OFFICE OF FAIR TRADING

Anticipated acquisition by Anglo American plc of Johnston Group plc

The OFT's decision on reference under section 33 given on 29 September 2004

Please note square brackets indicate exact figures replaced by ranges at parties' request.

PARTIES

1. **Anglo American plc (AA)** is one of the world's largest mining and natural resource groups. Its wholly owned subsidiary, **Tarmac Limited (Tarmac)**, is a buildings materials/construction group producing aggregates, asphalt, ready mixed concrete, mortars and screeds, cement and lime, concrete products and industrial products.

2. **Johnston Group plc (Johnston)** is a publicly quoted engineering and construction materials group. Johnston owns the freehold of Leaton Quarry in Shropshire. This quarry is operated by Berwyn Granite Quarries Ltd, a 51/49 joint venture between Johnston and an AA subsidiary, Tarmac Roadstone Holdings Limited. Johnston also holds a 100 per cent leasehold interest in and operates Leinthall Quarry in Herefordshire. The construction materials division also includes Johnston Pipes Ltd, a single site in Telford, manufacturing concrete drainage products. Johnston achieved European turnover of (see note 1) million for the year ended 31 December 2003 and has indicated that its UK turnover for the last financial year was over £70 million.

TRANSACTION

3. Tarmac holds 24.9 per cent of the issued share capital of Johnston. It had originally intended acquiring a further 0.5 per cent of Johnston's shares.

However, following the announcement of the intended bid for Johnston by Ennstone on 29 July 2004, AA announced its intention to make a bid for the remaining share capital of Johnston on 24 August 2004. Should the offer be successful, Ennstone may exercise a call option to acquire the Leinthall operations for £11.25 million. AA has informed the OFT that it will in due course seek the on-sale of Johnston's engineering division assets.

4. Tarmac's stated rationale for acquiring Johnston's construction division comprises synergies and environmental benefits via improved logistics which would occur as a result of full takeover. The acquisition of Leaton is regarded by Tarmac as essential to its long-term strategy to replace an existing quarry in Shropshire which has limited reserves.

JURISDICTION

5. As a result of this transaction AA and Johnston will cease to be distinct. The UK turnover of Johnston Group exceeds £70 million, so the turnover test in section 23(1) (b) of the Enterprise Act 2002 (the Act) is satisfied. The parties overlap in the supply of aggregates and asphalt, and the share of supply test in section 23 of the Act is also met. The OFT therefore believes that it is or may be the case that arrangements are in progress or in contemplation which, if carried into effect, will result in the creation of a relevant merger situation.

RELEVANT MARKETS

6. The parties overlap in the quarrying and supply of aggregates and the production and supply of asphalt. Several of Tarmac's production sites are near to Johnston's Leinthall and Leaton sites in the Midlands.

7. Cases under the Fair Trading Act 1973 (FTA), including Hanson/Pioneer (2000), Tarmac/Anglo-American (2000) and RMC Group/Alexander Russell (2001), have informed the OFT's consideration of market definition in this case.

Product markets

8. **Asphalt (coated stone)** is produced by heating and mixing bitumen and aggregates and is primarily used as a surfacing for roads. High specification asphalt products are used for applications such as racing tracks and coloured mixes. The specification of each type of asphalt is a function of the mix of

aggregates, bitumen and additives and is made to customers' specifications. The OFT has previously considered there to be a relevant product market for the production and supply of asphalt (see paragraph 7 above).

9. **Aggregates** are used for construction purposes. Although aggregates may be sorted and graded differently,[1] the OFT has previously considered (see paragraph 7 above) there to be a single relevant market for aggregates given the substantial substitutability between different aggregate types for a particular use.

10. For present purposes, the parties accept both product market definitions, and no evidence has emerged suggesting a different definition in either case.

Geographic markets

30-mile radius approach

11. The OFT has previously considered a 30-mile radius from the point of production as the most appropriate initial geographic basis for analysing the effect of both asphalt and aggregate mergers, due to (i) high transportation costs relative to both products' sales values; (ii) Government planning policy recognising the 30-mile delivery distance in respect of aggregates;[2] and (iii) the highly perishable nature of asphalt, which must be delivered hot to the site of consumption.

Parties' proposed 2-hour isochrone approach

---

1 Aggregates consist of primary (sand; gravel; and crushed rock) and secondary/ recycled aggregates (including china clay waste; glass waste; slag; recycled construction/demolition site waste and recycled railway ballast). The most notable possible distinction is of High PSV aggregates which are used in the top layer of roads which commands a greater price than other aggregates and between primary and secondary aggregates where secondary aggregates cannot be used for certain purposes (most notably ready mixed concrete).

2 Minerals Planning Guidance 6, published by the Office of the Deputy Prime Minister states '*aggregates are mainly transported from sites by road and rail. Most travel by road and rail are delivered within 30-35 miles from the quarry or pit*'; National Planning Policy Guideline 4 for land for mineral workings published by the Scottish Office states '*since road access and related transport costs require working in relatively close proximity to the main urban markets, working more than 30-miles from the main markets will not generally be attractive to the industry and will conflict with Government objectives for reducing energy consumption*.'.

12. Tarmac contests the 30-mile radius approach in respect of both products, arguing instead in favour of a 2-hour drive time isochrone from the point of production to the place of delivery. In the case of Leinthall and Leaton, this equates to approximately a 50-mile radius around each site.

Tarmac cites the following factors in support:

- *Location of use and serviceability* – the contestable market for these products is dictated primarily by the site of use (consumption) rather than location of the customer, as the great majority of the product is delivered on-site. Aggregates are primarily used for construction, with a smaller percentage (approx. 10 per cent) being used in road construction. This applies with even greater effect in relation to asphalt than for aggregates (greater volumes of the latter are delivered to 'fixed outlets' including block plants, asphalt plants and concrete plants). The life span of hot mix asphalt – and thus the time window between production and consumption – is between three and a half hours (in winter) and five hours (in summer);[3] by deducting loading, waiting and laying times, the transport time window remaining is between two and a half hours (in the winter) and four hours (in the summer).[4] Journey times vary significantly depending on the location of the production plant, the road network and the time of day.

- The majority of Tarmac's sales of both products travel beyond 30 radial miles.

- *Transport costs* – haulage costs for aggregates represent on average 36.5 per cent (approximately (see note 1) per tonne) of the value of one tonne of product, while haulage costs for asphalt are approximately (see note 1) per tonne of product.

13. Tarmac has provided estimates of the percentage of aggregates volume delivered by isochronal zones for its Dolyhir, Gore and Bayston Hill sites, indicating that on average only [70-80] per cent of aggregates are delivered

---

[3] The actual life span of hot mix asphalt depends on the heat loss from the product which is influenced by many variables such as the ambient temperature, the type of material, the standard of insulation provided by the wagon, wind chill on the day, and so on.

[4] Tarmac has provided us with two examples in which these times are borne out.

within a 2-hour isochrone of the sites; for asphalt, the corresponding figure is [80-90] per cent, the majority being delivered within a smaller time window than aggregates. However, the actual cumulative percentage of deliveries of each product differs per site. This indicates that the proportions delivered within a 2-hour drive time isochrone of Leinthall and Leaton may be different.

14. Third parties have mixed views as to the geographic scope for both products, some believing a 30-mile radius to be a good approximation of the range of distances travelled (a small number submit that over 80 per cent of aggregates bought come from within a 25-mile radius), others believing that this is too narrow.

15. The OFT specifically sought third party comment on the merits of an isochrone approach, prompting mixed views as to its utility relative to a mile radius approach, and on what time frame was appropriate, particularly given differing views on the life span of asphalt.

16. Given the mixed evidence on this point, the OFT has employed the 30-mile radius approach of previous cases to examine the potential competitive effects of the merger, but has also considered several wider geographic lenses — 40- and 50-mile radii and the parties' proposed 2-hour isochrone (see Annexe).

COMPETITIVE ASSESSMENT

Treatment of joint ventures

17. A contested issue in this case has been attribution of shares of supply in relation to Midland Quarry (MQP), a 50/50 joint venture (JV) between Tarmac and Hanson, which is active in the 30-mile radius of Leaton. A similar issue arises in relation to Berwyn, the JV operating Leaton and owned 49/51 by Tarmac and Johnston respectively. For the reasons given below, the OFT has considered it appropriate to allocate the respective JVs' shares of supply proportionately between the parents when assessing market shares.

18. Tarmac does not dispute the proposition that share data, being a step in the assessment of market power and degrees of competitive constraint, should seek to reflect suppliers' competitive incentives as accurately as possible.[5] It does contest, however, that Tarmac's pricing incentives are in any way

[5] See OFT, *Mergers – Substantive assessment guidance* (2003), 4.3.

altered as a result of its interest in MQP, with the consequence that the JV's supply should be treated as that of an independent competitor, rather than allocated between its parents.

19. While acknowledging that it has the ability materially to influence MQP's policy within the meaning of section 26 of the Act (enterprises ceasing to be distinct), Tarmac submits that it in fact refrains from actual day-to-day involvement in the running of MQP, and for the purpose of determining whether or not the merger may be expected to result in a substantial lessening of competition should be treated as having no influence over MQP's pricing strategy. Moreover, Tarmac submits that because the margins for a Tarmac business equivalent to MQP[6] would be somewhat (see note 1) for Tarmac (see note 1) than MQP (see note 1), Tarmac would have no economic incentive to divert business to MQP.

20. The OFT observes first that even if Tarmac has eschewed involvement in MQP's pricing historically, no evidence suggests it lacks the ability to do so in future. As to the parties' margin comparison, it does not follow that merely because Tarmac's margins are (see note 1) than MQP's, it could not have an incentive to increase its own prices, thereby diverting sales to MQP: account must also be taken of the additional margin Tarmac would make on its retained sales as well as the proportion of lost sales diverted to MQP. (When these two factors are considered, it appears that Tarmac may have an incentive to set prices at a higher level than it would do absent its stake in MQP.[7]) Indeed, whether or not MQP is operationally independent of Tarmac, such arguments fail to address how Tarmac's incentives differ simply as a result of its stake in MQP: should Tarmac lose a bid to an independent rival, it will forego the entirety of the potential profit on the sale; should it lose a bid to MQP, it will ultimately receive 'compensation' for the lost potential profits in the form of a share (here, 50 per cent) of MQP's profits from the winning bid. This suggests that MQP is proportionately a lesser constraint on Tarmac than if MQP were truly independent.

---

6 Tarmac Business equivalent to MQP – i.e. Tarmac's Bayston Hill, Gore, Dolyhir/Strinds and Mancetter quarries.

7 The OFT has calculated diversion ratios to test this proposition. The diversion ratio is the fraction of the sales lost by Product A going to Product B when A raises its price by, say, 10 per cent. The major proviso with the estimates used is the assumption that customers will switch to other sites in proportion to their market shares.

21. The same reasoning on economic incentives holds true in relation to Tarmac's 49 per cent share in the Berwyn JV operating Leaton.[8]

22. The OFT therefore considers it appropriate to consider the impact of Tarmac's partial ownership of MQP (pre- and post-merger) and Berwyn (pre-merger) in its assessment of whether a substantial lessening of competition may be expected to result from the merger. As share data are a means to that end, share figures will be adjusted accordingly: Tarmac's share incorporating 50 per cent of MQP's share and 49 per cent of Leaton's is taken as the best available proxy for its competitive position relative to its rivals in each case.[9]

23. In summary, the practical impact of adjusting shares in this manner (rather than treating each JV as an independent entity) is that the HHI indicates a more concentrated market and the merged entity's share is larger, but the *increments* to the HHI and share are smaller. The share of supply and HHI tables on these bases are included in the Annexe.

Market concentration

24. Competition analysis in the earlier FTA cases was guided by a 'safe harbour' rule of thumb that shares of supply below 33 per cent within a target (asphalt or aggregate) production site's 30-mile delivery radius were judged not to give rise to competition concerns. More recently, the OFT's published guidance for Enterprise Act cases indicates that potential competition concerns may arise where a merger creates a significant HHI delta (over 50) in a highly concentrated market (post-merger HHI >1800).[10] The guidance makes clear that market concentration figures may be used as an initial indicator of potential competition concerns, but will not give rise to a presumption that a merger may be expected to lessen competition substantially. The OFT will

---

8 Thus, whilst Tarmac's acquisition of control over the remaining 51 per cent of the shares in Berwyn represents a change in its level of control over the whole of Berwyn's share of the market, when assessing the impact of that change on competition it is appropriate to apportion Berwyn's pre-merger share of the market between Tarmac and Johnston.

9 While the use of shares as proxies is inherently an imprecise exercise, to assume Tarmac had 0 per cent pre-merger interest in either JV for purposes of share calculation would simply aggravate concerns as to lack of precision.

10 See further OFT, *Mergers – Substantive assessment guidance* (2003), 4.3 for a description of HHI data.

also undertake a wider assessment of how competition works and whether the merger may substantially reduce it.

25. As to **asphalt**, Tarmac's share of supply within the Leinthall 30-mile radius will rise from between [45-55] per cent to [65-75] per cent as a result of the merger; in relation to Leaton's 30-mile radius, its share rises from [30-40] per cent to almost [45-55] per cent. Indeed, irrespective of which radii are used, Tarmac's post-merger share will exceed 33 per cent in both Leinthall and Leaton, the increment is significant (even if, as Tarmac contends, no adjustment is made as a result of the MQP or Leaton JVs), and HHI figures indicate potential concerns. Further details on share and HHI data are shown in Annexe Table One.

26. As to **aggregates**, Tarmac's share of supply within the Leinthall 30-mile radius will rise by [0-10] per cent to [35-45] per cent. While the HHI data indicate potential concerns on all radii considered, Tarmac's post-merger aggregates share does not indicate unilateral market power concerns on wider radii in relation to Leinthall or on any radii in relation to Leaton, as the post-merger share is below 33 per cent in all cases and the increment is generally small. Further details on share and HHI data are shown in Annexe Table Two.

NON-COORDINATED EFFECTS

27. As initial indicators of potential competition harm, the share and HHI data, particularly in relation to the 30-mile radii around each site, give rise to concerns that the merger may create or facilitate the post-merger exercise of unilateral market power on the part of Tarmac in respect of supply of asphalt around both Leinthall and Leaton, and in respect of aggregates around Leinthall. Such concern is corroborated by customers, most of whom raised fears of post-merger price increases and reduced competition.

28. The OFT has considered whether evidence on other factors nonetheless supports the conclusion that Tarmac (and potentially its rivals) has (or have) no significant post-merger ability or incentive unilaterally to raise prices significantly above pre-merger levels in respect of each of the issues of concern.

Spare capacity

29. Tarmac argued that rivals' spare capacity is a post-merger constraint. Capacity utilisation amongst third parties does appear to be low, especially for asphalt (as low as 30 per cent in some cases). It is not clear, however, how quickly this spare capacity could be utilised; a third party submitted that excess capacity is effectively committed to ensure the proper managing of contract requirements. Moreover, the parties themselves have relatively low capacity utilisation (estimated at between (see note 1) for asphalt at the relevant sites and (see note 1) for aggregates at Tarmac's Bayston, Gore and Dolyhir sites); in respect of reserves[11] Tarmac has (see note 1) un-worked sites within 50-miles of Leaton and/or Leinthall.[12] The OFT acknowledges that rivals able to deploy spare capacity to expand production are clearly a potential source of constraint. The evidence in this case, however, is insufficiently strong to permit the conclusion that rivals have the ability and incentive to do so to a degree that would eliminate concerns that the merger may substantially lessen competition.

Bidding dynamics

30. Tarmac has only been able to provide a limited set of bidding data for both products. Unfortunately this set appears to be so limited that it cannot be relied on to dispel the competition concerns raised above.

New entry

Asphalt

31. Aside from the key issue of aggregates supply (considered below), the investment required simply to set up an asphalt plant does not appear to be substantial: Tarmac considers that a conventional hot mix plant with an annual sales output of 200,000 tonnes (sufficient to gain a 5 per cent share in the two hour isochrone) would require capital expenditure in the range of (see note 1); a cold mix plant (based on different technology) could be established

---

11 This refers to consented reserves, effectively land with planning permission for quarrying.

12 Many of these sites are 'statutorily dormant'— i.e. planning permission was granted a significant time ago and in order for the site to be worked, the conditions attached to the consent will need to be updated and agreed.

for (see note 1). New entry may also occur by establishment of a new urban asphalt plant. Tarmac estimates that an urban asphalt plant could be established for approximately (see note 1). The time lag from planning consent to commissioning of a plant is approximately 4-6 months and commissioning requires an additional 3-4 weeks. Estimated capital expenditure would be the same for an existing player or a new entrant. Rates of return on such capital investments are typically of the order of (see note 1), according to Tarmac.

32. Tarmac submits that since 1998, 41 consents have been granted for new asphalt plants or expansion in Great Britain. Two new plants have entered within a 2-hour drive time of Leinthall and Leaton. Both these sites (owned by Gryphonn Quarries Ltd and Clearwell & Stowe Hill quarries) have asphalt plants located within quarry sites owned and operated by the same respective companies. To the best of Tarmac's knowledge, since May 1998 there have been five applications for asphalt plants, one of which was refused, one consented and no decision made on the others.

33. The OFT has previously considered that access to aggregates represents a greater potential barrier to entry than an asphalt processing plant. Most asphalt plants are located at aggregate quarries, and Tarmac states that there are no asphalt producers located in close proximity to Leinthall or Leaton not active in the production of aggregates. Similarly, third parties are unaware of any asphalt producers not active in aggregates. Accordingly, consistent with previous findings, access to aggregates appears to be a barrier to entry into asphalt in the specific areas in question.

Aggregates

34. A new entrant to aggregates requires land suitable for quarrying and the necessary planning permissions both in terms of quarrying the land and lorry movements from the site. Previous case experience suggests that such permissions are difficult to obtain and that existing producers maintain a bank of permitted reserves, which may add to the scarcity of new sites. Tarmac, however, believes that the recent examples of new entrants illustrate that such barriers as do exist are surmountable. Potential capital costs for any new quarry project vary considerably because of the uniqueness of each deposit, its location, infrastructure needs and planning conditions. To capture 5 per cent of the relevant geographic market (as defined by Tarmac), Tarmac estimates that investment in a plant with a 600 tonnes per hour output (single

shift) would be required. It estimates that such capital cost on a greenfield site would be in the range of (see note 1). Entry costs would be less significant if a mobile plant were erected. Tarmac estimates that the cost of hiring a mobile plant would be less than (see note 1) per annum and that installation could be completed in approximately two weeks.

35. According to Tarmac, there has only been one recent new entrant in primary aggregates within a 50-mile radius of the Johnston sites (Cappaldy & Sons, 20 miles from Leinthall). There have been 17 new entrants to secondary/recycled aggregates within a two-hour drive time isochrone of Leinthall or Leaton (only one of which is within a 30-mile radius, four within a 35-mile radius). Tarmac also submits that there have been 40 planning applications made within a 50-mile radius of Leinthall and Leaton areas since 2001. The majority of these relate to extensions of existing sites.

36. Third parties have mixed views regarding barriers to entry, some citing planning restrictions as being a barrier and others arguing that planning restrictions are only a barrier for certain types of aggregates.

37. Given these mixed views about barriers to entry, and experience in previous aggregate mergers suggesting that barriers are high due to the planning regime, the evidence provided by the parties, while relevant, does not suggest that potential entry removes concerns that the merger may substantially lessen competition in aggregates in either the Leinthall or Leaton areas.

Buyer power

38. Tarmac and its competitors submit that their larger customers[13] have considerable buyer power for various reasons: they account for a significant percentage of each producer's revenue from sales of aggregates; contracts are via competitive tender or often packaged as longer-term contracts (2-4 years on average); switching costs are low and the number of suppliers is high; and the Highways Authority in particular has sufficient power to insist that onerous specifications be met. Customers generally regarded themselves as exercising buyer power. However, customers were also concerned that the elimination of Johnston would facilitate post-merger price increases. Overall

[13] For example, bodies responsible for road maintenance and development (the Highways Agency and local authorities) and the construction industry.

customer reaction, therefore, does not permit the OFT to regard buyer power as a countervailing consideration sufficient to offset the above concerns.

COORDINATED EFFECTS

39. Cartel prosecution of aggregates suppliers in Europe and elsewhere highlights that market conditions conducive to coordination may be present in the sector: homogenous products for which price is the principal competitive parameter; high barriers to entry, and price-insensitive customers.

40. In this case, concentration levels in aggregates and especially asphalt are high. Johnston's Leinthall site appears to be one of the few aggregate plants run by an 'independent' (i.e. supplier outside the top five) and is the only independent asphalt plant within a 30-mile radius of the two sites. To the extent the merger eliminates the independence of this site by conferring control over Leinthall to a top five supplier, Tarmac, there is a possibility that the merger provides greater incentives to the remaining players in the area tacitly to collude. However, although alleged by one customer, the OFT's merger investigation did not reveal any substantiated evidence of pre-existing tacit or explicit collusion. Similarly, there is no evidence, beyond the points made above, to suggest that the merger would 'tip' competition in the area towards collusion.

VERTICAL ISSUES

41. Aggregates are an input into the production of asphalt, and asphalt is an input into road laying services. Thus the question of whether vertical foreclosure is likely to arise due to the vertical integration from aggregates through to road surface laying services needs to be addressed. Johnston does not operate a surfacing arm in the Leinthall/Leaton area. Tarmac has its own surfacing arms and [35-45] per cent of its asphalt sold within a 30-mile radius of Leinthall and [25-35] per cent within a 30-mile radius of Leaton is used by its own contracting arm. However, Tarmac only accounts for [15-25] per cent of surfacing in the 30-mile radius around Leinthall and [5-10] per cent in the 30-mile radius around Leaton. Other suppliers include RMC, Hanson and Aggregate Industries as well as Ringway Highway Services, which accounts for [25-35] per cent of surfacing in the 30-mile radius around Leinthall and

JDM Accord Ltd, which accounts for [20-30] per cent of surfacing in the 30-mile radius around Leaton.[14]

42. Removal of Johnston as a non-vertically integrated asphalt supplier could remove one potential source of supply for third parties in surfacing. However, given the relatively low shares of Tarmac's surfacing arm and the relatively high proportion of Tarmac's asphalt that is sold to third parties, this is unlikely to be substantially detrimental to competition.

THIRD PARTY VIEWS

43. Almost all Johnston customers, and several Tarmac customers, were concerned that the merger would facilitate post-merger price increases by eliminating Johnston as one of the only independent suppliers in the region, leaving few remaining competitors. Competitors generally expressed no concerns.

44. Third party views in relation to market definition, entry and buyer power are discussed above.[15]

ASSESSMENT

45. The parties overlap in the supply of aggregates and asphalt to customers around Johnston's Leinthall and Leaton quarries (the latter already being a 51/49 JV with Tarmac). While a 30-mile radius from site of production has been used as the initial geographic context to analyse the merger's competitive effects, wider radii, including the parties' proposed 2-hour drive time isochrone, have also been considered.

46. The share and concentration data raise potential competition concerns, more in asphalt than aggregates, and more in the Leinthall than in the Leaton area. Customers are almost all concerned that prices will rise post-merger. The

---

14 These are based on the parties' estimates.

15 Third parties were originally asked for views on Tarmac's proposed acquisition of a parcel of shares in Johnston, giving it material influence over the company; none changed their view when contacted again in view of this proposed transaction. Johnston's customers were contacted only in relation to the latter as no contact details were previously provided.

countervailing evidence on spare capacity, bidding, entry and buyer power, taken together, is insufficient to allay these concerns.

47. Setting aside the undertaking in lieu offer, discussed below, the OFT believes it is or may be the case that the merger may substantially lessen competition in the supply of asphalt and aggregates in the Leinthall area, and in the supply of asphalt in the Leaton area.

UNDERTAKINGS IN LIEU

48. Ennstone has a call option to buy Leinthall from Tarmac if the transaction is completed. Tarmac has asked that this option be considered as an undertaking in lieu of reference to resolve any competition issues raised in this area.

49. In the past, undertakings in lieu of reference have been accepted and quarries/sites have been divested, consistent with the 'safe harbour' rule of thumb, such that the share of supply is no higher than 33 per cent within a 30-mile radius of the relevant aggregates or asphalt site. While this rule has been kept in mind as a benchmark, it should not be read as determinative of whether or not there are competition concerns warranting a CC reference. Rather, the OFT has taken a variety of factors into account in analysing the effect of the undertaking in relation to both Leinthall and Leaton.

50. The proposed undertaking has several elements in its favour. First, it entails divestment, thereby avoiding the regulatory issues that sometimes are associated with non-structural remedies.

51. Second, Ennstone does not appear fully to own any quarries within the Leinthall or Leaton areas; it has no asphalt plants in England, but has aggregate quarries located at Breedon (near Derby), Ling Hall (West of Birmingham), Burford (near Oxford) and De Lank (near Bodmin).

52. Third, the parties argue that Ennstone is an attractive entrant from a competition perspective because (i) the Leinthall and Leaton plants would have no common ownership and thus the plants would be independent competitors, and (ii) Ennstone is likely to be an aggressive competitor.

53. Nonetheless, the undertaking also raises several difficulties, having regard to the need to achieve as comprehensive a solution as is reasonable and practicable to the competition concerns identified.

54. First, Ennstone will be a smaller independent supplier with Leinthall than Johnston was with Leinthall plus a 51 per cent stake in Leaton. Leinthall and Leaton are in each others' 30-mile radius. The parties have emphasised that control of more than one plant in an area provides the supplier with flexibility to meet demand from either plant (which is important given the transport costs and delivery time issues described above at paragraph 11): Tarmac explained how it bid for asphalt contracts as a company and then assigned the job to the most appropriate plant; this method of supplying contracts was also open to Johnston. It would not be open to Ennstone. Doubts therefore remain whether Ennstone would be as an effective competitor as was Johnston pre-merger.

55. Second, even with divestment of Leinthall, high concentration levels would increase as a result of the merger because of the transfer of control of Leaton to Tarmac, whose share in the Leinthall 30-mile radius rises from [45-55] per cent to [55-65] per cent for asphalt (and [30-40] per cent to [35-45] per cent for aggregates). Tables three and four in the Annexe show the impact this will have on shares of supply and HHIs, the issues being more acute in relation to asphalt. (Note that the question of whether any of MQP's shares of supply should be attributed to Tarmac is not relevant to the Leinthall analysis since MQP is not present in the 30-mile radius around Leinthall.)

56. Third, the merger with the divestment to Ennstone will still result in a substantial post-merger share – [40-50] per cent, with an increment of [0-15] per cent — for Tarmac in respect of asphalt within the Leaton 30-mile radius (exceeding the 'safe harbour' rule of thumb of previous cases).

57. The OFT's published guidance indicates that in order to accept undertakings in lieu, the OFT

> '... must be confident that the competition concerns can be resolved by means of undertakings without the need for further investigation. Undertakings ... are therefore appropriate only where the competition

concerns raised by the merger and the remedies proposed to address them are clear cut...'[16]

58. Further investigation may well reveal that the proposed undertaking does resolve all competition concerns. At this stage of the inquiry, however, the undertaking leaves open a number of concerns and fails to meet the above standard.

59. Accordingly, the remedy offered as an undertaking in lieu of a reference does not relieve the OFT of its duty to refer the merger to the CC given the belief that it is or may be the case that the merger may be expected to result in a substantial lessening of competition.

DECISION

60. This merger will therefore **be referred** to the Competition Commission under section 33(1) of the Act.

NOTE

1. Details excised at the request of the parties for reasons of commercial confidentiality.

[16] *Mergers — Substantive assessment guidance* — May 2003 (OFT 516)

ANNEXE TABLE ONE

ASPHALT — shares of supply 2003:
various radii around Leinthall and Leaton[1]

	30 miles		40 miles		50 miles		2 hr- drive time	
	Leint-hall	**Leaton**	**Leint-hall**	**Leaton**	**Leint-hall**	**Leaton**	**Leint-hall**	**Leaton**
Tarmac	35-45	10-20	25-35	25-35	25-35	25-35	25-35	25-35
Johnston	25-35	15-25	15-25	5-15	5-15	0-10	5-15	0-10
Leaton[2]	15-25	10-20	0-10	0-10	0-10	0-10	0-10	0-10
Leinthall	5-15	0-10	5-15	0-10	0-10	0-10	0-10	0-10
MQP	0.0	20-30	5-15	5-15	5-15	0-10	5-15	5-15
Pre-merger shares of Tarmac (Tarmac + 50% MQP + 49% Leaton)	45-55	30-40	35-45	30-40	30-40	35-45	30-40	30-40
Pre-merger share of Johnston (100% of Leinthall, 51% of Leaton)	15-25	10-20	10-20	0-10	0-10	0-10	5-15	0-10
Post-merger share of Tarmac (Tarmac, 100% of Johnston, 50% of MQP)	**65-75**	**45-55**	**45-55**	**45-55**	**45-55**	**35-45**	**45-55**	**35-45**
Top 5[3]	>95	>95	>95	>95	>95	>90	>95	>95
HHI pre-merger[4]	>3000	>2500	>2500	>2000	>2000	>2000	>2000	>2000
HHI post-merger	>5000	>3500	>5000	>4500	>4500	>4000	>4500	>4000
HHI increment	>1500	>1000	>2500	>2000	>2000	>2000	>2000	>1500
Post-merger share >33?	Y	Y	Y	Y	Y	Y	Y	Y
Post-merger HHI>1800; HHI delta > 50?	Y	Y	Y	Y	Y	Y	Y	Y

Source: Tarmac

Notes:

[1]Shares of supply for 30-miles are based on production, while those for 40-mile, 50-mile and the 2-hour drive time are based on shares of consumption.

[2]Leaton's share has been calculated as combined share of Tarmac and Johnston minus the combined share exc Leinthall.

[3]Top 5: Anglo-American (Tarmac), Hanson, Lafarge, RMC, Aggregate Industries, MQP (JV between Hanson and Tarmac).

[4]The pre-merger HHI has been adjusted to take into account Tarmac's partial ownership of MQP and its 49 per cent stake in Leaton. This has only been done in proportion to its shareholdings in each of these companies and is necessarily only a rough approximation of its actual level of control over these companies.

ANNEXE TABLE TWO

AGGREGATES —shares of supply 2003:
various radii around Leinthall and Leaton[1]

	30 miles		**40 miles**		**50 miles**		**2 hr- drive time**	
	Leint-hall	**Leaton**	**Leint-hall**	**Leaton**	**Leint-hall**	**Leaton**	**Leint-hall**	**Leaton**
Tarmac	30-40	15-25	25-35	25-35	20-30	20-30	15-25	20-30
Johnston	0-10	0-10	0-10	0-10	0-10	0-10	0-10	0-10
Leaton[2]	0-10	0-10	0-10	0-10	0-10	0-10	0-10	0-10
Leinthall	0-10	0-10	0-10	0-10	0-10	0-10	0-10	0-10
MQP	0.0	0-10	0-10	5-15	5-15	5-15	5-15	5-15
Pre-merger shares of Tarmac (Tarmac + 50% MQP + 49% Leaton)	30-40	20-30	25-35	30-40	25-35	25-35	20-30	25-35
Pre-merger share of Johnston (100% of Leinthall, 51% of Leaton)	0-10	0-10	0-10	0-10	0-10	0-10	0-10	0-10
Post-merger share of Tarmac (Tarmac, 100% of Johnston, 50% of MQP)	**35-45**	**20-30**	**20-30**	**25-35**	**20-30**	**25-35**	**20-30**	**20-30**
Top 5[3]	> 70	> 65	> 85	> 85	> 80	> 85	> 85	> 80
HHI pre-merger[4]	> 1500	> 1000	> 2000	> 1500	> 1500	> 1500	> 1500	> 1500
HHI post-merger	> 2000	> 1000	> 2500	> 2500	> 2500	> 2500	> 2000	> 2000
HHI increment	> 400	> 200	> 500	> 1000	> 500	> 500	> 500	> 500
Postmerger share > 33?	Y	N	N	N	N	N	N	N
Postmerger HHI > 1800; HHI delta > 50?	Y	N/Y	Y	Y	Y	Y	Y	Y

Source: Tarmac

Notes:
[1]Shares of supply for 30-miles are based on production, while those for 40-mile, 50-mile and the 2-hour drive time are based on shares of consumption.
[2]Leaton's share has been calculated as combined share of Tarmac and Johnston minus the combined share exc Leinthall.
[3]Top 5: Anglo-American (Tarmac), Hanson, Lafarge, RMC, Aggregate Industries, MQP (JV between Hanson and Tarmac).
[4]The pre-merger HHI has been adjusted to take into account Tarmac's partial ownership of MQP and its 49 per cent stake in Leaton. This has only been done in proportion to its shareholdings in each of these companies and is necessarily a rough approximation of its actual level of control over these companies.

ANNEXE TABLE THREE

ASPHALT — Shares of supply 2003 post-divestment: various radii around Leinthall and Leaton[1]

	30 miles		40 miles		50 miles		2 hr-drive time	
	Leint-hall	Leaton	Leint-hall	Leaton	Leint-hall	Leaton	Leint-hall	Leaton
Tarmac	35-45	10-20	25-35	25-35	35-45	25-35	20-30	20-30
Johnston	20-30	15-25	15-25	5-15	5-15	5-15	5-15	0-10
Leaton[2]	10-20	10-20	5-15	5-15	0-10	5-15	0-10	0-10
Leinthall	0-10	0-10	5-15	0-10	0-10	0-10	0-10	0-10
MQP	0.0	20-30	5-15	5-15	5-15	5-15	5-15	5-15
Pre-merger shares of Tarmac (Tarmac + 50% MQP + 49% Leaton)	45-55	30-40	30-40	35-45	35-45	35-45	35-45	30-40
Pre-merger share of Johnston (100% of Leinthall, 51% of Leaton)	15-25	10-20	10-20	0-10	0-10	0-10	5-15	0-10
Post-merger share of Tarmac (Tarmac, 100% of Johnston, 50% of MQP)	65-75	45-55	45-55	40-50	40-50	35-45	40-50	35-45
Post-merger share of Tarmac with Leinthall divested	**55-65**	**35-45**	**35-45**	**35-45**	**35-45**	**35-45**	**30-40**	**30-40**
Aggregate Industries	5-15	5-15	0-10	15-25	15-25	15-25	15-25	15-25
Hanson	15-25	15-25	15-25	0-10	10-20	5-15	10-20	5-15
Hanson + 50% MQP	15-25	25-35	25-35	5-15	15-25	10-20	15-25	15-25
Lafarge	-	0-10	0-10	0-10	0-10	5-15	5-15	5-15
RMC	-	0-10	0-10	0-10	0-10	5-15	0-10	5-15
Top 5	> 95	> 95	> 95	> 95	> 95	> 90	> 95	> 95
HHI pre-merger	> 3000	> 2500	> 2500	> 2000	> 2000	> 2000	> 2000	> 2000
HHI post-merger	> 5000	> 3500	> 5000	> 4500	> 4500	> 4000	> 4500	> 4000
HHI increment	> 1500	> 1000	> 2500	> 2000	> 2000	> 2000	> 2000	> 1500
HHI post-divestment of Leinthall[3]	> 4000	> 2500	> 2500	> 2500	> 2500	> 2000	> 2000	> 2000
HHI Increment post divestment	> 500	> 300	> 100	> 300	> 50	> 200	> 40	> 100
unadjusted combined shares	65-75	30-40	40-50	35-45	40-50	35-45	35-45	35-45
Post-merger share > 33?	Y	Y	Y	Y	Y	Y	Y	Y

	30 miles		40 miles		50 miles		2 hr-drive time	
	Leint-hall	**Leaton**	**Leint-hall**	**Leaton**	**Leint-hall**	**Leaton**	**Leint-hall**	**Leaton**
Post-merger HHI > 1800; HHI delta > 50?	Y	Y	Y	Y	Y	Y	Y	Y
Post-divestment share > 33?	Y	Y	Y	Y	Y	Y	Y	Y
Post-divestment HHI > 1800; HHI delta > 50?	Y	Y	Y	Y	Y	Y	Y	Y

Source: Tarmac

Notes:

[1]Shares of supply for 30-miles are based on production, while those for 40-mile, 50-mile and the 2-hour drive time are based on shares of consumption.

[2]Leaton's share has been calculated as combined share of Tarmac and Johnston minus the combined share exc Leinthall.

[3] This post-divestment HHI is adjusted to take into account Tarmac's 100 per cent ownership of Leaton and a divestment of Leinthall to Ennstone.

ANNEXE TABLE FOUR

AGGREGATES — Shares of supply 2003 post-divestment: various radii around Leinthall and Leaton[1]

	30 miles		**40 miles**		**50 miles**		**2 hr-drive time**	
	Leint-hall	**Leaton**	**Leint-hall**	**Leaton**	**Leint-hall**	**Leaton**	**Leint-hall**	**Leaton**
Tarmac	30-40	10-20	20-30	20-30	20-30	20-30	10-20	20-30
Johnston	0-10	0-10	0-10	0-10	0-10	0-10	0-10	0-10
Leaton[2]	0-10	0-10	0-10	0-10	0-10	0-10	0-10	0-10
Leinthall	0-10	0-10	0-10	0-10	0-10	0-10	0-10	0-10
MQP	0.0	0-10	0-10	5-15	0-10	0-10	5-15	0-10
Pre-merger shares of Tarmac (Tarmac + 50% MQP + 49% Leaton)	30-40	20-30	20-30	25-35	20-30	20-30	20-30	20-30
Pre-merger share of Johnston (100% of Leinthall, 51% of Leaton)	0-10	0-10	0-10	0-10	0-10	0-10	0-10	0-10
Post-merger share of Tarmac (Tarmac, 100% of Johnston, 50% of MQP)	35-45	20-30	20-30	25-35	20-30	25-35	20-30	20-30
Post-merger share of Tarmac with Leinthall divested	**30-40**	**20-30**	**20-30**	**25-35**	**20-30**	**20-30**	**20-30**	**20-30**
Aggregate Industries	5-15	5-15	5-15	5-15	5-15	5-15	10-20	10-20
Hanson	15-25	15-25	30-40	10-20	20-30	10-20	15-25	10-20
Hanson + 50% MQP	15-25	20-30	30-40	15-25	20-30	15-25	20-30	15-25
Lafarge	0-10	0-10	5-15	15-25	5-15	15-25	15-25	15-25
RMC	0-10	0-10	10-20	10-20	10-20	10-20	10-20	10-20
Top 5	> 70	> 65	> 85	> 85	> 80	> 85	> 85	> 80
HHI pre-merger	> 1500	> 1000	> 2000	> 1500	> 1500	> 1500	> 1500	> 1500
HHI post-merger	> 2000	> 1000	> 2500	> 2500	> 2500	> 2500	> 2000	> 2000
HHI increment	> 400	> 200	> 800	> 1000	> 800	> 900	> 700	> 700
HHI post-divestment of Leinthall[3]	> 1500	> 1000	> 2000	> 1500	> 1500	> 1500	> 1500	> 1500
HHI Increment post divestment	> 100	> 50	> 30	> 30	> 10	> 20	> 30	> 10
unadjusted combined shares	35-45	15-25	25-35	25-35	20-30	25-35	20-30	20-30
Post-merger share > 33%?	Y	N	N	N	N	N	N	N

Post-merger HHI >1800; HHI delta> 50?	Y	N/Y	Y	Y	Y	Y	Y	Y
Post-divestment Share > 33%?	Y	N	N	N	N	N	N	N
Post-divestment HHI > 1800; HHI delta > 50?	Y	N	N	N	N	N	N	N

Source: Tarmac

Notes:

[1]Shares of supply for 30-miles are based on production, while those for 40-mile, 50-mile and the 2-hour drive time are based on shares of consumption.

[2]Leaton's share has been calculated as combined share of Tarmac and Johnston minus the combined share exc Leinthall.

[3] This post-divestment HHI is adjusted to take into account Tarmac's 100 per cent ownership of Leaton and a divestment of Leinthall to Ennstone.