFT notes that cement is a key input for RMX production. Based on the parties' figures it may account for [a significant proportion] of total RMX costs. For the reasons set out in paragraphs 206 to 235 above, the OFT considers that the proposed transaction is likely to enhance Lafarge's existing market power in the supply of bulk cement in the region around the Tunstead plant. However, the size of Lafarge in a number of regions already suggests that it may have a degree of market power prior absent the merger. The absence of a material increment to Lafarge's market power in cement in these regions does **not** mean that vertical concerns do not arise as a result of the proposed transaction. In Scotland, Lafarge's share of bulk external supply was [50-60] per cent in 2009, reflecting its cement plant in Dunbar. In the South West EPR region, Lafarge's share of

[56] The parties stated that with regard to external bulk sales made to non-integrated RMX producers the parties' combined sales are [60-70] per cent of total sales, representing an increment of just [0-10] per cent.

bulk external supply was [50-60] per cent in 2009, reflecting its cement plant in Aberthaw.[57] Although the accretion to Lafarge's market share in these regions by the proposed transaction is very small, this does not mean that Lafarge did not enjoy market power pre-merger, which the joint venture will continue to enjoy post-transaction.

243. The OFT notes that on the basis of the parties' data, the combined firm would have market shares [of 50-60] per cent in the supply of bulk cement to the external market in the following EPR regions: Scotland; the South West; East Midlands; West Midlands; and the Northern regions. The OFT does not have data for total bulk grey cement sales by region, but notes that the data available is consistent with the parties enjoying market power with respect to total cement supplies.

244. The OFT does not consider that many customers have the ability to switch away from the parties outside of Cemex and Hanson (see paragraph 224 above regarding the limited strength of importers), nor have many customers told the OFT that they could significantly substitute their cement requirements for cementitious products. In terms of the parties' arguments about supply by Cemex and Hanson, and the degree of spare capacity they enjoy, the OFT notes that any coordinated behaviour in the supply of cement may make it less likely that customer switching to Cemex and Hanson for upstream supply could defeat an attempt at input foreclosure by the combined firm (see paragraphs 261 to 352 below). It may also make the parties' commitment not to restart supply to such customers more credible.

245. The OFT therefore believes that the joint venture would have the ability to harm non-integrated rivals through raising prices[58] or refusing to supply to them in a number of regions of the UK, including Scotland.

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[57] The OFT notes that Lafarge also had a cement plant at Westbury, but that this was closed in 2009. It is possible that Lafarge's share of supply in the South West would be lower in 2010 but the OFT does not have the data to confirm this. In any event, this does not affect the OFT's overall assessment in relation to the vertical concerns identified.

[58] Low variable profit margins in RMX may indicate that there would be significant pass-through of cement cost increases into RMX prices of independent suppliers, since they have little scope to absorb (or cross-subsidise) them.

Incentive

246. The OFT considers whether the combined entity would have the incentive to cease supply and/or raise downstream rivals' costs.

247. The parties argued that such an incentive does not exist because upstream cement margins are far higher than downstream RMX ones, meaning an implausibly high level of diversion to the merged firm's RMX plants would be needed to outweigh the loss of profits on cement sales no longer made. In this regard, the parties estimated that in the event of the combined firm withdrawing cement supplies to independent customers,[59] the joint venture would need at least [40-50] per cent of the volumes lost by foreclosed RMX producers to divert to its own RMX business in order for the foreclosure strategy to be profitable. The parties submitted that since other national players (Cemex, Hanson and Aggregate Industries) together account for a significantly larger share of RMX in Scotland ([30-40] per cent) than the parties' combined share ([15-25] per cent), the required degree of diversion would not arise if diversion occurred in line with market shares.

248. By way of illustration, on the basis that the parties estimated that the national market share of independent RMX producers is [20-30] per cent, the OFT notes that, on average, the parties would need a combined share of [30-40] per cent in RMX supply to generate a diversion ratio from RMX independents to the joint venture at the threshold level of [40-50] per cent.[60] The OFT notes that this assumes no diversion outside the market, which is a worst case scenario from the parties' perspective. If there was significant diversion outside the local RMX market then the parties' combined share would need to be accordingly higher. However, the OFT also notes that it has not been able to audit the robustness or sensitivity of the parties' margin data and calculations underlying their stated [40-50] per cent critical diversion threshold, and hence whether alternative data inputs might result in a lower threshold. With respect to Scotland as a whole, the [40-50] per cent share of RMX held by independents would translate into the parties needing a combined share of [20-30] per cent to generate sufficient diversion in line with market shares.

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[59] The parties' analysis assumes that these customers are unable to replace their needs from other suppliers, even at a higher price, hence the need for a commitment not to restart supply is not required to sustain an ability to totally foreclose.

[60] Calculated by: [ ]

249. As stated above, however, the OFT notes that RMX markets are local, rather than regional. Although the parties' overall regional share of RMX supply in Scotland is [15-25] per cent, their combined shares in particular local markets will often be significantly higher than this. The OFT does not have the data to estimate relevant share thresholds for each local area where either of the parties is active in RMX. Nevertheless, the data on share of RMX plant numbers submitted by the parties for local areas where their RMX activities overlap indicated that in many such local markets, the parties will have a combined share in excess of a relevant threshold, whether in the region of [25-35] per cent. This is certainly the case for various overlaps in Scotland and the Northern region. The OFT was not provided with local RMX shares for the parties' non-overlapping RMX plants (on the basis that these would not have given rise to horizontal unilateral effects), but believes it likely that one or the other party may have a significant share (that is, in excess of relevant thresholds) in many such areas, and likely high enough share in many of these to also account for diversion outside the local market.

250. In summary, on the basis of the parties' own data on relative margins for upstream cement and downstream RMX supply, the OFT believes that there are likely to be a number of local areas, including areas in Scotland, where the parties would potentially have an incentive to foreclose competing non-integrated RMX suppliers.

Effect

251. In light of the OFT's findings in relation to ability and incentive, the OFT has gone on to consider the effect of foreclosure of non-integrated RMX suppliers in the various affected local markets. The OFT has not been able to undertake a bespoke analysis of the effects of foreclosure of independent RMX suppliers in all the potentially affected local markets, nor does it have the data to be able to do so. Nevertheless, it is reasonable to expect that a reduction in competition in certain local downstream RMX markets may result in higher prices to end customers and that there is limited scope for RMX customers to switch to alternative downstream products.[61] The OFT also notes that the local areas in which

[61] Although it could be argued that there is scope for customers to 'arbitrage' through the on-sale of cement from one local RMX area (where the merged entity is not strongly present downstream) to another (where the merged entity is more strongly present), the nature of the

foreclosure is profitable are those where the parties already have a significant combined share, thereby showing that there is a certain degree of concentration in the relevant local areas.

252. The parties argued that to the extent that foreclosed independent firms' volumes may be switched to integrated RMX players, double marginalisation would be removed such as to reduce the likelihood that harmful pricing effects would arise. The OFT has not been able to calibrate this consideration as part of its first phase review.

253. The OFT has therefore not been able to exclude that foreclosure of non-integrated RMX competitors could have an effect on competition in certain local markets such as to give rise to a substantial lessening of competition.

Conclusion on vertical effects in cement into RMX

254. The parties argued that their analysis of foreclosure ability and incentives also holds in relation to partial input foreclosure (increasing the input price charged to downstream rivals, as opposed to cutting off supply). They provided data to demonstrate that Lafarge does not currently systematically set higher prices to independent RMX customers with whom it competes, and that this should generate a presumption that partial foreclosure will not be profitable post-transaction.

255. The OFT considers that, in comparison to total foreclosure, partial foreclosure would typically entail smaller volume losses upstream and higher margins on retained upstream sales, set against lower diversion downstream. To the extent that factors relating to the proposed transaction and pointing towards possible ability and incentive to engage in input foreclosure have been identified above, the OFT believes these also apply with respect to partial foreclosure.

256. On balance, although the OFT, at first phase, has not been able to specify individually the set of potentially affected local RMX markets, the OFT considers that there is a realistic prospect the proposed transaction will lead to a substantial lessening of competition by foreclosing non-

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product and the transportation logistics that would be involved means that this possibility appears theoretical rather than real.

integrated RMX customers in certain local downstream RMX markets by raising costs, or restricting supply, which may ultimately harm end-customers. Such concerns are present in local areas where the merged firm's downstream share of RMX supply is in excess of the 25 to 34 per cent range discussed above, and which are within regions in which the combined firm has market power in the upstream supply of cement.

Aggregates inputs into asphalt and RMX

257. Aggregates are a key input into the production of both asphalt and RMX, where the combined entity is active. In local areas where the joint venture creates a high combined share of aggregates production (whether on the basis of all aggregates, primary aggregates or crushed rocks), and where it is also active in asphalt or RMX production, the OFT may be concerned about potential input foreclosure if the joint venture were able to raise effective prices faced by its downstream rivals (partial input foreclosure) or to refuse to supply them completely (total input foreclosure).

258. The horizontal local unilateral effects assessment has identified those upstream aggregate supply overlaps where the proposed transaction creates or enhances a market share in excess of 33 per cent (see paragraphs 156 to 159 above).

259. There may, in addition, be other local areas that are not identified by the horizontal assessment where one of the parties already has some pre-merger degree of market power in relation to the supply of aggregates, but which is not enhanced by the proposed transaction, and where the proposed transaction creates or enhances a vertical relationship. In relation to this possibility, the OFT notes the following points:

(a) the OFT has not received significant specific concerns about purely vertical effects arising in the supply of aggregates (independent of horizontal overlap concerns), and

(b) the parties submitted that their current pre-merger shares of supplies of aggregates to non-integrated asphalt and RMX producers are significantly below their overall shares of aggregates output, and that this limits their ability to engage in input foreclosure of such purchasers relative to that implied by overall production market shares.

260. The OFT has therefore not identified any areas where the test for reference is met in relation to input foreclosure of aggregates into asphalt or RMX. However, the OFT has not needed to conclude definitively on this point given its overall conclusion on the competitive effects created by the proposed transaction.

III. COORDINATED EFFECTS

Introduction

261. Coordinated effects may arise when firms operating in the same market recognise they are mutually interdependent and they can reach a more profitable outcome if they coordinate to limit their rivalry. When assessing coordinated effects, the OFT will examine whether there is evidence that the firms in the market were coordinating pre-merger. If such evidence exists, the OFT will examine whether the proposed transaction makes coordination more stable or effective, given the characteristics of the market. If there is little or no evidence of pre-existing coordination, the OFT will examine whether the proposed transaction makes it more likely that firms in the market will start to coordinate.[62]

262. As well as considering whether or not there is evidence of pre-existing coordination, the OFT analyses the characteristics of the market for evidence of the ability to coordinate. For coordination to be possible, three conditions must be met:[63]

(a) firms must be able to reach and monitor terms of coordination

(b) coordination must be internally sustainable among the coordinating firms, and

(c) coordination must be externally sustainable, such that competition from external sources should not undermine the coordinating activity.

[62] Merger Assessment Guidelines, paragraph 5.5.4.
[63] Merger Assessment Guidelines, paragraph 5.5.9.

263. In the following paragraphs, the OFT assesses evidence of pre-existing coordination and each of the three conditions for coordination in turn.

264. It is important to recognise in the analysis that follows that coordination between suppliers in a market does not have to take place on an 'all or nothing' basis; rather the existence of previous coordination, and the prospect of future coordination, may be likened to a continuum, which in turn may be made weaker or stronger by the proposed transaction. Coordination may exist to some degree, but may be weakened in terms of its efficacy, longevity or the scale of its effects by pressures from within or outside the coordinating group. The removal of such pressures may allow the coordination to increase in efficacy, duration or effect.

265. It is for this reason that the CC/OFT *Merger Assessment Guidelines* state that where 'there is evidence that the firms in the market were coordinating pre-merger ... [the Authorities] will examine whether the merger makes coordination more stable or effective, given the characteristics of the market.'[64]

Evidence of pre-existing coordination

266. The OFT considers below the strength of third party concerns regarding the current competitive environment and analyses the parties' internal documents and margin data to determine whether there is any evidence of pre-existing coordination.

General third party observations

267. In the course of the OFT's market investigation, a significant number of third parties complained that national suppliers of cement (that is, Cemex, Hanson, Tarmac and Lafarge), and national suppliers of aggregates, RMX and asphalt (including Aggregate Industries) regularly engage in coordinated behaviour to the detriment of customers. They told the OFT that, in their view, anticompetitive practices are commonplace in the industry, some stating that it has been a feature of the industry for over 20 years. A few third parties told the OFT that explicit collusion used to take place in the UK, where the major national players attended meetings to fix prices.

[64] Merger Assessment Guidelines, paragraph 5.5.4.

268. Third party complaints mainly, although not exclusively, related to the supply of cement. Although the OFT, for the purposes of its coordinated effects assessment focuses on complaints made with respect to the supply of cement, it notes that a number of similar complaints to those identified in the forthcoming paragraphs were made also in relation to aggregates, asphalt and RMX supply as well. More specific third party complaints are set out below (see also paragraphs 355 to 361 below).

269. Responding to these general third party observations, the parties told the OFT that [ ]. [ ]. In any event, the OFT notes that, although a number of third party concerns were from RMX competitors, in fact, a significant number were from customers of cement for uses outside RMX production, such as for concrete blocks and tiles.

Market sharing/customer allocation complaints

270. A significant number of third parties informed the OFT that they regularly experience problems in obtaining competitive quotes for their required products. Some of these customers stated that they would often obtain a quote from one national supplier, but when they attempted to obtain a second or third quote, other national suppliers would either price disproportionately high, or would refuse to supply/quote altogether.

271. A number of customers alleged that the reason why competitive quotes cannot be obtained is because the national players deliberately share markets. One RMX customer stated that it was common practice that where, for example, a Cemex site was geographically closest to a particular job, all other national players would refuse to give a quote, even where required volumes were very large and competing sites were nearby. The customer stated it was normal for Tarmac and/or Lafarge representatives to state explicitly, for example, that 'that's a Cemex job, so we won't price'. Another customer asserted that there were regular situations where national suppliers would not show interest in supplying certain sites or products on the basis of not encroaching on their competitors' territories. This customer stated that the markets are very transparent and that 'everyone knows who supplies to whom', so national players could easily divide contracts between themselves.

272. The parties' arguments as to why they believe that these complaints are not substantiated by the evidence on patterns of supply in relation to bulk cement are addressed in paragraph 317 below.

Price coordination complaints

273. A large number of third parties referred to price announcement letters that are sent out by the national players to their customers. They stated that the frequency of these letters has increased from an annual increase at the start of January to several sent throughout the year. Third parties consistently stated that all the national suppliers' price announcement letters are sent around the same time (often within a few days of each other), would be of similar format, and would often be for the same (or similar) increase of price per product. The OFT gives further consideration to the use of price announcement letters, including the parties' views as to why these are not evidence of, and do not facilitate, coordinated effects, in paragraphs 298 to 308 below.

Internal documents

274. The OFT reviewed the internal documents supplied by the parties to determine whether any coordinated activity may be inferred.

275. The OFT identified one internal document supplied by Tarmac[65] which discusses the level and stability of domestic cement margins and appears to set out the perceived consequence of regulatory intervention in the market by the antitrust authorities.

> '-**Level of domestic cement margins:** Although significant reductions are expected in the cost of imported cement, we expect UK margins to remain at approximately the current level owing to the stable structure of the UK market
> -**Risk of supply surplus and price dispersion:** Experience from other markets suggests that the risk of such disruptions is relatively low and any impact would probably be limited with the market eventually reverting to historic margins

[65] [ ].

-**Regulatory intervention:** Although the risk is hard to assess, historical analysis suggests that intervention would likely take the form of fines against proven offenders rather than price controls'[66]

276. It continues: [67]

'**Domestic cement margins:**

- Current contribution margin scenario:
  Cement producers maintain margins despite falling import costs and additional carbon-credit cost, by passing the costs entirely to consumers and keeping operational efficiency gains
  ...
  Market structure:
- There will be no significant regulatory action
- There will be no disruptive price war'

277. The OFT is aware that the document quoted above was prepared by [ ], rather than by Tarmac itself. However, the OFT notes that the slides were used at an oral presentation given to Tarmac's executives. The content of the document suggests that this formed a number of similar presentations provided at the request of Tarmac. The OFT considers that Tarmac must have taken this report into account in considering whether to go ahead with obtaining planning permission to build the extra kiln at the Tunstead plant. To the extent that it relied on different or other documentation, the OFT is not aware of such evidence. Overall, the OFT therefore considers that it is appropriate to attach some weight to this document, whilst taking proper account of the limitations explained above.

278. [ ].

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[66] Ibid, slide 1.

[67] Ibid, slide 4. The document goes on, on slide 10, to assess the cement market in Germany as a case study following the 'disruptive moves' of RMC, as whistleblower of the cement cartel in 2001 which was a 'price breaker strategy...undermining industry price stability'. It notes that the 'industry reacted by consolidating, adjusting capacity and raising prices' which 'occurred despite the scrutiny of the regulator during much of this period'. It notes that 'the number of 'major players' in cement fell from 7 to 6, and the top-five players increased their share from 66% to 77%'. Similarly, '[t]he top-7 players market share in ready-mix increased [their] share from 43% to 65%'. Although this information pertains to the cement market in Germany, the OFT notes that consolidation is one feature that is cited as enabling the German market to sustain price levels.

279. In responding to concerns about the [ ] document, the parties stated that it 'does not reflect the current operating environment', pointing to a reduction in cement demand, energy cost increases and tighter environmental requirements. However, the parties did not satisfactorily address why, in terms of the structural nature of the cement market, the OFT should not have regard to the [ ] document in terms of evaluating the possibility of pre-existing coordination.

Margin data

280. In relation to UK cement margins, the same [ ] document referred to above observes:

> 'Contribution margins in the UK are among the highest in Europe. France, Spain and the UK are all dominated by the global majors and one large national producer.
> Lower margin European countries like Germany have lower concentration and less vertical integration...'

281. The OFT notes that the suggestion that margins in the UK are high is borne out by the parties' own margin data in that profit margins for cement (both gross and net) are significantly higher than in the other construction products under consideration (each of which have a more significant fringe of smaller UK producers outside the national players). In particular, the percentage margin over viable cash costs for cement has remained reasonably stable (in the approximate range of [ ] per cent) for both of the parties between the years 2007 to 2010. To the extent that the percentage margin over total production cash-costs is considered, the absolute figures are lower ([ ] per cent) but have not declined significantly over the period. These data indicate that the parties have been largely successful in preventing the decline of cement margins, notwithstanding the significant reduction in demand that has occurred between 2007 and 2010.

282. The parties provided a number of arguments as to why margins in bulk cement have remained reasonably stable. In particular, they cited cost reduction initiatives by [ ]. Nevertheless, the OFT notes that margins over variable cash-costs for both companies are high (at [ ] per cent), which is particularly striking given the significant reduction in demand experienced in relation to the supply of bulk cement. In this regard, the OFT

understands that the parties have also implemented similar cost-cutting measures in the supply of other, comparable construction products;[68] yet margins here are far lower. In the light of this, it is unclear how the parties' cost-cutting measures in cement can explain the persistent high level of cement margins.

283. Moreover, the OFT notes that a major plank (discussed further below) of the parties' arguments as to why the proposed transaction does not create or strengthen coordination is that market demand for cement is very responsive to changes in price—that is, is elastic. If so, then—when considered with their high profit margins—the OFT considers that, acting unilaterally, the parties would profit if they undercut prevailing prices, given in particular that the major suppliers do benefit from some degree (albeit not to the same extent as a proportion of their individual capacities) of spare capacity.[69] This seems hard to reconcile with the parties' arguments that there is no pre-existing coordination.

Conclusion on the evidence of pre-existing coordination

284. The OFT has not obtained documentary evidence of explicit collusion in the course of its market investigation.[70] However, the OFT notes the ongoing cartel investigations by the European Commission in the cement sector,[71] and recent antitrust investigations commencing in Hungary in the RMX market.[72] The OFT has also recently published its own market study report which has independently identified concerns regarding the functioning of competition in certain UK construction markets, including the supply of bulk cement.[73]

285. The parties argued that past proven or suspected cartel activity cannot be indicative of pre-existing coordination, as explicit coordination (cartel activity) and tacit coordination are substitutes: put differently, if tacit

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[68] See, for example, Lafarge internal document, [ ].
[69] See Merger Assessment Guidelines, paragraph 5.5.6.
[70] However, the OFT is aware that the construction industry has a history of cartelistic behaviour. See for example, the Bundeskartellamt imposing fines totalling 660 million Euro on companies in the cement sector on account of cartel agreements, 14 April 2003 www.bundeskartellamt.de/wEnglisch/News/Archiv/ArchivNews2003/2003_04_14.php.
[71] http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/08/676&format=HTML&aged=0&language=EN&guiLanguage=en
[72] www.gvh.hu/gvh/alpha?do=2&st=2&pg=133&m5_doc=7177, although the OFT notes that neither Lafarge nor Tarmac are named participants in the alleged anticompetitive conduct.
[73] www.oft.gov.uk/news-and-updates/press/2011/90-11.

coordination were possible, then there would be no use for explicit coordination. The parties noted the CC/OFT Merger Assessment Guidelines, which state that '[i]n markets which are not obvious candidates for tacit coordination according to the conditions in paragraph 5.5.9 [of the Guidelines], past cartel behaviour (ie explicit coordination) may suggest that tacit coordination is difficult.'[74]

286. The OFT notes three points in respect of the relationship between express and tacit coordination in this context:

(a) first, that express collusion may enable a more coordinated outcome to be achieved than tacit coordination, even though the latter is at least to some degree feasible

(b) second, that both explicit and tacit coordination are germane to an assessment of the effects of a merger,[75] and

(c) third, that when determining the implications of past proven or suspected cartel activity, the key question for the OFT is whether the conditions of coordination were met in that market.

287. As is clear from the guidelines,[76] the OFT does not automatically infer that past proven or suspected cartel behaviour is indicative of pre-existing coordination and takes in the round all evidence available to it (in particular whether the conditions for coordination were met in the market in question).

288. In that regard, the OFT notes the significant number of consistent third party complaints in this case, the parties' high margins in the face of elastic demand and the internal documents. These collectively would tend to lead the OFT to consider that there is sufficient evidence for the purposes of the OFT's first phase assessment of pre-existing coordination in the UK in the supply of bulk cement.

289. The OFT generally considers that a merger in a market already showing coordinated outcomes would be likely to make coordination more

[74] Merger Assessment Guidelines, paragraph 5.5.7.
[75] Merger Assessment Guidelines, paragraph 5.5.3.
[76] Merger Assessment Guidelines, paragraph 5.5.7.

sustainable or effective.[77] In this situation, the question for the OFT to consider is whether the structure and scale of the combined firm is so different from those of its predecessors that the incentive to coordinate has been removed (in this respect see paragraphs 340 to 351 below on the effect of the proposed transaction on the prospects for co-ordination).

290. The OFT proceeds below to assess the characteristics of the markets for evidence of the ability to coordinate, as well as whether the conditions for coordination are likely to be strengthened as a result of the proposed transaction.

291. In the analysis that follows, the OFT focuses on the supply of bulk grey cement since the majority of third party concerns stemmed from this product market.

Ability to reach and monitor terms of coordination

292. For coordination to exist, firms must be able to: (i) reach a common understanding about their objectives; and (ii) monitor sufficiently each other's behaviour to ensure that deviation from the coordinated outcome can be detected.[78] The OFT looks at whether or not these criteria are met and the impact of the proposed transaction on the likelihood and effectiveness of the national players' ability to reach these goals.

Ability to reach a common understanding

The number of firms in the market

293. In general, the fewer firms in the market, the easier it will be to reach a common understanding.[79] In the supply of cement, in 2009 the four national suppliers together supplied 86 per cent of bulk grey cement in Great Britain. The market is therefore already highly concentrated prior to the merger, with a HHI of 2,108. The proposed transaction would then lead to a reduction in the number of these major players effectively from four to three, and a delta to the HHI of 680. An elimination of one of these suppliers would typically lead the OFT – in the context of a merger in a market with relatively homogenous goods and some evidence of pre-existing coordination – to consider that the proposed transaction will

[77] Merger Assessment Guidelines, paragraph 5.5.8.
[78] Merger Assessment Guidelines, paragraph 5.5.10 to 5.5.14.

increase the ability of the remaining players to align their behaviour in the market.[80]

Degree of complexity in the competitive environment

294. The parties argued that each of the product markets is characterised by complexity and non-transparency, making coordination over a single, uniform price difficult or even impossible to be reached or sustained. They provided analyses to demonstrate that there is a significant degree of price dispersion for each product sold to different customers by different sites and that they are always lower than the announced increase. For Lafarge's top bulk cement product, for example, the data showed that the ex works price for supply to non-integrated RMX sites ranges from approximately £[ ] to £[ ] (for the 10th-90th percentile). They concluded that such an absence of transparency indicates that there is neither an 'agreed' market price nor any scope to monitor deviations from an agreed price.

295. The OFT is conscious that, in the supply of grey bulk cement, the parties acknowledged that different grades of grey cement are interchangeable on the demand- and supply-side, such that no distinction or segmentation should be made. Third parties broadly confirmed this notion. This is also consistent with previous decisional practice of the OFT which confirms the homogeneity of this product.[81]

296. The OFT recognises the degree of price dispersion in relation to actual prices charged to different customers. However, the OFT's concern is not simply coordination to reach a single high price that is the same for every customer. Rather, it is that suppliers may still be able to reach terms of co-ordination around: (i) timing and scale of headline price increases; and (ii) supply or refusal to supply customers (be it absolute or constructive) in particular areas, or those with established supply relationships. Such strategies would not necessarily be negated in their effectiveness by a degree of price dispersion in relation to individual products. The OFT has

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[79] Merger Assessment Guidelines, paragraph 5.5.11.
[80] See, for example, Anticipated acquisition by Wienerberger Finance Service BV of Baggeridge Brick plc, 11 December 2006.
[81] See, for example, Anticipated acquisition by Lafarge Cement UK of Port Land Cement Company Limited, 21 October 2005 at paragraph 39.

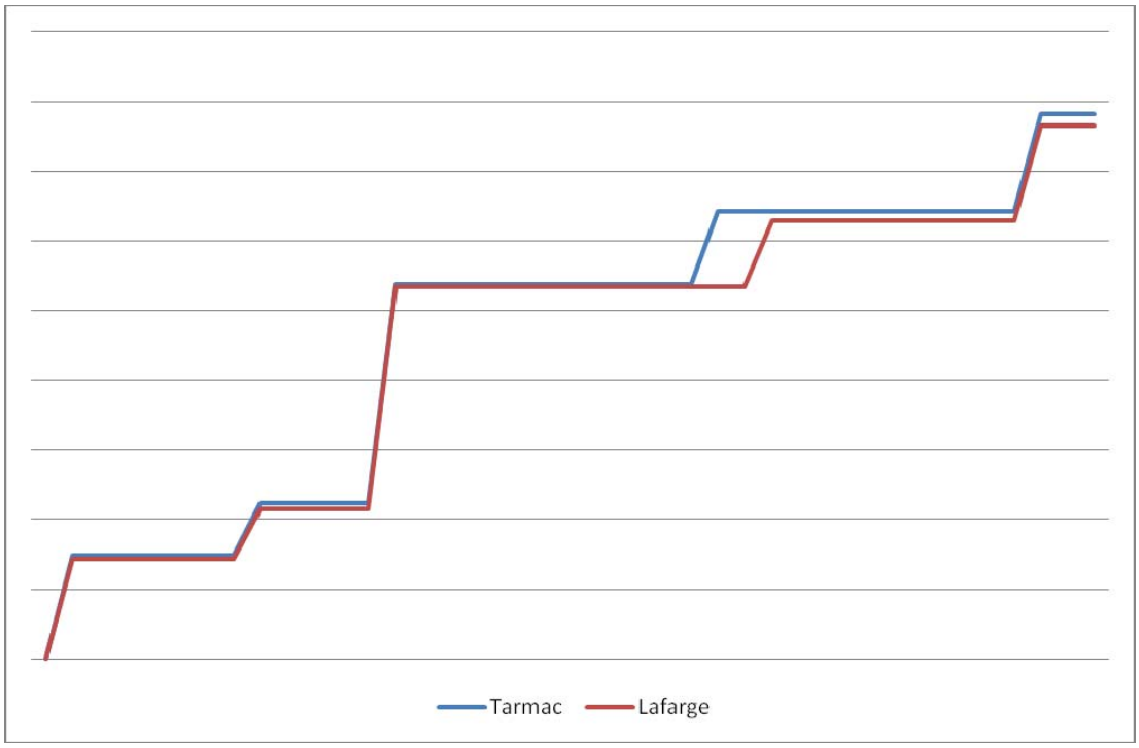
proceeded to examine the role played by price announcement letters specifically below in the following sub-section.

297. The parties also argued that market evidence does not support a view of strict territorial division. However, consistent with its market test, the OFT considers that the major national suppliers are likely to have a reasonable knowledge of production volumes, and of the relative strengths and weaknesses of rivals' supply positions in different areas. In particular, the OFT is aware that the industry is prone to 'chatter' whereby suppliers are generally aware of who supplies to whom. This issue is examined further below (see paragraphs 315 below).

Price increase announcement letters

298. As set out in paragraph 273 above, national suppliers send out letters several times a year to announce price increases to their customers. These letters are usually sent around the same time (that is, within a few days or weeks of each other) and typically announce very similar amounts, in pounds and pence per tonne (not percentages), by which prices are to be increased to each customer. The dates contained in these letters at which prices are to be increased are identical. The parties provided the OFT with some of their price announcement letters. Of those provided with respect to the supply of bulk cement, the OFT assessed the similarities in the parties' announced price increases. Figure 5 below sets out, in cumulative form, the effect over time of each of the parties' announced price increases against the effective date of the announced increase, for supplies of bulk Portland cement:

Figure 5 – Cumulative announced price increases per tonne for bulk Portland cement (2008-2011)[82]



[Axes have been redacted]

299. The parties argued that price increase announcements are consistent with unilateral attempts by each supplier to recoup cost increases. They argued that the reason for the similarity of timing and price increase is due to the commonality of inputs (including in particular energy costs) required by competitors, and the increase in price of these key inputs which tend to be reflected at around the same time through price announcement letters issued by the national players.

300. At the same time, however, Lafarge stated to the OFT during the investigation that when setting the levels of the price increase, it would carefully consider a range of different costs, [ ]. Further, Tarmac told the OFT that in the past when common costs have decreased and prices to customers have fallen, it was not industry practice (in its experience) to send price **decrease** announcement letters—still less so for them to be as well aligned (in terms of amount and date of commencement) as the price increase announcement letters analysed above.

[82] The OFT understands from third parties that several price announcement letters are sent out by the parties each year, not just annually. The OFT believes that disclosure of all bulk Portland cement price letters would have shown further alignment.

301. The OFT is sceptical of the level of similarity in the parties' pricing policies given the number of factors cited by the parties that drive increased input costs. Although there would clearly be some degree of commonality in the cost increases suffered by each supplier, it would be expected that competitors would have taken approaches, with different degrees of success, to mitigating those costs (for example through hedging and other contractual arrangements, plant closure, mothballing and so forth – see in this respect, paragraph 282 above for different measures taken by the parties). As such, in the same way as actual realised prices are dispersed, one would expect there to be more significant dispersion of **announced** price increases to reflect the parties' differing costs given the numerous variables at play. Yet the OFT's analysis of price letters suggests that the parties' announced prices typically differ by no more than [20-30] pence per tonne (on announced price increases, from Figure 5, of [£0-£<20] per tonne).

302. The parties argued further that announced price increases to customers do not provide a meaningful basis for rivals about actual prices achieved. They argued that the majority of actual prices achieved for volumes sold are below the announced price change such that there is no correspondence between announced price increases and actual price increases. In this regard, they stated that monitoring deviations would not be feasible because it could not be determined whether or not the price change had been fully implemented.

303. The OFT acknowledges that actual price increases may not follow exactly the announced price, but notes that on the basis of the parties' data, price announcements do tend to result in an increase in cement price, at an aggregated level (albeit that the specific level will differ by individual customer).[83] [ ].

304. The OFT considers that price announcements enable the national firms to reach a common understanding that an increase in price will result. Although non-binding, the headline price announcement letters provide a simple mechanism, reinforced through repeated use and experience, to generate a tacit understanding on pricing behaviour. Further, they signal intentions to other market participants and condition market expectations

[83] See Figures 41 and 42 in RBB paper, Assessment of the scope for coordinated effects.

about the existence, the timing and the scale of the pricing increase initiatives.

305. Given that the national players would expect each other to send out their price letter at or around the same time, the OFT considers that any deviation from such agreement to send out the price letter at the prescribed time could easily be detected. The OFT is therefore of the view that it is likely that, even if the price announcement does not lead to the full listed price increase for all customers, coordinating firms will still understand that an overall price rise should result from the collective behaviour.

306. In terms of the scale of any price increase, a large announced increase in a given product signifies a stronger push for increased prices on the part of suppliers than a smaller per tonne announced increase will do. Similarly, it is more likely that a price increase initiative for one supplier will be successful if customers are aware that other suppliers have recently announced similar, or identical, price increases for the same product.

307. The OFT does not consider it necessary to prove that a price change is **fully** implemented in respect of all customers, rather that an increase in price is attempted, and is in fact, commonly achieved (albeit that the actual amount increased by individual customer will depend on the circumstances of that customer).[84]

308. That said, the OFT notes that for coordination to be sustainable, there needs to be a monitoring mechanism for coordinating firms to determine whether negotiated prices to individual customers have resulted in realised outcomes consistent with wider stability in customer relationships. This is considered below.

[84] Non-binding, costless and non-verifiable announcements—known as 'cheap talk'—of the kind contained in the price increase announcement letters are known to facilitate coordination, provided the incentives of the putative coordinating group are sufficiently aligned. For a discussion of incentives and internal stability, see paragraphs 322 to 331.

Ability to monitor deviations

309. Given there are currently only four main cement suppliers in the market, the OFT assesses the ease with which the national competitors are able to detect the choices of their rivals in the market.

310. The OFT notes that the parties' internal documents indicate that competitor decisions and actions in relation to production capacity are transparent. For example, a Lafarge internal document[85] notes in relation to 'Cement Supply/Demand' that:

> 'All players have demanding cash requirements but shown discipline (so far) in reducing capacity ([ ] small Kiln & Padewswood campaign running: [ ] closure of Barrington & South Ferriby campaign running on 1 Kiln: Lafarge closure of Northfleet and Westbury) to cut costs.'

311. The OFT considers that the existence of structural links between firms in the market may assist in reaching and monitoring terms of coordination.[86] In the UK construction industry, certain joint ventures exist between the national firms, such as Midland Quarry Products, a 50/50 joint venture between Hanson and Tarmac. This may tend to align competitors' incentives and assist in making markets more transparent for coordination to occur.

312. In addition, significant cross-supply relationships exist between the national suppliers, which may make transaction prices more observable than would otherwise be the case. For example:

(a) in 2010, Tarmac purchased [ ] per cent of its external cement requirements from [ ]

(b) Hanson estimated that approximately [ ] per cent of its total cement supply is sold to the other major nationals, yet it currently purchases from [ ] (approximately [ ] per cent of total cement used) for its downstream RMX operations

(c) Cemex stated it supplied [ ] per cent of its cement to the other nationals, but for its RMX business, it purchased its external

[85] [ ].
[86] Merger Assessment Guidelines, paragraph 5.5.13.

cement requirements (approximately [ ] per cent of total cement used) from [ ].

313. The OFT considers that, whilst commercially rational in terms of efficient procurement, the fact that the majors buy cement from, and sell to, each other and to independents to service local RMX demand is likely to aid their understanding of prices at which deals are struck, without the need for extensive price transparency.

314. The parties argued that the fact that national cement producers buy cement from and sell to each other cannot aid coordination because a cement swap establishes a single price (or at most a few prices). Given the number of customers served by Lafarge, such arrangements would not provide any 'clear signal' as to the correct price for a cement swap. The OFT acknowledges that the existence of such arrangements does not – in itself – provide sufficient information for the parties to be able to monitor deviations; however, they are likely to provide the parties with a certain degree of information as to the other supplier's pricing and available capacity (itself potentially providing an indication of that supplier's pricing to other customers).

315. In terms of the ability to monitor deviations, the OFT notes that customer allocation behaviour would enable coordinating firms to detect easily when a participant has deviated from coordinated behaviour. In this sense, the OFT does not necessarily mean explicit allocation of individual customers, as might be the case in a market sharing cartel, but rather an understanding between suppliers that a certain customer has historically been supplied by a particular supplier. This would particularly be the case in the event that customer relationships with particular suppliers were stable in the cement market over time (see paragraph 319 below).

316. As set out above, numerous third parties told the OFT that they were unable to obtain competitive quotes for jobs because rivals explicitly stated they did not want to take an incumbent's customer. The OFT considers that feedback from regional sales teams (or from customers) and observable supply outcomes can inform suppliers about rivals' conduct – including the extent to which they are seeking to achieve price increases in line with the extent of the announced price increase – without needing to observe their actual realised prices in respect of specific individual customers. To the extent that competitors in a given

area noticed that a supplier won an unusually and unexpectedly high number of customers following a price increase letter, this would suggest that that supplier was not seeking to implement the announced price increase to the same extent as other suppliers.

317. The parties argued that for effective market division, it would be necessary to demonstrate that the parties do not supply customers within close proximity of rival sites. In this regard, they provided evidence to show that approximately [ ] per cent of Lafarge's independent RMX customers are located within a 25-mile radius of competitor cement locations, thereby contradicting the OFT's claim that national suppliers divide the market.

318. In this respect, the OFT is mindful of the significant number of third party complaints about the allocation of customers in the supply of bulk cement. The OFT notes the data presented by the parties in terms of the proportion of Lafarge independent RMX customers located within a particular distance of a rival cement supplier (referred to in paragraph 317 above). However, the OFT has not been able within the confines of its investigation to test the robustness of these data or to explore in any detail where the customers of the national cement suppliers are located so as to rule out there being any pattern in terms of customer dispersion.

319. In any event, the OFT does not consider it necessary to identify specific areas or regions where customers have been allocated wholesale to a particular supplier for effective monitoring to be able to occur. It is plausible, given the long-standing nature of many customer relationships, that customer allocation (perhaps more accurately described as an understanding of who normally supplies whom) takes place on a customer by customer basis rather than on the basis of territorial proximity. Indeed, third parties noted that cement supply is particularly transparent in that it is commonly known who supplies cement to whom. This is particularly likely to be the case for long-standing customers or customers who require large volumes. Therefore if a participant deviates by offering a lower cement price to the 'incumbent's' customer (leading that customer to switch supplier), this could be detected.

320. In this way, the OFT considers that some form of customer allocation strategy would enable national players to monitor coordinated behaviour.

Such a strategy is not premised on any need to share precisely any local areas or regions between participants.

321. On the basis of the evidence discussed above, the OFT considers that bulk cement suppliers would be able to monitor deviations from coordinated pricing strategies that resulted in customers switching supplier.

Internal sustainability

322. Coordination will only be sustainable where the profit from such coordination is sufficiently high and there is an effective mechanism to punish deviation.[87]

323. The small number of major cement suppliers would tend to help sustain coordination.

324. The OFT also notes that there are significant common features between the national players which may strengthen their incentives to coordinate. For example, Hanson, Lafarge, Cemex and Tarmac are the only vertically-integrated companies in Great Britain with extensive geographic coverage across all product markets. The OFT considers that multimarket contacts may enable coordinating firms to punish deviation more effectively, since punishment can be targeted and at limited cost. Such a targeted response may minimise the cost of punishment while maximising its impact.

325. That having been said, the OFT acknowledges the somewhat differentiated position of Tarmac in relation to the supply of bulk cement. The increased vertical integration of the combined entity is a key post-transaction effect (discussed further in paragraph 342 below) in creating more aligned incentives between the combined firm, Hanson and Cemex than is the case pre-merger. The OFT considers this would tend to enhance internal stability, and facilitate more effective coordination (with respect to the achievement of shared objectives or frequency of episodes of deviation) than was the case pre-merger.

326. The OFT considers that punishment involving output expansion would be possible given the significant overcapacity in the industry. This would

[87] Merger Assessment Guidelines, paragraph 5.5.15.

enable participants to increase output as part of a punishment strategy without requiring costly investment of expansion. The OFT understands that a significant proportion of Cemex's and Hanson's capacity is not being utilised. In addition, the OFT notes that the parties also have some excess cement capacity, albeit a lesser proportion than Cemex and Hanson. In total, the OFT estimates that this amounts to approximately [ ] tons of additional cement that could be produced. National suppliers therefore would have the ability to increase output if necessary as part of a punishment strategy.

327. The parties argued that there will be asymmetry in terms of excess capacity in terms of the national suppliers and that the excess capacity that exists undermines coordination. The OFT acknowledges that there is an asymmetry in terms of the proportion of suppliers' capacity that is spare. However, each of the suppliers has at least some degree of capacity available. Given that any deviation from coordination would be expected to occur piecemeal, rather than wholesale at national level, a supplier would only need a limited degree of capacity in order to be able to punish in response. As such, the OFT does not consider that the asymmetry that exists in terms of excess capacity prevents internal sustainability of any coordination.

328. In terms of whether the operation of the market currently demonstrates that coordination is internally sustainable, the parties were able to provide illustrative examples showing that a number of their customers had switched to an alternative cement supplier in 2009; this could prima facie suggest that customers are not being allocated between the national players. However, the instances provided by the parties correspond, in total, to only a small proportion of the overall market. Further, only a small proportion of the examples identified switching by independent RMX customers to other national players. The OFT therefore considers that this evidence is of limited weight in disproving the existence of any co-ordination.[88]

329. The parties also pointed to fluctuations in the regional shares of bulk external supply of cement, arguing that these changes were inconsistent with any tacit agreement to share the market. However, fluctuations in

[88] The OFT also notes that the existence of some degree of switching could also be consistent with the existence of short-term and localised punishment for any deviation from coordination (which would be consistent with the existence of co-ordinated effects).

regional shares can occur for a variety of reasons, including: new jobs or sources of demand; accommodated responses to significant cement capacity closures or mothballing; and genuine switching. Taken overall, the switching data is insufficient clear to be relied upon to support the proposition that there can be no form of understanding over supply relationships and patterns between suppliers.

330. Overall, as noted at the start of this section, the OFT notes that coordination is not necessarily an 'all or nothing' proposition, but can exist on a continuum of differing degrees of effectiveness. Similarly, punishment need not necessarily entail a complete breakdown in coordinating conduct across the board. In the case of customer allocation, deviation on a local basis may be responded to with localised retaliatory punishment (made easier by the geographic multimarket contact between rivals). Prevailing levels of cement gross margins and capacity utilisation imply that a tit-for-tat response to customer poaching would not be particularly costly for the responding firm. Observations of some customer switching and market share adjustments (which could also reflect accommodation of significant capacity closures) are therefore not inconsistent with a degree of coordination, and may even in some cases reflect localised deviation and punishment.

331. A similar argument applies to the parties' position on the speed of detection of deviations from any coordinated outcome, and how swiftly on from this punishment follows. It is certainly the case that instantaneous detection and very rapid punishment make coordination more internally stable. But—recognising that coordination is not a binary state and may exist on a continuum—an observation that detection and punishment are not instantaneous is not sufficient itself to indicate that there is no coordination.

External sustainability

332. Coordination must be externally sustainable in that any outside competitive constraints on the firms involved in coordination must be relatively limited.[89] The OFT considers below the extent to which external factors constrain the national players.

[89] Merger Assessment Guidelines, paragraph 5.5.18.

Barriers to entry

333. Following consistent third party comments during the course of the OFT's market investigation, as addressed above, the OFT considers that barriers to entry into the supply of cement are likely to be high and that importers are not a significant constraint on the national players in the UK. The cement market is currently dominated by the four national players. The OFT is not aware of any expected entry from independents within the UK into the cement market, noting that huge capital investment is needed to get a cement plant up and running. For a further discussion of barriers to entry into cement, see paragraphs 233 and 234 above.

Buyer power

334. The OFT considered the extent to which customers may be able to act strategically to undermine any coordination (see also paragraph 323 above).

335. The majority of third parties told the OFT that they have very little buyer power, particularly with respect to obtaining cement supplies. Many customers complained that since the national players know that independent cement customers have little or no alternative but to source from one of them, they are rarely willing to engage in price negotiations even for large volumes. Since several of these customers stated that other national suppliers would not quote (or would price unreasonably high) when they attempted to find an alternative supplier, these customers asserted that the incumbent supplier would sometimes threaten to refuse to supply to ensure a price increase resulted, knowing that no alternatives existed for the non-vertically integrated customer.

336. Given that independent customers of cement are not vertically-integrated and therefore have no ability to self-supply, the OFT considers that these customers have little or no countervailing buyer power to disrupt any coordination by the national suppliers.

Strength of the competitive fringe

337. The parties submitted that in the event that, post-merger, the domestic cement producers attempted to coordinate on price or refuse to supply non-integrated RMX producers, this strategy would be undermined by the

constraint placed by importers of cement. They submitted that importers have maintained a significant share of the national grey cement market despite the recent downturn in demand.

338. As considered in paragraph 226 above, the OFT does not consider that importers are likely to constrain the national players to any significant degree.

(a) Although the parties argued that importers have been gaining market share over the last three years, third parties were consistent in their views to the OFT that, whether for reasons of unreliability of product quality and/or supply, they would not consider importers to be fully viable alternatives.

(b) The OFT understands that marginal costs in relation to imported cement (in particular due to the inherent transport costs) are typically significantly higher than those relevant to domestic production.

(c) Very few of the parties' customers viewed the other alternative cement suppliers listed by the parties to be viable alternatives. They viewed these suppliers as neither having national coverage, nor the ability to supply large volumes.

339. The OFT therefore does not consider that there does not exist a sufficient constraint outside the national players to undermine coordination.

Post-transaction effect

340. The parties argued that there is no realistic prospect that the transaction would lead to co-ordinated effects, in particular since Tarmac's presence on the external market is minimal (with a share of supply to non-integrated RMX producers of [0-10] per cent), and that, even if Tarmac employed all its excess capacity externally, this would leave its share at around [0-10] per cent.

341. For the reasons expressed in paragraph 208 above, the OFT considers it likely that Tarmac has the ability to flex its internal and external cement volumes whenever it would be profitable to do so. Importantly, the OFT believes that the parties significantly downplay Tarmac's position as a

cement supplier and that undue focus on Tarmac's current limited position in relation to external supply is inappropriate. On the basis of shares of supply for total bulk grey cement sales in Great Britain, Tarmac's share in 2009 was [10-20] per cent.

342. In any event, the OFT believes that the proposed transaction will increase the symmetries of the national players by making the combined entity's position more aligned to the positions of Hanson and Cemex across the four markets. In this regard, the OFT is aware that Tarmac's relative positions in the cement market and RMX markets (and hence its position as a net purchaser of cement) may currently moderate its incentives to maximise cement prices, but that the proposed transaction is likely to remove this moderating influence and increase the effectiveness of coordination.

343. The OFT observes from the parties' own data that Tarmac is a large net purchaser of cement. In 2009, Tarmac purchased [ ] tons of cement from external sources, of which [ ] per cent was sourced from [the three nationals]. In previous years, Tarmac's required cement volumes were even more significant: [ ] tons in 2007 of which [ ] per cent was sourced from the three nationals; and [ ] tons in 2008 of which [ ] per cent was sourced from [the three nationals].

344. Therefore, although Tarmac's external sales of cement are currently small, its unique purchasing position allows it to dictate from where it sources its external demand, since it has several options available to it: (i) to source from one or a number of the national players; (ii) to encourage imports or even new entry;[90] or (iii) to increase its ability to self-supply (for example, by expanding its Tunstead plant by adding an additional kiln – see paragraph 231 above). The OFT considers that Tarmac's different business structure (as a cement supplier, but net purchaser) is likely to act to limit the effectiveness of pre-merger coordination in raising prices, or make coordination more susceptible to breaking down.

345. The OFT is therefore of the view that the existence of Tarmac with a differentiated position to that of the other domestic cement suppliers may have acted to reduce the sustainability or efficacy of any existing coordination, for example by limiting the extent and magnitude of the

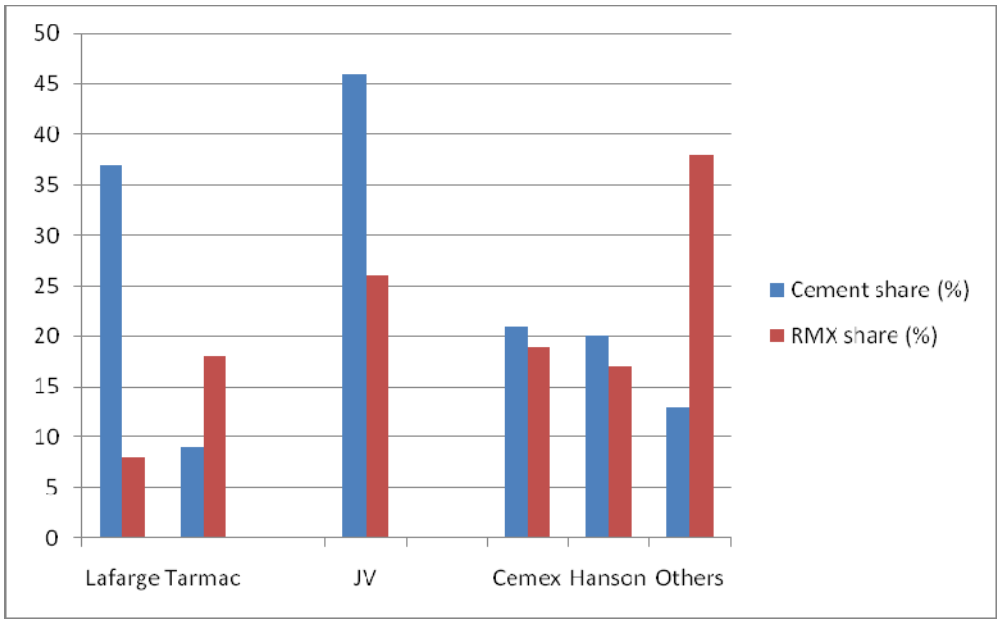
[90] Between 2006 to 2010, Tarmac has purchased small volumes from importers, including [ ].

announced price increases. Post-transaction, the vertical integration and resulting structure of the combined entity may make coordination between the cement majors more stable or more effective by better aligning their overall incentives.

346. In any event, the OFT considers that the reduction of major suppliers in the cement market, effectively from four to three, is likely to enhance their ability to reach an agreement to coordinate and to monitor compliance.

347. Moreover, the OFT considers that the proposed transaction will give rise to a realistic prospect of a substantial lessening of competition by enhancing the symmetries of the vertically-integrated national players through the alignment of Tarmac's and Lafarge's market positions across cement and RMX. This is likely to increase the incentives of the national players to coordinate on customer, geographic area, price, output and/or capacity. The effect of the proposed transaction in rendering the positions of the combined entity more symmetrical with the other vertically-integrated national suppliers is shown in Figure 6 below.

Figure 6 – Cement shares of supply against RMX shares of supply (GB)



[Non-confidential version of Figure 6 based on market shares cited in the OFT's market study report, figures 3.4 and 3.6]

348. The OFT considers that there is support for this proposition within the internal documents of the parties presented to the OFT. One internal document of Lafarge refers to the current problem it is faced with:

> 'Although very consolidated the GB cement market is hindered by the asymmetries in the Concrete Value chain...This leads to tensions due to the varying motivations...'[91]

349. The OFT considers that this is referring to Lafarge's existing position of being long in cement but weak in RMX, the antithesis of Tarmac's position. This is emphasised further in another internal document relating to the proposed transaction:

> 'Our strategic pitfall is that Lafarge UK has an imbalanced portfolio Cement/Aggregates and RMX compared to its main competitors [ ] and [ ]...Combining Lafarge UK and Tarmac assets is the best opportunity for Lafarge to rebalance its portfolio of business lines.'[92]

350. The parties argued that a significant asymmetry will be retained in the market shares of the national vertically integrated suppliers post-transaction, such that the proposed transaction will not materially align the incentives of those suppliers such that a coordinated outcome becomes sustainable. However, the OFT observes that the market structure will be significantly **more symmetric** post-transaction than it is pre-merger, thereby increasing the prospect that coordination will be effective and sustainable. This does not require that all the suppliers, post-merger, become identical in terms of their market shares in the different markets.

351. The OFT considers that the proposed transaction will eradicate the 'imbalance' discussed above, making the market positions of all national suppliers more aligned.

Conclusion on coordinated effects

352. The OFT considers that, on the basis of its investigation, there is evidence that cement suppliers may be coordinating pre-merger. The OFT considers that the proposed transaction gives rise to a realistic prospect of a

[91] [ ].
[92] [ ].

substantial lessening of competition through coordinated effects.[93] By removing Tarmac as an independent supplier from the market, the OFT considers that the proposed transaction may make coordination in the supply of bulk grey cement more stable or effective.

BUYER POWER

353. The parties submitted that customers have significant bargaining power which constrains suppliers of construction materials.

354. A few customers stated that they had some ability to negotiate prices, particularly with respect to the supply of aggregates. However, most customers stated that they had very limited or no ability to negotiate prices particularly with respect to cement supply. In particular, they noted that actual prices did not always follow the announced price since the 'market rate' was usually around £1 lower. These customers therefore did not consider that they dictated the price differential, but that this was driven by the national players' attempts to remain 'under the radar' from being detected by antitrust authorities.

THIRD PARTY VIEWS

355. Third party comments have been discussed above where relevant.

356. The OFT received just under 300 third party responses during the course of its market investigation.

357. A number of third parties did not raise any concerns about the proposed transaction. However, the overwhelming majority did raise concerns, as identified in the OFT's competitive assessment set out above.

358. Several independent RMX producers complained that the vertically-integrated nationals frequently raise the price of cement sold to them without passing the costs on to their own downstream businesses, and then often reduce the price of RMX sold through their own downstream operations. These third parties stated that national cement players engage

[93] In this regard, it should be noted that the OFT's test for reference will be met when it considers there to be a realistic prospect of a substantial lessening of competition in respect of one or more of the theories of harm it considers. It is conceivable that these theories may be mutually exclusive (Merger Assessment Guidelines, paragraph 4.2.5 and footnote 36).

in this conduct in order to squeeze independents' margins and force them out of the market. Many of these third parties stated that they were currently under threat of going out of business as a result and that the proposed transaction would only exacerbate this concern.

359. One RMX competitor noted that, in many instances, cement sales to external third parties by the national suppliers are priced at or above the national suppliers' internal transfer price even when RMX prices are falling as a result of deliberate action of the vertically-integrated supplier. It therefore alleged that cross-subsidies exist within the integrated businesses, with the effect of rendering independent RMX prices uncompetitive.

360. The parties responded to these allegations in length, stating that market shares of independent RMX producers have rapidly increased over time (growing to over 27 per cent in 2010 on a national basis) such that domestic cement producers cannot collectively be engaging in margin squeeze activity. They argued that the closure of some independent RMX sites can be explained due to the economic recession, rather than through coordinated activity, that there is significant evidence of price dispersion for bulk grey cement sold to non-integrated RMX customers, and that their internal data demonstrates that they do not charge higher prices to independents than to each other (or to Hanson and Cemex).

361. On the basis of its overall findings with respect to coordinated effects, the OFT does not consider it necessary to conclude on the extent to which the proposed transaction creates or enhances the ability of national players to engage in margin squeeze of independent RMX producers.

UNDERTAKINGS IN LIEU OF REFERENCE

Introduction

362. Where the duty to make a reference under section 33(1) of the Act is met, pursuant to section 73(2) of the Act the OFT may, instead of making such a reference, accept from the parties concerned such undertakings as it considers appropriate for the purpose of remedying, mitigating or preventing the substantial lessening of competition concerned or any adverse effect which may result from it.

363. The parties offered a package of remedies to the OFT to address the local unilateral effect concerns that they acknowledged the OFT might identify in relation to the supply of aggregates, asphalt and RMX. In addition, without prejudice to their submissions as to why such concerns did not arise, they also offered a remedy in relation to the supply of cement.

364. To provide comfort to the OFT that the remedies package they proposed was readily implementable at phase I, the parties divided the totality of the different assets into eight remedy 'clusters', meaning that the OFT would be required to give purchaser approval to a maximum of eight different acquirers (assuming that each of the clusters was acquired by a different buyer).

365. To provide comfort to the OFT that the remedies package they proposed was commercially attractive, such that it would attract suitable potential purchasers, the parties initiated a pre-marketing process for sale of the proposed divestment assets, [ ]. The parties stated that the pre-marketing process resulted in the receipt of between [ ] bids for all the proposed divestment assets. These included bids from a wide range of industry players, including international building materials firms who would be new entrants into Great Britain, and regional and local firms looking to strengthen operations in existing markets and to expand their geographic footprint. Moreover, the parties indicated that potential buyers (including those who chose not to submit indicative bids as part of the pre-marketing process) indicated their yet greater interest in any enlarged divestment package that might be required by the OFT.

366. The OFT proceeds below to consider the range of divestments offered by the parties in order to remedy, mitigate or prevent the competition concerns identified by the OFT above. In doing so, the OFT has considered to what extent the parties' offers of remedies satisfies the criteria set out in the OFT's published guidance, and in particular the requirement that:

'In order to accept undertakings in lieu of reference, the OFT must be confident that all the potential competition concerns that have been identified in its investigation would be resolved by means of the undertakings in lieu without the need for further investigation.'[94]

367. Before discussing the applicability of the remedies offered to resolve each of the different theories of harm, the OFT first considers the basis on which a remedy would operate in relation to **local** unilateral effects in the supply of aggregates, asphalt and RMX.

Local unilateral effects: divestment of the full increment or divestment to a market share threshold

368. The parties argued that, to the extent that the OFT were to apply a market share threshold in order to determine where competition concerns arose in relation to *local* unilateral effects in each of aggregates, asphalt and RMX, the parties should be required to divest sufficient capacity in an individual area such that their post-divestment share was reduced to the relevant threshold (be it 33 per cent, 40 per cent or any other figure). The parties argued that they should not be required to divest the full increment in any given local area where this would result in their having a market share less than the threshold in question. In support of this, the parties argued that:

(a) to require them to divest down to a level below the threshold would be illogical given that the OFT would not have found competition concerns at a level just below the relevant threshold

(b) although the OFT had insisted on divestment of the full increment in a number of retail cases involving differentiated products,[95] the products in this case were homogenous, and geographic location of the parties' plants within a given area was irrelevant to their competitive impact provided they were within the relevant geographic radius (see paragraphs 144 to 146 above)

[94] OFT – *Mergers – Exceptions to the duty to refer and undertakings in lieu of reference guidance* (OFT1122) (Exceptions Guidance) chapter 5, paragraph 5.6.
[95] See, for example, Anticipated acquisition by Co-operative Group Limited of Somerfield Limited 20 October 2008, paragraphs 180 and 181 and anticipated acquisition by Travis Perkins of BSS Group, 26 October 2010, paragraphs 233 to 237.

(c) the principal competitive dynamic in these markets was one of capacity, regardless of whether that capacity was dispersed amongst multiple competitors or aggregated in the hands of a single purchaser

(d) the thresholds applied by the OFT are in any case based on a conservative approach, and

(e) divestment down to a threshold has been permitted in other OFT cases[96] and in more recent cases of the French Competition Authority (in aggregates) and the European Commission (in other product markets).

369. For reasons set out in full in the remainder of this section, the OFT has not needed to come to a definitive conclusion on the parties' arguments in this respect. However, the OFT notes that, in respect of the argument in point (b) above, it has doubts as to whether divestment down to the increment would suffice to remove its concerns in the way suggested by the parties. In particular, for the reasons given in paragraphs 146 to 148 above, the OFT is not persuaded that a plant's geographic location within a given radial is irrelevant to the degree of competitive strength it exerts on its competitors.

370. For that reason, even if the products in a particular location are more homogenous in nature, the geographic differentiation means that the identity of the plants that the parties divest in a particular location is important. This will determine whether competition in a given area is restored to pre-merger levels, or at least whether the substantial lessening of competition is clearly removed. This is important, in particular, given that the OFT does not have the information to determine what level of diversion exists between the parties' individual sites within a given local area.

371. With respect to the other arguments advanced by the parties, the OFT considers that: in relation to point (a), the OFT's policy position, as set out in its guidance, is that undertakings in lieu should act in a clear-cut fashion; for the reasons explained in paragraph 370 above, a divestment may therefore be required to take the merged entity's market share to a

[96] Proposed acquisition by Hanson plc of Pioneer plc, 19 April 2000.

level below that used by the OFT to identify where there are competition concerns; furthermore, in relation to point (d), once the test for reference is met in a particular area, the divestment should operate to remove that concern in a 'clear-cut' fashion; in relation to point (c), the OFT does not accept that the individual positions held by particular suppliers is irrelevant in these markets; it is not clear that fragmentation of the divestment share amongst multiple purchasers would remedy, mitigate or prevent the substantial lessening of competition; and in relation to point (e), the approach of divesting down to a market share threshold is not in line with OFT practice in more recent cases, and the OFT does not consider that decisions of other competition authorities are necessarily relevant for the OFT's remedies policy.

372. To the extent that the OFT were contemplating considering further the remedies put forward by the parties, it therefore considers that it would be minded to require divestment of the full increment in each local area in which the duty to refer is met (and the undertakings in lieu offered by the parties are considered on this basis).

Unilateral horizontal effects in aggregates

373. The OFT identified a realistic prospect of a substantial lessening of competition arising from the proposed transaction as result of unilateral horizontal effects in the supply of aggregates. Specifically, the OFT identified that the test for reference was met in relation to:

(a) the supply of all aggregates in 43 local areas where the parties' combined share exceeded 33 per cent on a 30-mile radius

(b) the supply of primary aggregates in 81 local areas where the parties' combined share exceeded 33 per cent on a 30-mile radius

(c) the supply of crushed rock in the East Midlands and Yorkshire and Humberside, and

(d) the supply of rail ballast at national level.

374. The parties unambiguously offered to remedy through divestment of local quarries constituting the entire increment in each relevant local area the concerns identified in paragraph 373(b) (primary aggregates). The parties

also clearly offered to remedy the concerns in relation to paragraph 373(d) (rail ballast) through the divestment of [ ].[97]

375. In relation to the concern in paragraph 373(a) (all aggregates), the parties offered to divest local quarries in all areas where their share of all aggregates exceeded 33 per cent, but it was not clear from their offer whether they would have been willing to divest the full share increment in this scenario.[98,99] In relation to the concern in paragraph 373(c) (crushed rock) it was not clear from the parties' offer whether they would have been willing to divest the full share increment in the East Midlands and Yorkshire and Humberside.[100]

376. As structural divestments designed to remove the entire increment in the local areas, the OFT therefore considered that the parties' offer of undertakings in lieu in relation to the divestment of aggregate quarries was in principle capable of remedying competition concerns in relation to primary aggregates and rail ballast. However, the OFT notes that there is uncertainty as to whether the parties offered the necessary structural remedy in relation to all aggregates and crushed rock.

Unilateral horizontal effects in asphalt

377. The OFT identified a realistic prospect of a substantial lessening of competition arising from the proposed transaction as result of unilateral horizontal effects in the supply of asphalt. Specifically, the OFT identified that the test for reference was met in relation to:

(a) the supply of asphalt in 22 local areas where the parties' combined share exceeded 40 per cent on a 30-mile radius, and

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[97] The parties stated that the overlap in respect of rail ballast arises from the combination of Lafarge's share (generated from its production of rail ballast at its Mountsorrel quarry) with that of Tarmac ([ ]).

[98] Given the OFT's conclusion not to consider further the undertakings in lieu proposed for other reasons, the OFT did not find it necessary to revert to the parties under the OFT's 'near miss' policy (see paragraphs 8.18ff of the OFT – *Mergers – jurisdictional and procedural guidance* (OFT527)).

[99] Even to the extent that areas in paragraph 373(a) were a subset of areas in 373(b), the OFT notes that divestments in relation to the concerns in paragraph 373(b) would not remove the increment of concern in relation to those in paragraph 373(a) since they would be limited to the parties' primary aggregates assets.

[100] See footnote 98 above.

(b) the supply of asphalt in [ ] (in Greater London) where the parties' combined share exceeded 40 per cent on a 20-mile basis.

378. The parties unambiguously offered to remedy through divestment of local plants constituting the entire increment in each local area the concerns identified in paragraph 377(a) (asphalt on a 30-mile radius) and 377(b) (asphalt on a 20-mile radius in Greater London).

379. As structural divestments designed to remove the entire increment in the local areas, the OFT therefore considered that the parties' offer of undertakings in lieu in relation to the divestment of asphalt plants was in principle capable of remedying competition concerns in relation to asphalt on a 30-mile basis and on a 20-mile basis in Greater London.

Unilateral horizontal effects in RMX

380. The OFT identified a realistic prospect of a substantial lessening of competition arising from the proposed transaction as result of unilateral horizontal effects in the supply of RMX. Specifically, the OFT identified that the test for reference was met in relation to the supply of RMX in 64 local areas where the parties' combined share (by number of plants) exceeded 40 per cent on a 10-mile radius.

381. The parties unambiguously offered to remedy through divestment of local plants constituting the entire increment in each local area the concerns identified in paragraph 380 (RMX on a 10-mile radius).

382. As structural divestments designed to remove the entire increment in the local areas, the OFT therefore considered that the parties' offer of undertakings in lieu in relation to the divestment of RMX plants was in principle capable of remedying competition concerns in relation to RMX.

Unilateral horizontal effects in the supply of bulk cement

383. The OFT identified a realistic prospect of a substantial lessening of competition arising from the proposed transaction as result of unilateral horizontal effects concerns in the supply of bulk cement as a result of the loss of competition in Great Britain and, in particular, in the 100-mile region around Tarmac's Tunstead cement plant.

384. To address this concern, the parties offered the divestment of [ ],[101] [ ] in order to provide any buyer with the ability to supply bulk grey cement across a broad geographic region. [ ].[102]

385. The parties provided a range of operational information in order to demonstrate to the OFT that the divestment of [ ] would remove unilateral horizontal competition concerns, specifically that:

(a) [ ]

(b) [ ]

(c) [ ], and

(d) [ ].

386. The parties stated that the results of their pre-marketing exercise were that they had received [ ].

387. The OFT notes that, although the increment to the proposed transaction is caused by the Tunstead plant, [ ]. The OFT further notes that, [ ] would allow for the regional dimension to the supply of cement discussed by the OFT in paragraphs 111 to 115 above. The OFT has received no evidence during its investigation to suggest that the Tunstead plant would have, in production terms, a significant competitive advantage over [ ];[103] nor does it believe that [ ] should not be 'saleable' in a way that Tunstead would be. As such, the OFT considers that in this case there is no reason why the parties should not be permitted to divest [ ].[104]

388. Overall, as a structural divestment designed to remove the entire increment in the supply of bulk cement, the OFT therefore considered that the parties' offer of undertakings in lieu in relation to the divestment of

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[101] The parties explained that [ ].
[102] The parties stated that [ ].
[103] The OFT did consider whether the potential expansion plans at Tunstead (see paragraphs 230 to 232 above) might mean [ ] would not be appropriate given that the enlarged capacity of Tunstead would be significantly greater (2.0 Mt per annum) than [ ]. However, the OFT notes that, set against this, [ ], whereas it is not certain that Tunstead would be enlarged, and, if it would, this capacity would in any event not come on stream for a considerable time. In any event, the OFT has not needed to reach a conclusion on this point given its overall conclusion not to consider further undertakings in lieu of reference.
[104] See the OFT's Exceptions Guidance, paragraph 5.22.

[ ] was in principle capable of remedying unilateral horizontal competition concerns in relation to the supply of bulk cement.

Unilateral vertical effects in the supply of cement into RMX

389. The OFT identified a realistic prospect of a substantial lessening of competition arising from the proposed transaction as result of vertical concerns in the supply of bulk cement leading to input foreclosure in the supply of RMX in a number of local areas.

390. In relation to these vertical concerns arising in particular local areas, the parties considered that the divestment of [ ] to a new entrant in Great Britain that would be long in cement and therefore have a strong incentive to distribute its product widely, would clearly address these concerns. In addition, the parties noted that they would [ ] should the OFT consider this necessary.

391. Other than through the divestment of [ ], the parties did not offer remedies specifically in relation to the cement input foreclosure issues that could arise in local RMX markets.

392. The OFT does not believe that divestment of [ ] would remedy the vertical input foreclosure concerns identified by OFT in relation to local RMX markets in a clear-cut manner. This is because the OFT has identified a regional dimension to competition in relation to the supply of bulk grey cement. The divestment of the [ ] would not clearly remove the **ability** of the merged entity to engage in input foreclosure in a number of geographic regions where the size of Lafarge already suggests that it may have a degree of market power prior to the merger. Further, as explained in paragraphs 242 and 243 above, in those regions where Tarmac is not currently a stronger supplier, the absence of an increment to Lafarge's market power in cement in these regions does **not** mean that vertical concerns do not arise as a result of the proposed transaction. In these regions, the OFT cannot be confident that any pre-existing market power on the part of Lafarge would be sufficiently reduced, if at all, by the proposed divestment because of the regional geographical dimension to cement supply (see paragraphs 111 to 115 above).

393. For example, this concern arises most clearly in Scotland (where Lafarge's share of bulk external supply was [50-60] per cent in 2009, reflecting its

cement plant in [ ]) and the South West (where Lafarge's share of bulk external supply was [50-60] per cent in 2009, reflecting its cement plant in [ ][105]). It is not clear that the divestment of [ ] would remove the combined entity's market power in these regions such that it no longer had the ability to foreclose competitor RMX suppliers.

394. The OFT notes that the parties stated that [ ] should the OFT consider this necessary. However, the OFT does not have the information necessary to determine precisely [ ], nor whether divestment [ ] would necessarily enable a new entrant acquirer of [ ] to provide sufficient constraint on the combined entity in the supply of cement in those regions such as to remove the requisite market power enjoyed by the combined entity in those areas. As such it is not possible for the OFT to accept an undertaking in lieu in relation to the upstream cement market such that it would be confident that vertical concerns would be remedied.

395. The OFT also notes that the parties have offered to give structural remedies to divest RMX plants in areas in which they have more than 33 per cent in relation to the supply of RMX within a 10-mile radius. This remedy was designed to address local horizontal unilateral effects arising in relation to the supply of RMX. It would not necessarily prevent vertical concerns from arising in local RMX areas since there may be some areas where the parties do not overlap (such that a divestment is not required) but where one of the parties alone has a share above the relevant share threshold as discussed above (see paragraph 247 above). In addition, the OFT is mindful that there may be overlapping areas that the parties have not offered to divest (as the share of supply in RMX is above 33 per cent) but where their shares are nevertheless sufficiently high (that is, potentially in the range of 25 to 34 per cent) to generate foreclosure concerns. As such, it is not possible for the OFT to accept an undertaking in lieu in relation to the downstream RMX markets that would rule out any possibility of vertical concerns arising.

396. The OFT therefore considers that the undertakings in lieu offered by the parties do not, individually or collectively, allow the OFT to be confident that they would remedy the competition concerns identified in relation to the foreclosure of RMX competitors in terms of input supply of cement.

[105] See footnote 57 above.

Coordinated effects in the supply of bulk cement

397. The OFT identified a realistic prospect of a substantial lessening of competition arising from the proposed transaction as result of coordinated effects concerns in the supply of bulk cement.

398. To address this concern, the parties offered the divestment of [ ] in order to provide any buyer with the ability to supply bulk grey cement across a broad geographic region. The parties argued this would give the opportunity for the OFT to create a new entrant in the cement market with a different structure and incentives to the existing national players, thereby removing coordinated effects concerns. The parties noted that the capacity of [ ]. The parties also pointed to the results of their pre-marketing process, showing that they had received [ ].

399. The OFT acknowledges that the divestment of [ ] would result in a significant structural change to the supply of cement in the UK. The OFT considered carefully whether the divestment would be able to remove the coordinated effects concerns arising from the proposed transaction. In this respect, it is clear that the question for the OFT under section 73 of the Act is not whether the sale of [ ] would remove any pre-existing competition concerns in the functioning of the cement market. Rather, the OFT was required to consider whether the increased prospects for coordination brought about by the proposed transaction would be removed by this proposed remedy.

400. The OFT considered the different categories of purchasers of [ ] to determine whether **any one** of those categories of purchaser might allow for the removal of the concerns brought about by the proposed transaction. In this respect, the OFT considered that the purchaser of [ ] would need to be a company outside the current putatively coordinating group. If this were not the case (that is, in the event of a sale to Cemex or to Hanson), then there would still remain a reduction in the number of suppliers of bulk cement in the UK as a result of the proposed transaction, and this would make it easier to reach agreement and monitor compliance.[106]

[106] Merger Assessment Guidelines, paragraph 5.5.19.

401. The OFT therefore considered carefully whether the sale of [ ] to a new entrant not currently active in the supply of cement in the UK could remove the OFT's concerns about the effect of the proposed transaction. The OFT notes that, in terms of the effect of the proposed transaction, it is of particular significance to the OFT's finding that:

(a) Tarmac is, to some extent, differentiated from the other vertically integrated domestic suppliers by:

(i) having significant downstream RMX operations, and

(ii) being a net purchaser of cement (see paragraph 207 above), and

(b) it is this position that gives Tarmac a more muted incentive to coordinate than the other suppliers.

402. Whilst the prospect of a sale of [ ] to a new entrant is superficially attractive in terms of creating an additional supplier and restoring the number of suppliers that would otherwise be reduced by the proposed transaction, the OFT is not confident that this remedy would in reality remove coordination concerns.

403. Were the [ ] divested to a new entrant that did not have sufficient downstream operations, the OFT considers that there would be some risk that the new entrant could be incentivised to join the putatively coordinating group by charging higher prices of cement to downstream customers, or might otherwise seek to benefit from any coordination that already existed amongst existing suppliers. In this situation, the moderating effect of Tarmac's significant exposure to the downstream RMX market on coordination in cement would be removed, notwithstanding the divestment. It is not possible for the OFT to determine at this point whether a new entrant purchaser would be incentivised along these lines, or whether it would actively seek to chase cement supply volumes, therefore potentially destabilising any pre-existing coordination.

404. The concern expressed above highlights the fact that there may be some tension in ensuring that a divestment suitable to remedy competition concerns arising from unilateral effects in the supply of cement (see

paragraph 388 above) also serves to resolve coordinated effects concerns.

405. In light of the concerns about selling to a new entrant without sufficient downstream operations, the OFT therefore considered whether there were any potential purchasers of the [ ] whose downstream operations meant that they would have similar incentives to Tarmac. The OFT notes that there is currently no supplier of RMX that has the same scale or coverage as Tarmac besides Cemex and Hanson. The only other significant RMX player outside the putatively coordinating group is Aggregate Industries. However, in relation to a potential sale to Aggregate Industries, the OFT notes that:

(a) Aggregate Industry's parent company, Holcim, is currently a named[107] alleged participant in the European Commission's cartel investigation in cement across Europe (including the UK),[108] and

(b) in the event that it acquired [ ], Aggregate Industries would still have a more balanced upstream and downstream UK portfolio than that held by Tarmac and Lafarge absent the proposed transaction; Aggregate Industry's market share in the supply of RMX (at [10-20] per cent) is less than that of Tarmac's on a national basis (at [10-20] per cent). The net position of Aggregate Industries would mean that the divestment would be unlikely to remove the prospect that suppliers' incentives would be more aligned following the proposed transaction and that there could be more effective or stable coordination between the four leading cement producers.

406. On the basis of the above, the OFT is not confident that Aggregate Industries would meet the OFT's standard purchaser approval criteria as set out in its guidance.[109]

407. For the reasons explained above, the OFT considered that divestment of [ ] **in itself** was not a suitable remedy. For the sake of completeness, the OFT therefore also considered whether the remedy might be regarded as

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[107] www.bloomberg.com/news/2010-12-10/lafarge-heidelbergcement-probed-by-eu-on-possible-price-fixing.html.

[108] http://europa.eu/rapid/pressReleasesAction.do?reference=MEMO/08/676&format=HTML&aged=0&language=EN&guiLanguage=en.

[109] Exceptions Guidance, paragraph 5.26.

effective when combined with the parties' offer of divestments designed to remedy the downstream horizontal unilateral effects arising in RMX. This combined package might function by providing the purchaser of the cement plant with sufficient volume of RMX capacity that its incentive would be not to coordinate, or to coordinate only to the extent that Tarmac did so, in order to avoid paying too high a price for its cement needs.

408. The parties' maximum offer of RMX sites was for divestment of [ ] RMX plants.[110] Tarmac currently has 177 fixed RMX works and 13 mobile plants, which together account for its share of RMX production of approximately [10-20] per cent. Although the parties offered to divest a significant number of plants, it is not clear to the OFT[111] that (even assuming they were all sold to [ ]) this would mean that the purchaser of [ ] would be sufficiently long in downstream operations so as to have had Tarmac's incentives pre-merger. The OFT cannot rule out that the purchaser would still be sufficiently long in cement that the OFT's concerns about coordination would remain.

409. The OFT's guidance states that in order to accept undertakings in lieu of reference, the OFT must be confident that all the potential competition concerns that have been identified in its investigation would be resolved by means of the undertakings in lieu without the need for further investigation. In order to accept undertakings in lieu, in relation to the substantive competition assessment, there must not be material doubts about the overall effectiveness of the remedy. The OFT also states that in those cases where the potential magnitude of harm is especially large (in absolute terms), the OFT will be particularly cautious in its approach to accepting undertakings in lieu.[112]

410. Overall, the OFT does not believe that divestment of [ ] would remedy, mitigate or prevent the coordinated effects concerns arising from the proposed transaction in the supply of bulk grey cement to the necessary clear-cut standard. This remains the case even if the purchaser were

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[110] This would have been relevant in the event that the OFT found competition concerns on the basis of a 33 per cent market share threshold in a 10-mile radius. In fact, the OFT did not identify concerns on this basis (see paragraph 200 above).
[111] The OFT notes that the parties did not seek to address coordinated effects concerns in the supply of cement through the sale of downstream RMX operations, and therefore did not make submissions as to how such a remedy would function in terms of the purchaser's net incentives.
[112] Exceptions Guidance, paragraphs 5.6 to 5.8.

additionally to acquire the maximum number of RMX plants offered up by the parties. To ascertain whether the sale of [ ] to a particular type of purchaser would resolve the coordinated effects concerns, would itself require a detailed, careful, and potentially extensive examination, not suitable to a first phase investigation. The OFT is mindful of the fact that the value of cement sales in Great Britain in 2009 was approaching one billion pounds.[113] The OFT therefore considers that it would be wholly inappropriate for it to reduce or compromise its 'clear-cut' remedy standard in relation to any undertaking in lieu in this market given the scale of the potential magnitude of harm.[114]

Conclusions on undertakings in lieu

411. The OFT welcomes the parties' offer of undertakings in lieu. It acknowledges that the undertakings offered are structural in nature, and that such undertakings are normally the most appropriate remedy at phase I given the 'clear-cut' standard applied by the OFT when considering remedies.

412. However, in this case, the OFT does not consider it appropriate to suspend its duty to refer in order to seek to negotiate undertakings in lieu from the parties. This is because:

(a) the OFT does not believe that the parties' offer of divestment of [ ] would remedy, mitigate or prevent the coordinated effects concerns arising from the proposed transaction in the supply of bulk grey cement to the necessary clear-cut standard

(b) the undertakings in lieu offered by the parties (in terms of sale of [ ] and sale of certain downstream RMX plants) do not, individually or collectively, allow the OFT to be confident that they would remedy the competition concerns identified in relation to the foreclosure of RMX competitors in terms of input supply of cement, and

(c) there is uncertainty as to whether the parties offered the necessary structural remedy in relation to all aggregates and crushed rock.

[113] Source: OFT Market Study, paragraph 3.20.
[114] Exceptions Guidance, paragraph 5.8.

413. The OFT also notes that, even if the parties had offered structural remedies that were in principle capable of clearly resolving the competition concerns in relation to the points detailed above, the OFT would have had to have considered carefully whether it believed that this case was one in which it would have been appropriate to seek undertakings in lieu of reference. Specifically, the OFT would need to have considered whether the undertakings package offered was of such magnitude in absolute terms and/or complexity that its practical implementation would require unworkable resources at first phase.[115] As it is, however, the OFT has not needed to consider this issue given its findings as summarised in paragraph 412 above.

DECISION

414. The proposed transaction will be referred to the Competition Commission pursuant to section 33(1) of the Act.

[115] Exceptions Guidance, paragraph 5.8.