

BREEDON AGGREGATES/AGGREGATE INDUSTRIES UK MERGER INQUIRY

Provisional findings report

Notified: 6 February 2014

The Competition Commission has excluded from this published version of the provisional findings report information which the inquiry group considers should be excluded having regard to the three considerations set out in section 244 of the Enterprise Act 2002 (specified information: considerations relevant to disclosure). The omissions are indicated by [§]. Some numbers have been replaced by a range. These are shown in square brackets. Non-sensitive wording is also indicated in square brackets.

Contents

	<i>Page</i>
Summary	3
Provisional findings	11
1. The reference	11
2. The companies and the industry in which they operate	11
Breedon	11
Aggregate Industries and its operations in north Scotland	15
The supply of heavy building materials in north Scotland	17
The relevant products and services	19
Primary aggregates	20
Recycled and secondary aggregates	23
Drivers of demand	29
Customers	31
Competitors	33
3. The merger and the relevant merger situation	42
Outline of merger situation	42
The rationale for the merger	44
Jurisdiction	44
Enterprises ceasing to be distinct	45
Turnover test/share of supply test	46
Timing of the reference	49
Provisional conclusions on relevant merger situation	49
4. Market definition	49
Analytical framework	49
Product market	50
Aggregates	51
RMX	57
Asphalt	59
Contract surfacing services	61
Provisional conclusions on product market definition	62
Geographic market and catchment area analysis	63
Approach	63
Aggregates	65
RMX	67
Asphalt	70
Decorative aggregates	73
Contract surfacing services	73
Provisional conclusions on geographic market definition	74
5. Counterfactual	75
The circumstances prior to the merger	76
Our assessment of the counterfactual	77
Scenario 1: Closure of the acquired operations	77
Scenario 2: acquisition by one or several alternative purchasers	78
Scenario 3: continued ownership of the acquired operations by Aggregate Industries	80
Provisional conclusion on the counterfactual	81
6. Assessment of the competitive effects of the merger	82
Introduction	82
Pre-merger competition	83
Purchasing processes	83
Criteria used to select suppliers	87
Pricing	89
Closeness of competition between Breedon and Aggregate Industries in north-east Scotland	91

Analysis of local effects for aggregates, RMX and asphalt	96
Approach	96
Step 1: Filtering out of sites based on overlap and concentration analysis.....	102
Step 2: Detailed analysis of the competitive effects of the transaction in the relevant product markets and local areas	108
Step 3: Countervailing factors: Likelihood of entry and expansion in the relevant product markets of the problem sites and buyer power.....	151
Conclusions on the competitive effects of the merger in the markets for aggregates, RMX and asphalt in the relevant local areas	163
Analysis of competitive effects for contract surfacing services and decorative aggregates	163
Contract surfacing services.....	163
Decorative aggregates.....	168
Provisional conclusions on the SLC test.....	170

Appendices

- A Terms of reference and conduct of the inquiry
- B Parties' financial information
- C Supporting analysis for product market definition
- D Catchment area analysis
- E Tender and win and loss analysis
- F Analysis of overlaps and local concentration
- G Analysis for competitive assessment
- H Pricing analysis
- I Survey evidence at site level
- J Barriers to entry and expansion

Glossary

Summary

1. On 24 September 2013, the Office of Fair Trading (OFT) referred the completed acquisition by Breedon Aggregates Limited (Breedon) of certain Scottish assets of Aggregate Industries UK Limited (Aggregate Industries) (the transaction) to the Competition Commission (CC) for investigation and report. We are required to publish our report by 5 May 2014.¹
2. Breedon is a producer of heavy building materials, which serves primarily the North, West and East of Scotland (through Breedon Aggregates Scotland Limited, hereafter referred to as Breedon Scotland), together with the East and West Midlands, East Anglia, North Wales, Greater Manchester and South Yorkshire. In Scotland, it operates 29 sites and produces aggregates, asphalt, ready-mix concrete (RMX) and concrete blocks. It also provides contract surfacing services (ie services associated with laying asphalt). Its revenue in 2012 was £174 million. Aggregate Industries is the UK holding company for the operations in GB of Holcim Limited. It generates revenue from the sale of aggregates, RMX, asphalt, concrete products and paving and construction services. Its turnover in 2012 was over £1 billion.
3. Breedon and Aggregate Industries initiated discussions in 2012 and after considering a number of possible asset packages for acquisition by Breedon, in early 2013 the two companies started specific negotiations regarding the sale of certain of Aggregate Industries assets located in north Scotland (ie to the north of the 'Central Belt'² of Scotland) to Breedon. Conditional contracts were exchanged on 10 April 2013 and completion took place on 30 April 2013. The sale package included: 11 aggregates quarries, 4 asphalt plants (including associated contract surfacing services), 9 RMX plants and 2 concrete block factories and associated business,

¹ On 4 February 2014, the CC extended the reference period by eight weeks to 5 May 2014 due to the late provision of new market data that has delayed the publication of its provisional findings.

² The area covering the 'waist' of Scotland, including the cities of Edinburgh in the East and Glasgow in the West.

located at 18 sites. We refer to this package as the ‘acquired operations’. Aggregate Industries retained only one asset in north Scotland: its large quarry at Glensanda from which it supplies aggregates to the South-East of England and other countries.

4. We provisionally found that the activities of Breedon and of the acquired operations overlapped in the area of Scotland comprising Grampian, Tayside, Fife, the east part of the Highlands and the area of the Highlands north of Inverness (referred to in these provisional findings as north-east Scotland). We also provisionally found that Breedon did not produce concrete blocks in this part of Scotland. We therefore focused our analysis of competition on the supply of aggregates, RMX, asphalt and contract surfacing services in north-east Scotland.
5. There are different grades of aggregates and they can be extracted either from crushed rock quarries or sand and gravel quarries (referred to as primary aggregates). Certain types of aggregates are used for aesthetic purposes and referred to as decorative aggregates. Aggregates can also be produced from demolition activities and are referred to as recycled aggregates.³ For large projects (eg road building), aggregates can be extracted on-site in ‘borrow pits’. Aggregates are used for general construction purposes (including housing and the building of roads), in the production of asphalt (which also requires bitumen) or in the production of RMX (which also requires cement).⁴ RMX can be produced at fixed plants (typically located in an aggregates quarry), mobile plants (temporarily set up on a project site) or using volumetric trucks that transport the materials to the site and mix them on delivery. Asphalt can be produced in fixed plants or mobile plants. The drivers of demand for the three products are general commercial and private

³ Aggregates can also be produced as a by-product of other quarrying or mining operations (referred to as secondary aggregates) but are not produced in this way in north Scotland.

⁴ Aggregates are also used in specialist applications, but these were not relevant to our analysis of the transaction.

construction projects, government expenditure on road building and maintenance and large one-off projects.

6. In GB overall, five companies—Aggregate Industries, Cemex UK Operations Limited, Hanson and HeidelbergCement AG, Hope Construction Materials and Lafarge Tarmac Limited (collectively referred to as ‘the Majors’)—supply a substantial share of the aggregates, RMX and asphalt, but in north-east Scotland they have limited operations. Prior to the transaction, Breedon was the largest supplier of these products in north-east Scotland. Aggregate Industries was among the five largest suppliers of aggregates and RMX and the sixth largest supplier of asphalt. There are also a large number of local independent suppliers, some of which have shares of supply that are larger than the Majors in specific areas. Contract surfacing services are provided either by the producers of asphalt or by independent contractors.
7. We considered whether the transaction was a ‘relevant merger’ situation within the meaning of section 35 of the Enterprise Act 2002. We provisionally concluded that the acquired operations met the statutory definition of an ‘enterprise’, that the transaction met the share of supply test and provisionally concluded that a ‘relevant merger’ situation had been created.
8. We defined the relevant product markets in which we then assessed the effects of the transaction. In relation to aggregates, we considered whether different types and grades of primary aggregates; recycled aggregates; aggregates sold internally for the production of RMX, asphalt and other products; and decorative aggregates should be included in the same market. In relation to RMX, we considered whether product specification could have an effect on the substitutability of different types of RMX; and whether RMX supplied through the use of volumetric trucks and RMX produced at mobile plants were substitutable for RMX produced at fixed plants. In relation to

asphalt, we considered the demand-side substitutability between different specifications of asphalt, and between asphalt supplied from mobile plants and asphalt supplied from fixed plants. In relation to contract surfacing services, we considered whether internal supplies of the products used in the provision of these services should be included in the market.

9. We provisionally concluded that the transaction should be analysed in the following product markets:
 - (a) aggregates, including all types of primary aggregates (except decorative aggregates) and recycled aggregates, whether they are sold to external customers or used downstream for the production of RMX, asphalt or other products;
 - (b) decorative aggregates;
 - (c) RMX, including RMX supplied from fixed plants, mobile plants and volumetric trucks;
 - (d) asphalt, including asphalt supplied from fixed plants and mobile plants; and
 - (e) contract surfacing services.
10. Owing to high haulage costs and, in the case of RMX, the perishability of the product, the geographic markets for aggregates, RMX and asphalt are local in nature. For these three products, we have not defined local geographic markets. As a starting point for the competitive effects analysis, we defined catchment areas primarily based on the analysis of the destinations of the deliveries of the three products made by Breedon and the acquired operations in 2012. In reaching our provisional conclusions, we also took account of a range of sensitivity tests and other evidence from Breedon, other suppliers and customers. For our competitive assessment, we therefore adopted two different catchment areas for each of aggregates and RMX and three different catchment areas for asphalt.

11. We also used the analysis of the destinations of the deliveries made by Breedon to assist us in defining the geographic market for decorative aggregates. For contract surfacing services, we relied on qualitative evidence provided by Breedon, its competitors and customers. We provisionally concluded that the geographic market for decorative aggregates is likely to be Scotland-wide and possibly wider. We provisionally concluded that the geographic market for contract surfacing services is likely to be wider than the immediate vicinity of centres of demand and to extend to other parts of Scotland.
12. We considered what would have happened in the absence of the transaction (the counterfactual). We examined three possible scenarios: whether Aggregate Industries would have closed the acquired operations; whether the acquired operations would have been bought by one or several alternative purchasers; and whether the operations would have continued to be owned and operated by Aggregate Industries. We provisionally concluded that it was likely that absent the merger, Aggregate Industries would have continued to operate in north Scotland broadly as it had done before.
13. We considered the nature of purchasing processes and competition prior to the transaction. We found that a range of methods was used to purchase aggregates, RMX, asphalt and contract surfacing services. This includes tenders which may be formal or informal, negotiations, which may or may not have been preceded by a formal tender process, and some framework agreements. The evidence showed that in the vast majority of cases, customers obtained quotations from a number of suppliers and that prices were negotiated. We also found that a number of criteria were used in selecting suppliers but that the most important factors when purchasing aggregates, RMX and asphalt were the price quoted and the closeness of the production site to the delivery sites, due to high haulage costs. The evidence showed

that Breedon and the acquired operations were perceived as competitors prior to the transaction and competed with each other for many contracts across regions of north-east Scotland. Evidence from our survey and other analysis showed that they also faced competition from many other suppliers in north-east Scotland overall.

14. As the markets for aggregates, RMX and asphalt are local in nature, we carried out our assessment of the effects of the transaction at the local level. Starting with Breedon's 23 pre-existing sites and the 12 acquired sites in north-east Scotland, we first filtered out sites which were unlikely to lead to competition concerns. To do this, we first examined the distances between the sites to identify sites which we considered were close enough to each other to be able to compete with each other ('overlap sites'). Second, for each of these overlap sites for each of the three products, we used high-level indicators of local concentration (Breedon's post-transaction share of production and number of remaining competitors) within the catchment areas we had defined in order to begin filtering out the overlap sites which were unlikely to give rise to competition concerns. Having carried out this two-stage process, we grouped the remaining sites based on their proximity to each other and to population centres, and thus identified areas for which we carried out a detailed competitive assessment for each of the three products.
15. At the end of this process, we had identified nine areas (including the relevant sites) and product combinations for further investigation:
 - (a) aggregate sites near Montrose: Capo and Edzell;
 - (b) aggregate sites near Aberdeen: Corrennie, Craigenlow and Tom's Forest;
 - (c) aggregate sites near Peterhead: Stirlinghill;
 - (d) RMX sites near Montrose: Capo and Edzell;
 - (e) RMX sites near Aberdeen: Bridge of Don, Craigenlow, Deeside, Dyce, Inverurie, Tom's Forest, Tullos and Westhill;

- (f) RMX sites near Peterhead: Peterhead and Stirlinghill;
- (g) RMX sites near Inverness: Inverness and Beaully;
- (h) asphalt sites near Aberdeen : Tom's Forest and Stirlinghill; and
- (i) asphalt sites near Inverness: Daviot, Mid Lairgs and Netherglen.

16. For each of the nine local area and product combinations, we carried out a detailed analysis of the competitive constraints that the relevant Breedon pre-existing sites and relevant acquired sites exerted on each other; examined measures of local concentration resulting from the transaction; and assessed the likely competitive constraints exerted by other suppliers on the relevant Breedon pre-existing sites and the relevant acquired sites. Our analysis drew upon a data set with information gathered systematically for each product and area, but also information that was relevant to the particular circumstances of a given area and product. At the end of this process, we provisionally concluded that, absent countervailing factors, the transaction could be expected to lead to competition concerns in the following product markets and local areas:

- (a) RMX in the Aberdeen area;
- (b) asphalt in the Aberdeen area, extending to the north of Aberdeen;
- (c) RMX in the Peterhead area; and
- (d) asphalt in the Inverness area.

17. For each of these remaining four product and local area combinations, we considered whether entry or expansion could be expected to mitigate the effects of the transaction. We provisionally found that the barriers to potential entry for RMX were low. They were higher for asphalt. In order to establish the likelihood and timing of entry, we gathered information on entry and expansion plans we were aware of. We received evidence from three suppliers of plans for entry or expansion in the market for RMX in the Aberdeen area. Two of the suppliers had firm plans, which they were

progressing, while the plans of the third one were on hold. Given this evidence and the demand characteristics of the Aberdeen area, we provisionally concluded that in this area and in relation to RMX, entry and/or expansion was likely to occur in a timely manner and would be of sufficient scale to mitigate the competition concerns that we had identified. We did not consider that entry or expansion was sufficiently likely, timely and of a sufficient scale to mitigate any of the other competition concerns we had provisionally identified.

18. We also considered whether buyer power could be expected to mitigate the effects of the transaction, and provisionally concluded that no customer buying materials from Breedon was likely to have significant buyer power in the absence of a greater selection of alternative suppliers. In addition, we provisionally found that the ability of larger customers to negotiate favourable terms will not result in price protection for smaller customers because prices are individually negotiated allowing suppliers to price discriminate.
19. With regard to the markets for decorative aggregates and asphalt surfacing services, we provisionally concluded that the transaction was unlikely to lead to competition concerns.
20. We have therefore provisionally found a substantial lessening of competition leading to prices that would be higher than might otherwise be the case in the following product markets and local areas:
 - (a) asphalt in the Aberdeen area, extending to the north of Aberdeen;
 - (b) RMX in the Peterhead area; and
 - (c) asphalt in the Inverness area.

Provisional findings

1. The reference

- 1.1 On 24 September 2013, the OFT referred the completed acquisition by Breedon of certain Scottish assets of Aggregate Industries to the CC for investigation and report.

The CC must decide:

- (a) whether a relevant merger situation has been created; and
- (b) if so, whether the creation of that situation has resulted, or may be expected to result, in a substantial lessening of competition (SLC) within any market or markets in the UK for goods or services.

- 1.2 Our terms of reference are in Appendix A. We are required to publish our final decision by 5 May 2014.

- 1.3 This document, together with its appendices, constitutes our provisional findings, published and notified to Breedon in line with the CC's Rules of Procedure.⁵ Further information relevant to this inquiry, including non-confidential versions of submissions received from Breedon and third parties, as well as summaries of evidence received in oral hearings, can be found on our website.⁶

2. The companies and the industry in which they operate

Breedon

- 2.1 Breedon is a public company listed on the Alternative Investment Market (AIM) of the London Stock Exchange. Its business is operated along geographical lines through two wholly-owned subsidiaries: Breedon Aggregates England Limited (Breedon England) and Breedon Aggregates Scotland Limited (Breedon Scotland).

⁵ Rule 10 of the *Competition Commission Rules of Procedure, CC1*, March 2006.

⁶ www.competition-commission.org.uk/our-work/directory-of-all-inquiries/breedon-aggregates-aggregate-industries.

- 2.2 It was first set up in June 2008 as a special purpose vehicle and commenced operations in September 2010, when it acquired Breedon Holdings Limited. Breedon Holdings Limited had itself acquired out of administration Ennstone plc's aggregates, RMX, asphalt and contract surfacing services⁷ operations in England and Scotland in March 2009.
- 2.3 By the time of the transaction, Breedon had made a number of other acquisitions of businesses or assets involved in the supply of building materials. Three of these were in England⁸ and one was in Scotland.⁹ By the end of 2012, it had also entered into an unincorporated joint venture (JV) with TSL Contractors Limited (TSL) to launch Mobile Concrete Solutions (MCS), which provides a mobile concrete batching service for remote and inaccessible locations.¹⁰ Breedon also holds a 37.5 per cent share¹¹ in BEAR Scotland Ltd (BEAR Scotland), a provider of trunk road maintenance services.
- 2.4 Breedon serves primarily the North, West and East of Scotland, together with the East and West Midlands, East Anglia, North Wales, Greater Manchester and South Yorkshire. Prior to the transaction, its asset base comprised:
- (a) 26 quarries;
 - (b) 18 asphalt plants; and
 - (c) 41 RMX plants.
- 2.5 Prior to the transaction, Breedon operated 29 sites in north Scotland. They are shown in Figure 1.

⁷ The products and services are described in more detail in paragraphs 2.18–2.46.

⁸ The assets of C&G Concrete Limited, acquired in July 2011, Nottingham Ready Mix Limited, acquired in January 2012, and certain quarrying assets of Marshall Mono Limited, acquired in April 2013.

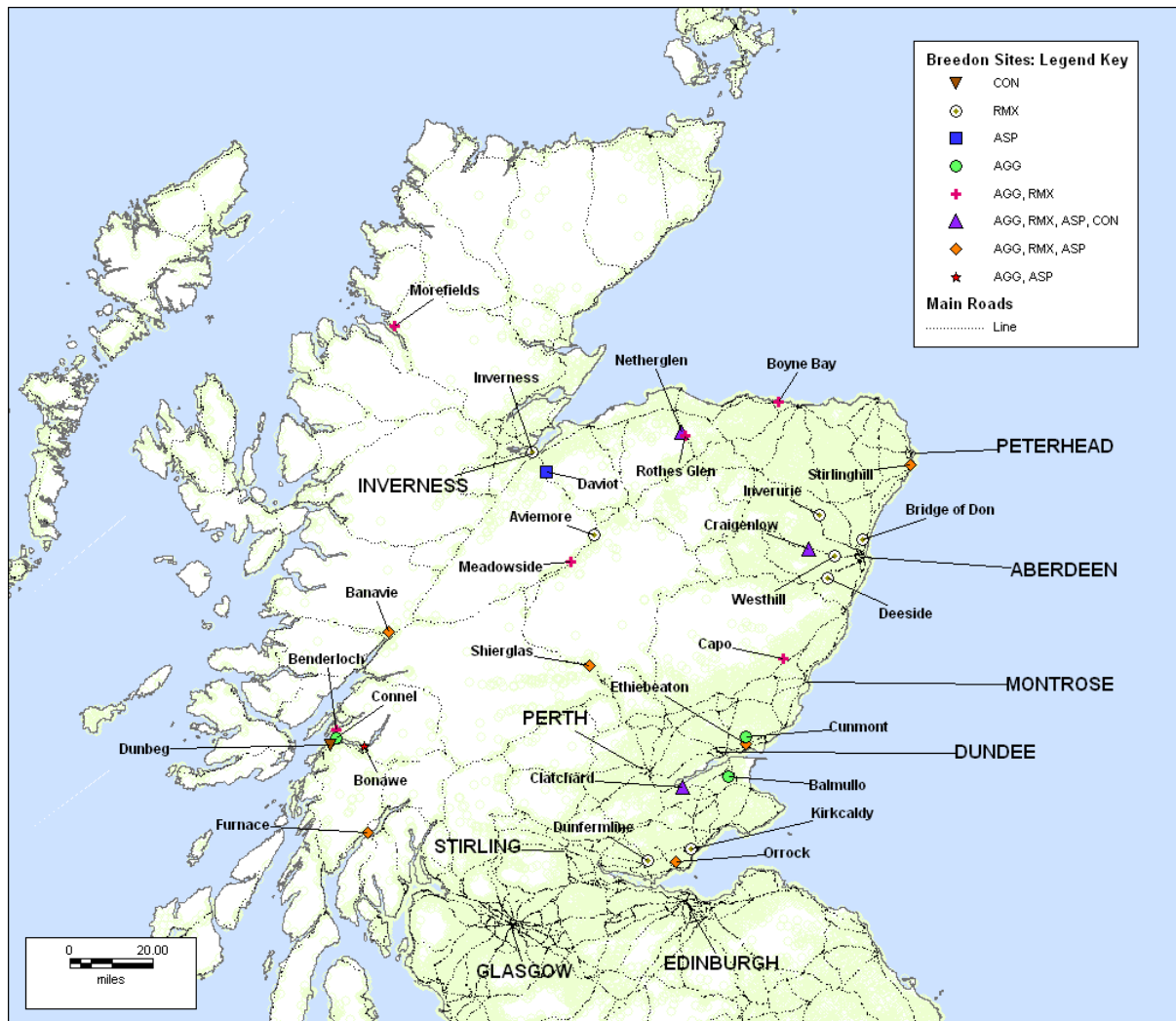
⁹ The assets of Speyside Sand & Gravel Quarries Limited in July 2012.

¹⁰ [§] Breedon told the OFT that MCS had once provided budget prices for a contract in the Hebrides but had not won any business in that area.

¹¹ The other two partners are: Eurovia Group Limited and Jacobs One Limited.

FIGURE 1

Map of Breedon's operations in north Scotland before the transaction



Source: CC analysis.

Note: AGG = aggregates; ASP = asphalt; CPR = concrete blocks; CON = contract surfacing services. Non-operational sites are not shown.

2.6 At the time of the transaction, a number of Breedon's sites in north Scotland were not in full use: ¹² the Aviemore RMX plant and the Deeside RMX plant had been mothballed and the Dunfermline RMX plant was used occasionally. The Clatchard RMX plant was mothballed after the transaction. The Meadowside and Connel

¹² Throughout this document, we describe a plant as being 'mothballed' if it is currently not used but may be brought back into use in the near future, eg to respond to an increase in demand; we describe a site or quarry as 'closed' if it is not currently used but may be brought back into use in the future; we describe a quarry and/or plant as 'occasionally used' if it is used to meet specific contracts or during certain times of the year, including sites worked using mobile plants. 'Non-operational' sites are leasehold and freehold land interests relating to past activities and which are deemed to have no production potential and can therefore not be expected to be brought back into production.

quarries are used occasionally. Breedon told us that it also had one closed site and five non-operational sites in Scotland, which are either long-term replacements for other sites or have no current production facilities on them. We do not consider these further in these provisional findings as we understand from Breedon that they could not be expected to be brought back into production, either at all or in the short or medium term.

2.7 In 2012, Breedon reported a turnover of £174 million, of which Scotland accounted for a little less than [X] per cent. Its earnings before interest, tax, depreciation and amortization (EBITDA) were £20 million and its return on capital employed (ROCE) was [X] per cent. [X] Summary financials are shown in Appendix B.

2.8 In 2012, Breedon's Scottish business achieved a turnover of £[X] million, an EBITDA margin of [X] per cent, a ROCE of [X] per cent and an EBIT margin of [X] per cent. Table 1 shows Breedon Scotland's revenue split by product type and between external and internal sales.

TABLE 1 **Breedon Scotland's volume and revenue broken down by product group and between external and internal sales,* 2012**

	<i>Aggregates</i>	<i>Asphalt</i>	<i>RMX</i>	<i>Contracting</i>	<i>Eliminations</i>	<i>Other</i>
<i>Production (tonnes)</i>						
External	[X]	[X]	[X]	[X]		
Internal	[X]	[X]	[X]	[X]		
Total production	[X]	[X]	[X]	[X]		
<i>Revenue (£'000)</i>						
Allocation	[X]	[X]	[X]	[X]	[X]	[X]
Revenue	[X]	[X]	[X]	[X]	[X]	0
<i>Revenue split between internal and external sales (£'000)</i>						
External	[X]	[X]	[X]	[X]		
Internal	[X]	[X]	[X]	[X]		
Total	[X]	[X]	[X]	[X]		

Source: Breedon.

*Aggregates external sales are those to third parties and internal sales are those to the downstream products of asphalt and RMX. Asphalt external sales are to third parties and internal sales are to the contract surfacing services business.

Aggregate Industries and its operations in north Scotland

2.9 Aggregate Industries is the UK holding company for the operations in GB of Holcim Limited, one of the world's largest suppliers of cement and aggregates. Aggregate Industries generates revenue from the sale of aggregates, RMX, asphalt, concrete products and paving and construction services. Its turnover in 2012 was over £1 billion.

2.10 Prior to the transaction, its operations in north Scotland comprised:

- (a) 12 aggregate quarries, including a 'super-quarry' at Glensanda;¹³
- (b) 4 asphalt plants (including associated services for asphalt surfacing);
- (c) 9 RMX plants; and
- (d) 2 concrete block factories.

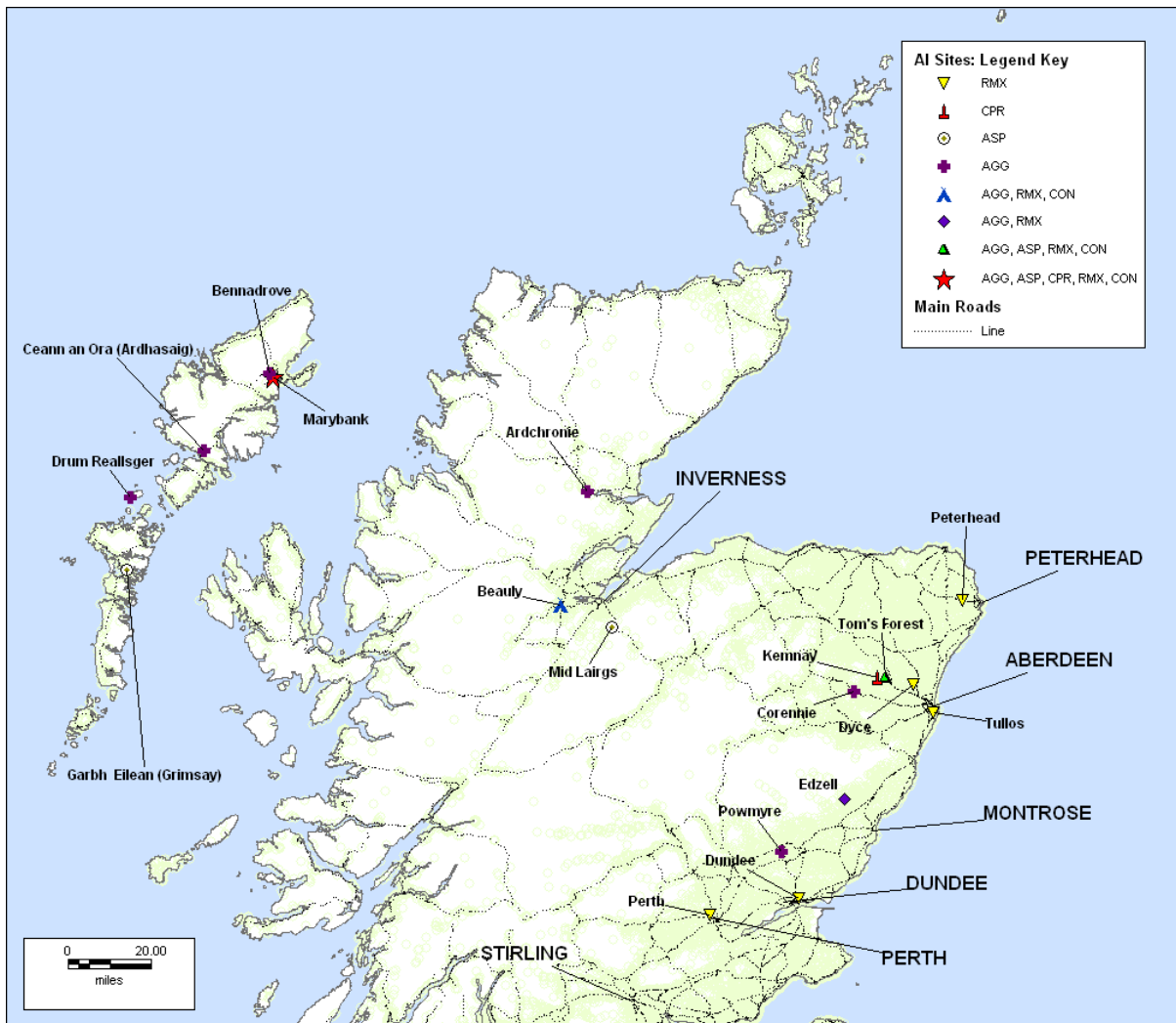
2.11 It also had aggregates, asphalt, asphalt surfacing services and RMX operations in the Scottish Borders, Central, Dumfries & Galloway and Lothian areas of Scotland.

2.12 As part of the transaction, Aggregate Industries sold to Breedon all its operations (located at 18 sites) in north Scotland with the exception of the Glensanda super-quarry which it retained. Figure 2 shows the location of the divested operations.

¹³ The quarry at Glensanda has no road link to the rest of Scotland and supplies products by ship to northern Europe. It has on occasions supplied aggregates by ship to Glasgow and Edinburgh to service the Central Belt of Scotland (see paragraph 2.17 for definition of the Central Belt).

FIGURE 2

Map of the acquired Aggregate Industries operations in north Scotland



Source: CC analysis.

Note: AGG = aggregates; ASP = asphalt; CPR = concrete blocks; CON = contract surfacing services. Non-operational sites are not shown.

2.13 Of the sites acquired by Breedon from Aggregate Industries,

- (a) five aggregate quarries were used occasionally: Ceann An Ora (the Hebrides), Bennadrove (Hebrides), Corrennie (Grampian), Ardchronie (Highlands) and Edzell (Tayside & Fife);
- (b) one aggregates quarry was non-operational: Kernay (Grampian);

- (c) two RMX plants were mothballed: Edzell¹⁴ (Tayside and Fife) and Perth (Tayside and Fife);
- (d) two sites were described by Breedon as non-operational; and¹⁵
- (e) two sites were described by Breedon as ‘interests in land’ and over which Breedon had no right to extract minerals, nor any ownership or access right over the land.¹⁶

2.14 Prior to the transaction, the sites acquired by Breedon from Aggregate Industries delivered a £[X] million turnover, £[X] million EBITDA ([X] per cent EBITDA margin) and [X] per cent ROCE in 2012. The EBITDA margins for the product categories in 2012 were:¹⁷

- (a) aggregates: [X] per cent;
- (b) RMX: [X] per cent;
- (c) asphalt: [X] per cent;
- (d) asphalt surfacing services: [X] per cent; and
- (e) concrete blocks: [X] per cent.

The supply of heavy building materials in north Scotland

2.15 As explained in paragraph 2.12, the sites acquired by Breedon comprise most of Aggregate Industries’ operations in north Scotland. In this section, we set out the transaction within the context of Scotland overall before describing the relevant products (aggregates, RMX and asphalt) and services (contract surfacing services) and providing an overview of the demand drivers, customers and competitors.

2.16 Figure 3 shows a map of Scotland indicating the population density by council area.

¹⁴ Following the transaction, the Perth RMX site has been reopened and the Edzell RMX site has been used occasionally.

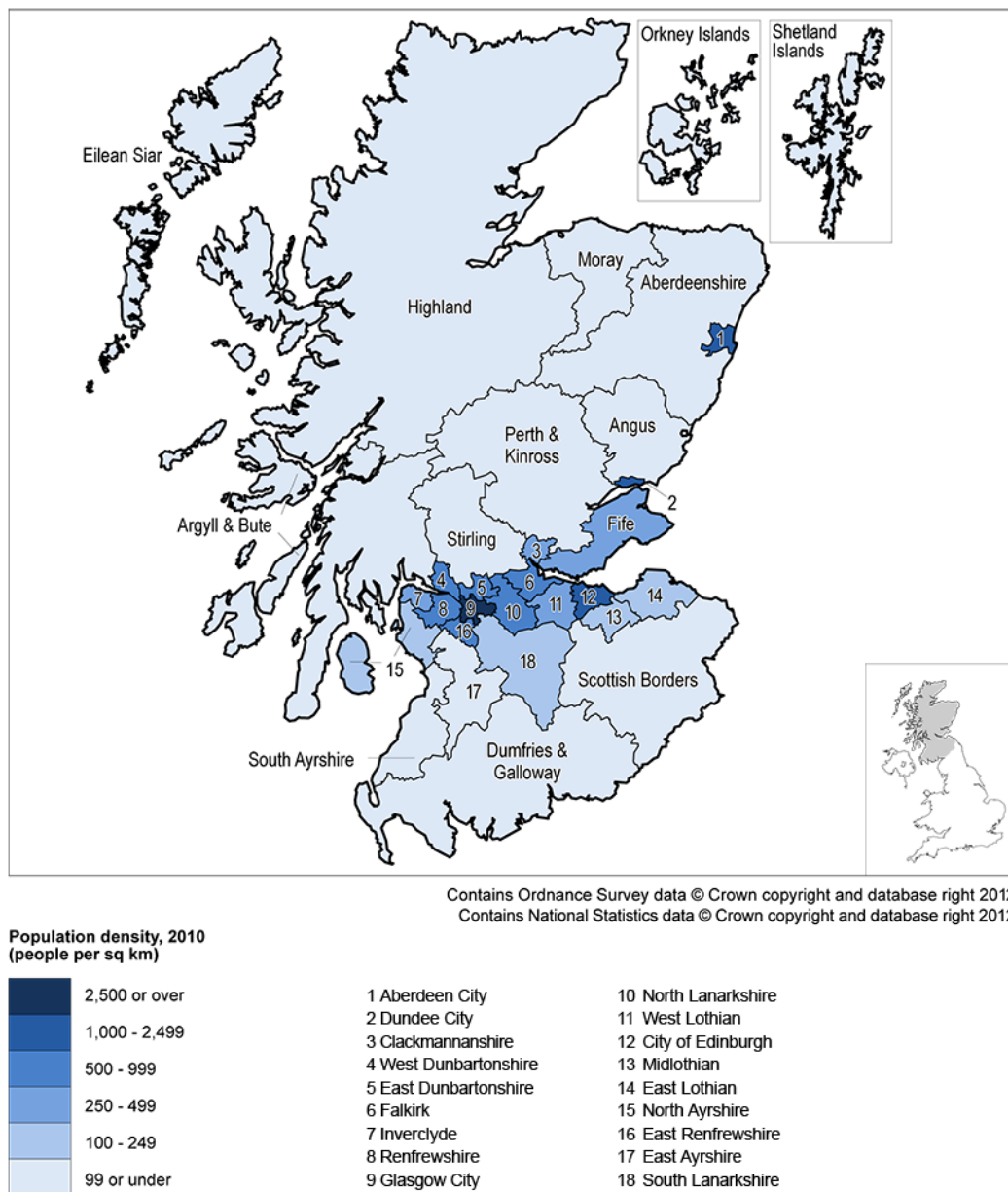
¹⁵ Annfield and Carrs Corner. These sites are not identified on Figure 2.

¹⁶ Borrowstone and Fledmyre Farm. These sites are not identified on Figure 2.

¹⁷ We note that the profitability of the different product lines may be distorted by internal pricing policies.

FIGURE 3

Scotland population density by council area, 2010



Source: Office for National Statistics.

- 2.17 The population of Scotland is largely concentrated in the 'Central Belt', which is the area covering the 'waist' of Scotland including the cities of Edinburgh in the East and Glasgow in the West. North of this belt the only densely-populated areas are those around Dundee and Aberdeen. The acquired operations are all situated north of this Central Belt. In addition, there is no geographic overlap between the acquired oper-

ations in the Hebrides¹⁸ and Breedon's pre-existing operations, nor between Breedon's pre-existing operations on the west coast south of Fort William and other acquired sites. The focus of our analysis has therefore been on Grampian (ie Aberdeenshire, Moray and Aberdeen City council areas), Tayside (ie Angus, Perth & Kinross and Dundee City council areas), Fife, the east part of the Highlands and the area of the Highlands north of Inverness. In these provisional findings, we refer to these areas collectively as north-east Scotland and in the remainder of our analysis we refer to Inverness, the east part of the Highlands and the area of the Highlands north of Inverness as 'the Highlands'. Where we are reporting comments made by parties or discussing the general context of the transaction (in particular in Sections 2 and 3 of the provisional findings), the term 'north Scotland' is used more generally and may include Comhairle nan Eilean Siar (the Hebrides), Argyll and Bute, Stirling and Clackmannanshire.

The relevant products and services

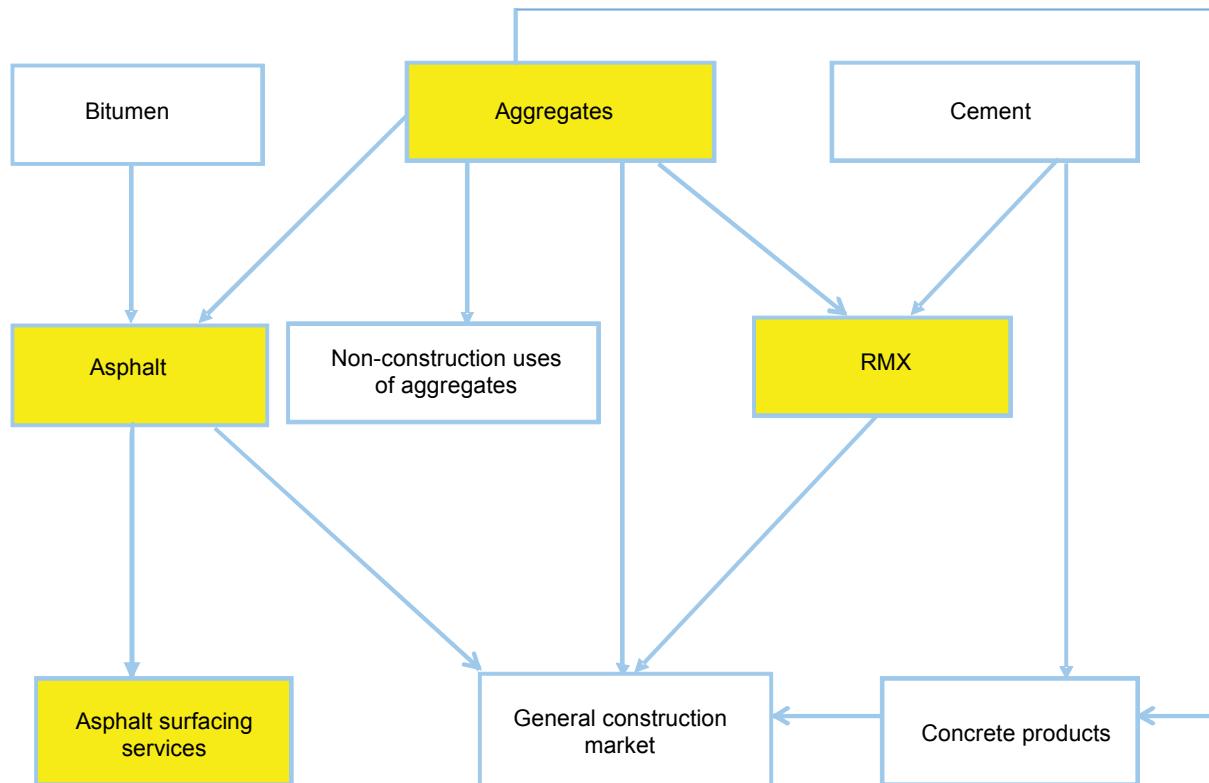
2.18 A simplified overview of the relationship between aggregates, RMX, asphalt and contract surfacing services, their inputs and other key heavy building materials is presented in Figure 4: aggregates and cement (or other cementitious product) form the basic ingredients of RMX; aggregates and bitumen form the basic ingredients of asphalt. The products and services supplied by Breedon and the sites it acquired have been highlighted in yellow.¹⁹

¹⁸ ie Drum Reallsger, Garbh Eilean, Marybank (see Figure 2).

¹⁹ Breedon does not supply concrete blocks in North Scotland. There was therefore no overlap between Breedon and the acquired operations in the supply of concrete blocks. No party has raised any concern about the effect of the transaction on the supply of this product. Therefore we have not investigated the supply of this product further. For the same reason our competitive assessment does not consider the Kemnay plant.

FIGURE 4

Simplified overview of the relationships between major heavy building materials



Source: CC.

Aggregates

- 2.19 Aggregates are the granular base materials used in the construction of roads, buildings and other infrastructure. Aggregates are also used in the production of RMX, concrete products and asphalt. Aggregates may be divided into primary aggregates, recycled aggregates and secondary aggregates. We describe the different types of aggregates and how they are produced in paragraphs 2.20 to 2.35.

Primary aggregates

- 2.20 Primary aggregates are produced from naturally-occurring mineral deposits, which are extracted, processed and used for the first time. They comprise sand and gravel and crushed rock (and a number of products within these two broad categories):

- (a) crushed rock is quarried from mainly hard, naturally-occurring rock deposits (eg granite, gritstone and limestone); and
- (b) sand and gravel is sourced from naturally-occurring alluvial deposits on land or on the seabed.

2.21 To produce crushed rock, rock is blasted from a quarry, then crushed and screened (ie sorted into different sizes—this process is also known as ‘grading’). The production of sand and gravel aggregates involves crushing (where necessary), washing, screening and clarification processes.

2.22 In Scotland, where there are large natural deposits of rocks of the type that can be accessed for extraction and crushing, most aggregates are produced from crushed rock (however, three of the quarries which Breedon acquired from Aggregate Industries produce sand and gravel).

2.23 Aggregates are classified by the grade (ie size) of the material.²⁰

- (a) Fine aggregates are generally materials with a particle size of less than 5mm diameter. Fine aggregates include dust produced by crushing rock, gravel, recycled or secondary materials as well as naturally-occurring sands.
- (b) Coarse aggregates are materials that are produced to a specific grading above 5mm diameter. In most applications the sizes used are 10mm, 14mm, 20mm, 28mm and 40mm, although larger materials may be produced.
- (c) Granular aggregates do not have a uniform size and are used to provide stability in foundation layers and bulk fill applications. They are composed of a combination of coarse and fine materials. The coarse materials provide strength and bulk while the finer component binds the material together and provides stability when compacted.

²⁰ Different producers may adopt slightly different classifications of these grades.

- 2.24 Producing any specific grade of primary aggregate necessarily results in a variety of other grades being co-produced.
- 2.25 Primary aggregates are used for both construction and specialist purposes.
- Construction applications include:
- (a) as a sub-base (the layer of stone which forms the foundation for many construction/road-building projects) and for other structural fills;
 - (b) in the production of RMX when combined with a cementitious product (see paragraph 2.36 below);
 - (c) in the production of other concrete products; and
 - (d) in the production of asphalt when combined with a binding agent such as bitumen (see paragraph 2.41 below).
- 2.26 Specialist applications for which particular types of aggregates are used include (but are not limited to):
- (a) Rail ballast, which is a specific type of crushed rock aggregate used as a bedding material underneath railway tracks. Rail ballast is resistant to pressure and breakage and inhibits the growth of plants under the tracks.
 - (b) High purity limestone (HPL), which is limestone with calcium carbonate content over 95 per cent, and which is used for its chemical characteristics. It is also known as chemical stone, and is used in industrial applications including flue-gas desulphurization (FGD) at coal-fired power plants²¹ and the production of chemicals.²² Limestone powders derived from HPL are also used in the agricultural and horticultural sectors.

²¹ FGD is the abatement of acid gas emissions from coal-fired power stations. Coastal stations use seawater to scrub acids from the combustion gases, while inland stations use a slurry of limestone, created by milling of HPL with water at the power stations. The slurry is injected into the gas stream to react with the acids, principally sulphur dioxide, to form gypsum, which is created as a by-product of this process.

²² Including soda ash, precipitated calcium carbonate and sinter.

(c) High polished stone value²³ (PSV) aggregates, which are derived from crushed rock. High-PSV aggregates are used for asphalt road surfacing in situations where there are high levels of traffic, high-speed roads or accident risk areas such as school crossings.

(d) Decorative aggregates that are used for aesthetic purposes including in parks, gardens, paths, lawns, drives etc and sometimes in asphalt road surfaces to produce a red or white effect.

2.27 Breedon estimated that approximately 50 per cent of all aggregates produced in the UK were used in construction, fills etc, approximately 20 per cent in RMX, and approximately 10 per cent in each of asphalt and concrete production and as other specialist applications.

2.28 Table 2 sets out our estimate of the volume of primary aggregates supplied in north-east Scotland by area in 2012.

TABLE 2 **Production of primary aggregates by region in north-east Scotland, 2012**

<i>Region</i>	<i>kt</i>	<i>%</i>
Grampian	[REDACTED]	40
East Highlands	[REDACTED]	19
Tayside	[REDACTED]	23
Fife	[REDACTED]	18
Total north-east Scotland	[REDACTED]	100

Source: CC analysis of Breedon, Aggregate Industries, third party and BDS Market Research Limited (BDS) data.

Recycled and secondary aggregates

2.29 In the analysis it presented to us, Breedon adopted a broad definition for 'recycled/secondary aggregates' which comprised:

(a) aggregates derived from recycled sources such as demolition sites and construction waste.

²³ Polished stone value is an attribute of aggregates. The higher the PSV of a particular aggregate, the greater the skid resistance of the asphalt produced using that aggregate.

- (b) secondary aggregates,²⁴ ie aggregates obtained as a by-product of other quarrying and mining operations such as china clay waste, slate waste and colliery spoil; or as a by-product of other industrial processes such as steel production, power station ash and spent foundry sand;
- (c) 'site-won' aggregates, where a contractor processes excavated material from a site such as a housing development either to use on-site or to sell in the market;
- (d) 'borrow pit'²⁵ aggregates, which are aggregates produced in one part of a project site (for example, excavation in the development of a road) which are then used in another part of the same site; and
- (e) aggregates used from small operations that are not registered.

2.30 Breedon told us that although the latter three categories (see (c) to (e) above) were virgin materials produced from naturally-occurring mineral deposits which were extracted, processed and used for the first time (and as such had the same physical properties as primary aggregates), they were not typically reflected in any market statistics, hence Breedon's inclusion of them within the 'recycled/secondary' category.

2.31 In our analysis, and consistently with previous CC cases,²⁶ we used the term 'recycled aggregates' for products of the type described in paragraph 2.29(a) and the term 'secondary aggregates' for products of the type described in paragraph 2.29(b). These definitions are also those adopted by BDS, a source of market data on aggregates, RMX and asphalt (among other things) which we have relied on for parts of our analysis. We recognize that certain sites that produce primary aggregates may not be captured by our definition (or by any available market statistics) (for example, see paragraphs 2.29(c), 2.29(d) and 2.29(e)), and set out our views of the

²⁴ Secondary aggregates are not available in Scotland and therefore not relevant to our analysis of the effect of the transaction.

²⁵ Borrow pits are temporary quarries set up on the site of major construction works (such as the building of new roads) to enable aggregates which need to be dug up from the site to be used in the construction work.

²⁶ For example the Tarmac/Lafarge final report and the market investigation final report

implications of the difference between Breedon's broader definition and ours where relevant in these provisional findings (eg paragraph 6.107).

2.32 Table 3 sets out our estimate of the volume of recycled aggregates supplied in north-east Scotland by area for 2012.

TABLE 3 **Production of recycled aggregates by region in north-east Scotland, 2012**

<i>Region</i>	<i>kt</i>	<i>%</i>
Grampian	[REDACTED]	27
East Highlands	[REDACTED]	11
Tayside	[REDACTED]	36
Fife	[REDACTED]	26
Total north-east Scotland	[REDACTED]	100

Source: CC analysis of Breedon, Aggregate Industries, third party and BDS data.

2.33 Breedon does not produce secondary aggregates from its sites or those acquired from Aggregate Industries. Breedon told us that it produced small amounts of recycled aggregates ([REDACTED] tonnes annually in Scotland).

2.34 There are two aspects of the tax regime that incentivize the production and use of recycled and secondary aggregates:

(a) *The Landfill Tax*. Unprocessed recycled and secondary aggregates may be classified as 'waste' and therefore the sites which process the aggregates may operate under waste management regulations which are enforced by the Environment Agency. Once processed, recycled and secondary aggregates are no longer classified as 'waste', and are regulated by the applicable planning permission.²⁷ In addition, the supply of secondary and recycled aggregates is also affected by the Landfill Tax, which is a charge levied on all waste sent to landfill. The tax therefore provides a financial incentive to waste producers to recycle more of their waste materials, rather than disposing of them in landfills.²⁸

²⁷ www.sustainableaggregates.com/sourcesofaggregates/recycled/rib_operation.htm.

²⁸ *ibid.*

(b) *The Aggregates Levy*. Sand, gravel and rock which is ‘commercially exploited’ in the UK (not for export purposes) is subject to a levy. The levy was £2.00 per tonne in 2013 and applied to primary aggregates, but not to recycled or secondary aggregates.

2.35 Breedon estimated²⁹ that at least 25 per cent of all aggregates consumption was made up of recycled/secondary aggregates. Breedon referred to the Minerals Products Association (MPA) estimate that 29 per cent of UK aggregates demand was met by recycled/secondary aggregates, and the Scottish Environment Protection Agency estimate that in Scotland recycled aggregates accounted for 20 per cent of total aggregates used.

RMX

2.36 RMX is concrete that is produced in a freshly mixed and unhardened state. RMX is manufactured by mixing highly specific quantities of cement and (if desired) other cementitious products with fine aggregates and coarse aggregates, water and other additives. The specific composition (and resulting properties) of RMX can be customized to suit different applications.

2.37 RMX can be produced in (a) a fixed plant and distributed to site by a concrete mixer; (b) a mobile plant at (or near) the customer site (also known as a ‘site plant’); or (c) a volumetric truck which carries the ingredients separately and mixes them on site.³⁰

2.38 RMX starts to harden once it has been mixed and should be poured within approximately 2 hours after being mixed. There is therefore a limit to the distance that RMX can be transported from a fixed site in mixer trucks (as opposed to volumetric trucks, which can travel further) before it becomes unusable. A customer

²⁹ Breedon response to issues statement, paragraph 1.5.

³⁰ The quality of RMX produced from volumetric trucks may be less consistent than RMX produced at fixed plants.

of RMX, RJ McLeod, however, told us that for extremely remote jobs it was possible to put in retarders and design the mix so that it could travel further.³¹ Accumix Concrete (Inverness) Ltd (Accumix), an operator of volumetric trucks in the Inverness area, told us that it travelled 100 miles occasionally.

2.39 Value-added RMX products (RMX VAPs) can be made by using additives and/or special production processes to develop particular properties for use in specialist applications. Examples include self-compacting RMX, coloured RMX, fast-setting RMX and waterproof RMX.

2.40 Table 4 shows our estimates of the volume of RMX produced (including by volumetric trucks and mobile plants) in 2012.

TABLE 4 **Production of RMX by region in north-east Scotland, 2012**

<i>Region</i>	<i>RMX production</i>	
	<i>'000 m3</i>	<i>%</i>
Grampian	[X]	40
East Highlands	[X]	23
Tayside	[X]	21
Fife	[X]	16
Total north-east Scotland	[X]	100

Source: CC analysis of Breedon, Aggregate Industries, third party and BDS data.

Asphalt

2.41 Asphalt is used in the surfacing of roads, car parks, footpath pavements and other surfaces. It is produced by heating and mixing aggregates and a viscous binding agent, usually bitumen (which, in the UK, is predominantly obtained from petroleum processing). 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 mix design, to BS/EN standards, to specifications set by the Highways Agency or to one of a series of standard EU asphalt mix specifications.

³¹ [Hearing summary](#), paragraph 13.

2.42 Asphalt can be produced at fixed plants or using mobile plants located at the customer site. Some plants (whether fixed or mobile) have planning permission to operate 24 hours a day, seven days a week (also referred to as ‘24/7’ plants). This permission allows suppliers to provide asphalt surfacing services, eg road surfacing overnight and during weekends. In some instances, asphalt may be substitutable with RMX/concrete products that are produced to supply the same end use, eg road base courses and surfaces, and concrete paving products.

2.43 Where the asphalt is produced at a fixed site, it is usually transported to the site in lorries with insulated tipper bodies (which keep the asphalt warm). The time (and hence distance) that the asphalt is able to travel will depend on several factors, including the air temperature and the composition of the mix. Table 5 shows our estimates of the volume of asphalt produced (including by mobile plants) in 2012.

TABLE 5 **Production of asphalt by region in north-east Scotland, 2012**

Region	Asphalt production	
	kt	%
Grampian	[X]	41
East Highlands	[X]	15
Tayside	[X]	24
Fife	[X]	20
Total north-east Scotland	[X]	100

Source: CC analysis of Breedon, Aggregate Industries, third party and BDS data.

Contract surfacing services

2.44 Breedon told us that in the UK it was usual for producers of asphalt also to operate contracting divisions which bid for a wide range of contracts involving the supplying and laying of asphalt and related products to build or surface roads, car parks, footpaths, pavements etc. The laying of asphalt on a road was normally referred to as ‘surfacing’ and hence these operations tended to be referred to as contract surfacing activities.

2.45 Breedon also told us that most of the asphalt in the UK was supplied to contractors using equipment such as paving machines and vibration rollers to apply the product. There are two principal categories of contractor:

- (a) independent contractors (for example, some larger civil engineering companies); and
- (b) the in-house contracting divisions of the asphalt producers. Breedon told us that this service was offered by most asphalt producers in the UK (in Scotland the majority of Breedon's asphalt was used in its contract surfacing business).³²

2.46 Breedon told us that contract surfacing activities were mobile and operated wherever the contract was located. For larger contracts, a site compound might be established for the duration of the contract. For smaller contracts, the people and equipment could be transported to the site on a daily basis.

Drivers of demand

2.47 In north-east Scotland there are three main drivers of demand for heavy building materials:

- (a) general commercial and private construction projects (eg houses, car parks);
- (b) government expenditure on road building and maintenance; and
- (c) large one-off projects which require large quantities of construction materials on a one-off basis.

2.48 Recent large projects in north-east Scotland have included:

- (a) the resurfacing of the main runway and taxiway at Inverness Airport which was won by the French company Colas³³—Colas deployed one of its mobile asphalt plants to the site in order to provide the required asphalt;

³² Breedon initial submission, paragraphs 7.82–7.83.

³³ www.colas.co.uk/news-media/news/2013/surfacing-work-begins-at-inverness-airport/.

- (b) the regeneration of the Dundee Waterfront, a £1 billion project which is expected to take place over a 30-year period (2001 to 2031);
- (c) the upgrade of the Beaulay–Denny power line, a £600 million project that is expected to be completed by 2014: the contract was awarded by Scottish Hydro Electric Transmission Limited to Balfour Beatty Utility Solutions;
- (d) wind-farm and renewable energy projects across Grampian and Highlands which have required large amounts of concrete in remote locations across north-east Scotland. Given the remote locations these can be economically provided by mobile plants; and
- (e) the Forth crossing, which was won by a consortium, which includes Hochtief of Germany, Dragados of Spain and American Bridge of the USA, as well as Morrison Construction. Cement is being sourced from Aggregate Industries in England, and RMX from Tarmac and Skene Group in Scotland.

2.49 We understand from Breedon and other parties that we have spoken to that future projects may include:

- (a) the Aberdeen Western Peripheral Route (AWPR), a project that is currently out to tender. Construction is expected to start in 2015. This is expected to drive increased demand in the Aberdeen region for all construction materials, although we were told that some of those materials may be sourced from elsewhere; and
- (b) upgrades of the A9, which may commence in the next few years.

2.50 In general across the UK, demand for construction materials fell in 2007/08 due to the UK recession. However, as regards the specific areas which we are considering in north-east Scotland, we understand that:

- (a) In Aberdeen, the local economy was to some extent insulated from the market decline due to its reliance on the oil and gas industry. The recession therefore did not impact Aberdeen as early or as badly as in other areas, and according to

Breedon's internal documents it started to be felt in the Aberdeen area in 2010, ie later than in other parts of Scotland.

(b) In the Tayside region, the collapse of the housing market particularly affected demand (according to Breedon's internal documents).

Customers

2.51 In this section we consider the main customers for aggregates, RMX and asphalt in north-east Scotland.

Aggregates/RMX

2.52 Customers of aggregate and RMX producers in north-east Scotland range from large multinational companies such as Balfour Beatty and utility companies and government bodies (eg Transport Scotland, local authorities) to small local builders who require only a few tonnes of products each year. Breedon told us that its customer base was quite fragmented and our calculations show that no single customer accounted for more than [%] per cent of all external materials sales in the three years to 2012. Our analysis shows that in the three years to 2012, Breedon had [%] customers who purchased materials. Over this period, the top 10 customers accounted for [%] ([%] per cent) of external materials sales and the top 30 customers accounted for [%] ([%] per cent) of all external materials sales.

2.53 In north-east Scotland aggregates suppliers supply a significant proportion of their aggregate sales (29 per cent)³⁴ to their own downstream RMX, asphalt, concrete products and other businesses. For Breedon this figure is [%] per cent and Breedon told us that, subject to limited exceptions, it did not supply third party RMX, asphalt or concrete block plants with aggregates on a regular basis. We understand that more

³⁴ Source: CC analysis of 2012 production/sales data of Breedon, Aggregate Industries, third parties and BDS.

generally, producers of RMX and asphalt in north-east Scotland tend to rely on their in-house supply of aggregates.

Asphalt/contract surfacing services

- 2.54 Producers of asphalt supply it directly to both independent contract surfacing suppliers and their own in-house contract surfacing operations.
- 2.55 Buyers of contract surfacing services can either be:
- (a) public sector, for example the Highways Agency, Transport Scotland or local authorities, which will invite a selection of companies to tender for repair, maintenance or new construction of motorways, roads etc; or
 - (b) private sector, for example the construction of a supermarket car park or retail development and small-scale domestic jobs.
- 2.56 Some contract surfacing contracts are undertaken directly for the client or customer but many are undertaken on a subcontract basis to a contractor undertaking a larger construction project for the client. For example, the construction of a new housing estate may result in the supply of feeder roads, drives, pathways etc being let as a separate subcontract with a number of bidders invited to tender.
- 2.57 Transport Scotland is responsible for the strategic maintenance of the trunk road network, which accounts for 6 per cent or approximately 3,400 km of the roads in Scotland. Transport Scotland's overall maintenance budget stands at around £200 million which includes payments to the Design, Build, Finance, Operate (DBFO) contracts described in paragraph 2.58.
- 2.58 The maintenance work is carried out through four geographical operating units (North East, North West, South East and South West operating companies, shown in

Appendix E, Annex 1) and currently two DBFO contractors which between them manage the four geographical units: BEAR Scotland manages the North East, North West and South East operating companies. The South West operating company is managed by Scotland TranServ, a JV between Balfour Beatty plc and Mouchel Group³⁵. North Scotland is covered by the North East operating company and the North West operating company, through which Transport Scotland spent £61 million (on maintenance) in 2012/13.³⁶

2.59 Transport Scotland is also responsible for the provision of larger trunk road infrastructure projects, for example new-build projects where roads are widened or upgraded, or built from scratch. For these projects, Transport Scotland tenders the contract to construction companies which then run their own procurement process in order to determine who the suppliers will be.

2.60 Breedon's largest customer of asphalt sold directly (ie sales that are not made through its contract surfacing services division) was [REDACTED] which accounted for [REDACTED] per cent of asphalt sales in the three years to 2012. Its sales of contract surfacing services (which include the provision of asphalt as part of the contracts) in 2012 were to [REDACTED] customers. Its largest customers were [REDACTED] ([REDACTED] per cent), [REDACTED] ([REDACTED] per cent) and [REDACTED] ([REDACTED] per cent).

Competitors

2.61 In GB as a whole, the Majors supply a substantial share of aggregates, RMX and asphalt, although they do not each supply all three products. The Majors are esti-

³⁵ MRBL Limited is the holding company of the Mouchel Group having acquired the former subsidiaries of Mouchel Group plc in 2012 when Mouchel Group plc entered administration.

³⁶ Source: The Performance Audit Group's Annual Report 2012/13: www.performanceauditgroup.co.uk/Downloads/pagrep13.pdf.

mated to account for a combined 80 per cent share of supply of aggregates and 71 per cent share of supply of RMX in GB.³⁷

2.62 Post-transaction, the Majors' activities in north Scotland can be summarized as follows:

- (a) Aggregate Industries³⁸ continues to operate its Glensanda quarry (see paragraphs 2.10(a) and 2.12).
- (b) Cemex³⁹ activities consist of operational aggregates facilities at Callender, Cupar and Perth; and operational RMX facilities at Stirling, Cardenden, Dundee and Perth. It also has mothballed RMX facilities at Stirling, Inverkeithing and Newport on Tay.
- (c) Hanson's⁴⁰ activities consist of operational RMX facilities at Stirling and Cowdenbeath and closed sites at Leven, Kincardine, Dundee and Perth.
- (d) Lafarge Tarmac⁴¹ is a JV between Anglo American and Lafarge. Lafarge Tarmac's activities consist of operational aggregates facilities at Banffshire, Lossiemouth, Nairn, Inverness and Perth and operational asphalt facilities at Denny, Inverkeithing and Perth.
- (e) HCM's⁴² activities consist of operational RMX facilities at Elgin and Inverness and a mothballed facility at Nairn.

2.63 In north-east Scotland a substantial proportion of the supply of aggregates, RMX and asphalt comes from local competitors.

³⁷ Market investigation final report, paragraph 3.1..

³⁸ Aggregate Industries is a wholly-owned subsidiary of Holcim Ltd (Holcim Group), incorporated in Switzerland.

³⁹ Cemex's ultimate parent company is Cemex S.A.B de C.V. (Cemex Group), which is incorporated in Mexico.

⁴⁰ Hanson's ultimate parent company is Heidelberg Cement AG (Heidelberg), which is incorporated in Germany.

⁴¹ Anglo American and Lafarge concluded the Anglo-Lafarge JV on 7 January 2013, creating Lafarge Tarmac.

⁴² On 7 January 2013, Mittal Investments created Hope Construction Materials from the assets divested by Lafarge and Tarmac. It commenced operations with a cement works, a national network of RMX plants, aggregates quarries, rail depots and asphalt plants.

2.64 Prior to the transaction, Breedon was the largest supplier of these products across north-east Scotland and Aggregate Industries was the second largest. In 2012, the combined production of Breedon's sites and the acquired Aggregate Industries sites in north-east Scotland for each product was:

(a) aggregates: [20–30] per cent;⁴³

(b) RMX: [30–40] per cent;⁴⁴ and

(c) asphalt: [40–50] per cent.⁴⁵

2.65 The remaining share of supply is divided between the Majors and a large number of local suppliers, some of which have shares of supply that are larger than the Majors in specific areas in north-east Scotland (but many of which do not have a presence outside these specific areas).

2.66 In the following sections we consider the main suppliers for each product type in north-east Scotland, based on 2012 production data (excluding Aggregate Industries' Glensanda facility, as it does not currently serve north-east Scotland) for each of aggregates, RMX and asphalt.

Production of aggregates in north-east Scotland

2.67 Figure 5 shows the location of the aggregates production sites operated by Breedon, Aggregates Industries and their main competitors in north-east Scotland.

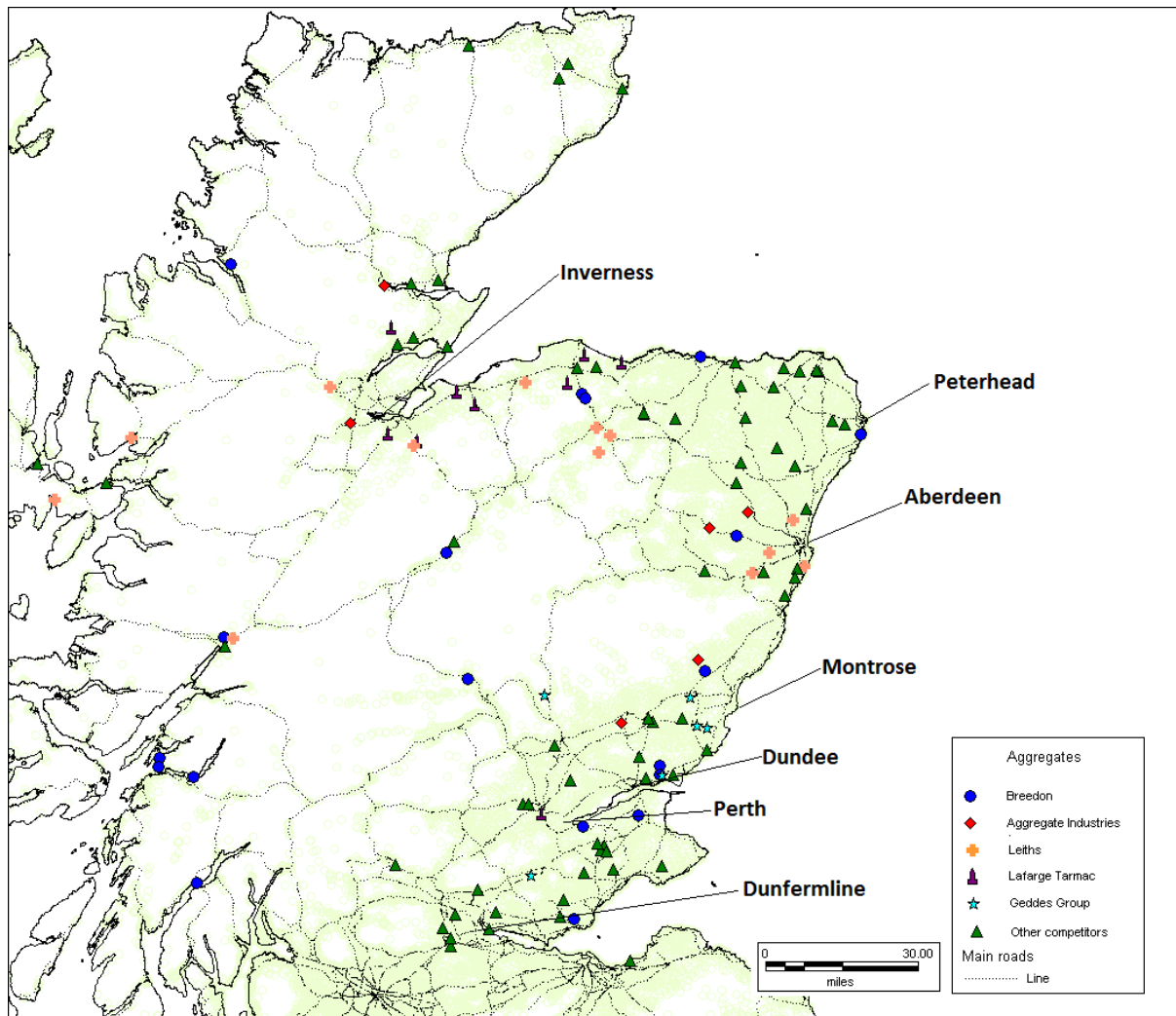
⁴³ Includes our estimates of secondary and recycled aggregate production.

⁴⁴ Includes our estimates of production through volumetric trucks and mobile plants.

⁴⁵ Includes our estimates of production through mobile plants.

FIGURE 5

Aggregate production sites* in north-east Scotland



Source: CC analysis.

*Aggregate Industries also had an aggregates quarry in Kemnay. This is not shown on the map as it is non-operational.

Note: Not all secondary and recycled aggregate sites are recorded.

2.68 The main aggregates production sites are located around the population centres of Inverness, Peterhead, Aberdeen and Dundee.

2.69 In Table 6 we set out the shares of supply of aggregates by company for all suppliers whose share in north-east Scotland exceeds 5 per cent.

TABLE 6 Primary and recycled aggregates production by supplier in north-east Scotland, 2012

Region	Total production	
	Kt	%
Breedon	[X]	[20–30]
Leiths	[X]	[10–20]
Geddes Group	[X]	[5–10]
Aggregate Industries	[X]	[5–10]
Lafarge Tarmac	[X]	[5–10]
Other	[X]	[40–50]
Total north-east Scotland	[X]	100

Source: CC analysis of Breedon, Aggregate Industries, third party and BDS data.

2.70 Even before the merger, Breedon was the largest producer of aggregates in north-east Scotland. Aggregate Industries was the fourth largest producer. Of the Majors, only Lafarge Tarmac supplied significant amounts of aggregates in north-east Scotland. The other significant producers of aggregates in north-east Scotland were:

- (a) Leiths, which has a strong presence around Aberdeen and Inverness. It is a large independent construction materials business based in Aberdeen but serving north-east Scotland. It produces aggregates, asphalt, RMX and supplies contract surfacing services.
- (b) Geddes Group, an independent construction materials business based in Arbroath (north of Dundee). Geddes Group operates seven quarries together with an asphalt plant and two RMX plants. It is active in contract surfacing and demolition activities and produces recycled aggregates at most of its quarries.

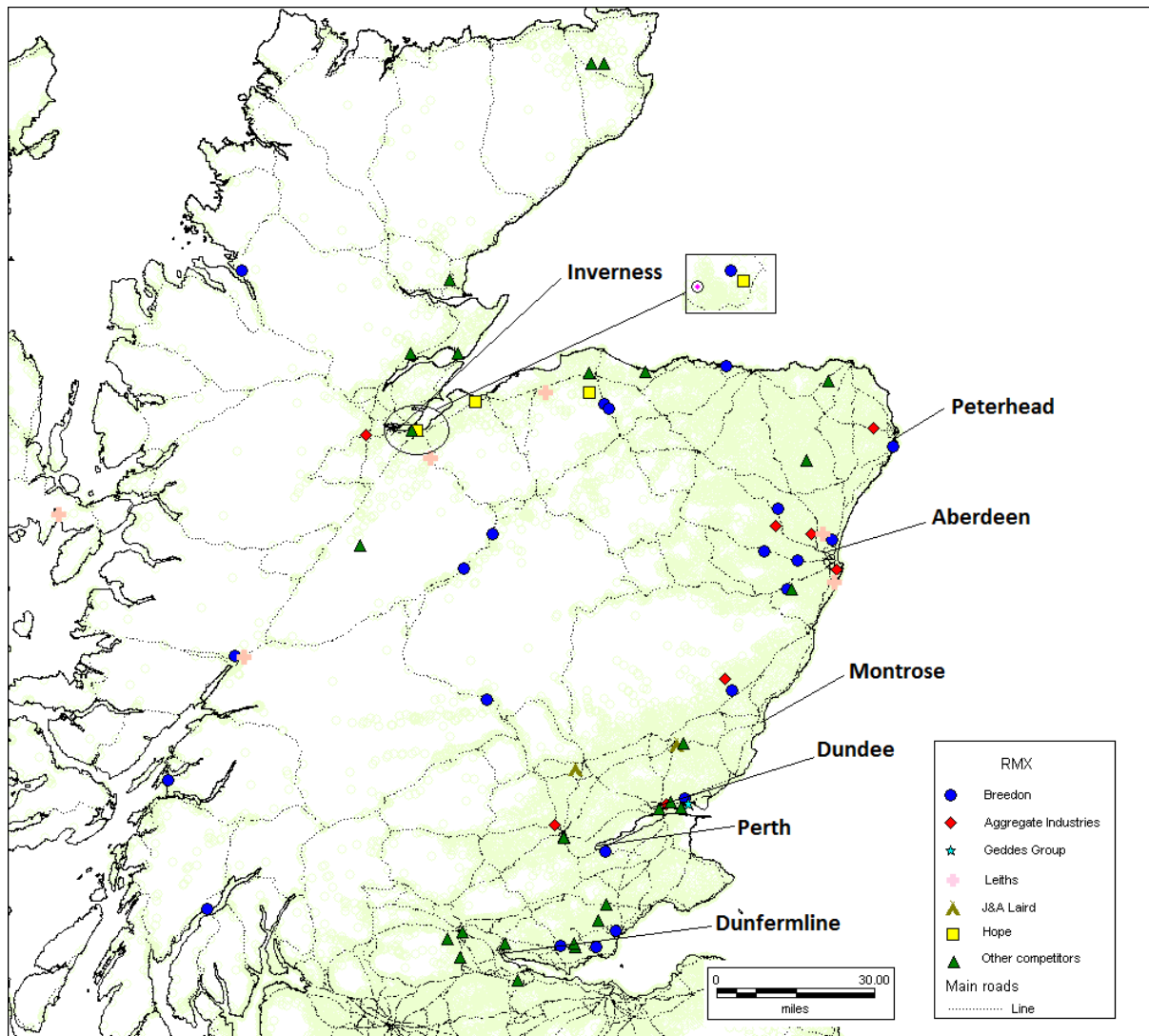
2.71 Other competitors that individually have a share of supply that is less than 5 per cent across north-east Scotland but that have a material role in a relevant local area are discussed further in Section 6.

Production of RMX in north-east Scotland

2.72 Figure 6 shows the locations of RMX production sites operated by Breedon, Aggregate Industries and their main competitors in north-east Scotland.

FIGURE 6

RMX production plants in north-east Scotland



Source: CC analysis.

2.73 As with aggregates, the main RMX production sites are located around the population centres of Inverness, Peterhead, Aberdeen and Dundee.

2.74 Breedon told us that nearly all of its competitors in RMX were vertically integrated with aggregates production, with the exception of firms such as HCM, Spot-mix, PCP (Accumix) and Hanson which were not active in aggregates in Scotland.

2.75 In Table 7 we set out the shares of production of RMX in north-east Scotland by company.

TABLE 7 RMX production by supplier in north-east Scotland, 2012

Region	Total production	
	'000 m3	%
Breedon	[X]	[20–30]
Aggregate Industries	[X]	[10–20]
HCM	[X]	[5–10]
Skene Group	[X]	[5–10]
Laird Brothers	[X]	[5–10]
Leiths	[X]	[5–10]
Geddes Group	[X]	[0–5]
Other	[X]	[30–40]
Total north-east Scotland	[X]	100

Source: CC analysis of Breedon, Aggregate Industries, third party and BDS data.

2.76 Even before the merger, Breedon was the largest producer of RMX in north-east Scotland. Aggregate Industries was the second largest producer. Of the Majors, HCM produces a significant amount of RMX in north-east Scotland. Cemex and Hanson produce smaller amounts. Skene Group and Laird Brothers are local suppliers producing significant amounts of RMX (in addition to Leiths and Geddes Group, both described in paragraph 2.70(a)):

(a) Skene Group is a medium-sized independent construction materials business focused on Fife and Tayside. It operates two quarries, two RMX plants and a blockworks in Fife.

(b) Laird Brothers is a family-run company originating in Forfar. It operates two quarries and two RMX plants serving the Tayside, south Aberdeenshire and Perthshire markets.

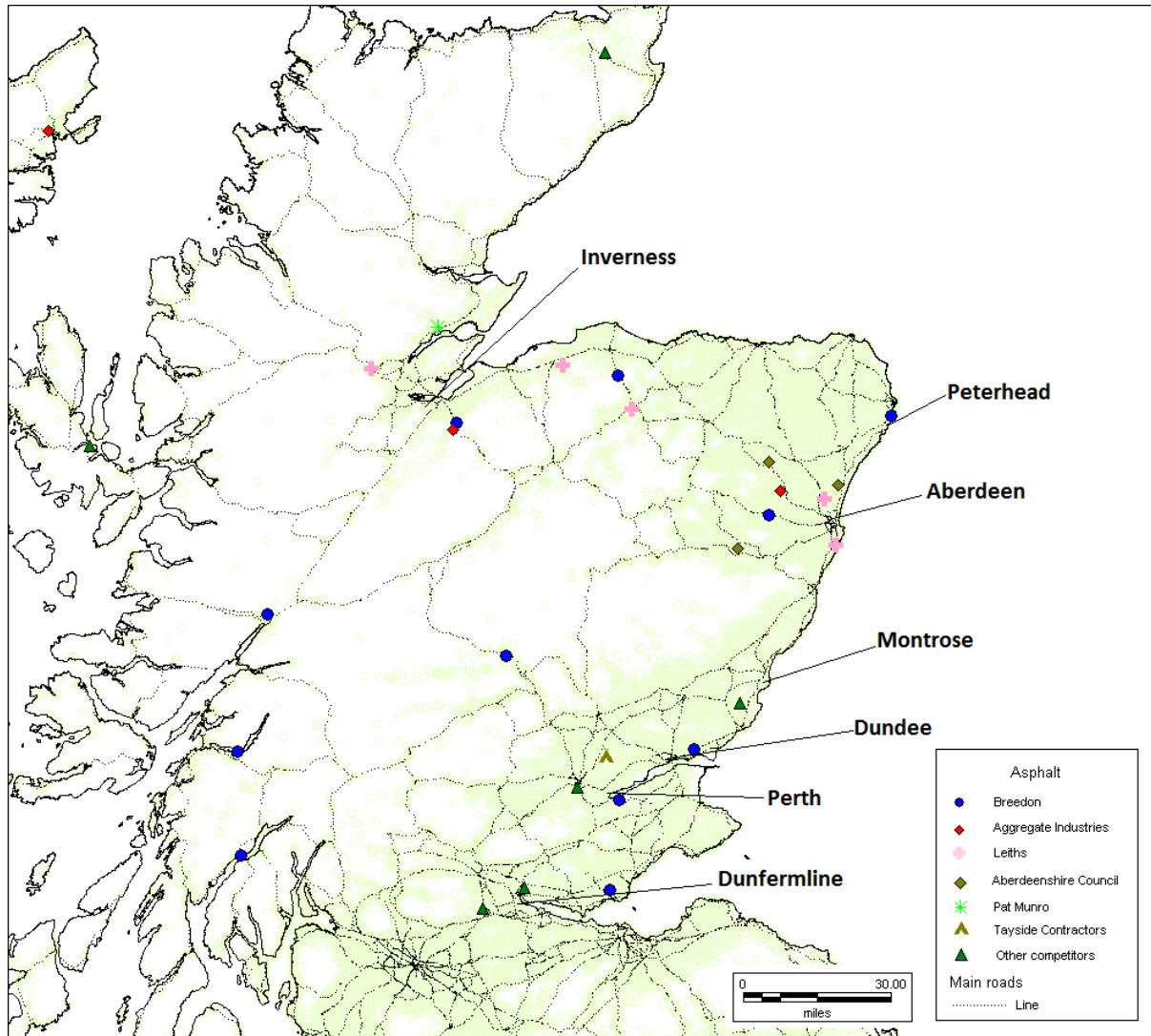
2.77 Other competitors that individually have a share of supply that is less than 5 per cent across north-east Scotland but that have a material role in a relevant local area are discussed further in Section 6.

Production of asphalt in north-east Scotland

2.78 Figure 7 shows the locations of the asphalt production sites operated by Breedon, Aggregate Industries and their main competitors in north-east Scotland.

FIGURE 7

Asphalt production sites in north-east Scotland



Source: CC analysis.

2.79 As with aggregates and RMX, the main asphalt production sites are located around the population centres of Inverness, Peterhead, Aberdeen and Dundee.

2.80 Breedon told us that nearly all of its asphalt competitors were vertically integrated with aggregates production, with the exception of Colas which had a site plant at Inverness Airport.

2.81 In Table 8 we set out the shares of supply of asphalt in north-east Scotland by company.

TABLE 8 **Asphalt production by supplier in north-east Scotland, 2012**

<i>Region</i>	<i>Total production</i>	
	<i>kt</i>	<i>%</i>
Breedon	[X]	[40–50]
Leiths	[X]	[10–20]
Aberdeenshire Council	[X]	[5–10]
Tayside Contracts	[X]	[5–10]
Pat Munro Ltd	[X]	[5–10]
Aggregate Industries	[X]	[5–10]
Tillicoultry Quarries Ltd	[X]	[0–5]
Other	[X]	[5–10]
Total north-east Scotland	[X]	100

Source: CC analysis of Breedon, Aggregate Industries, third party and BDS data.

2.82 Breedon is the largest supplier of asphalt across north-east Scotland. Leiths (described in paragraph 2.70(a)) is the second largest producer, with a particular focus on the Aberdeen and Inverness areas.

2.83 Tillicoultry Quarries Ltd is a medium-sized operator primarily operating in the Central Belt, but also supplying materials further north into Fife and Tayside. It operates four hard rock quarries located at Dunfermline, Tillicoultry, Denny and Harthill, and has five asphalt plants located at Kincardine, Denny, Harthill, Clydebridge and Rutherglen. It also has three RMX plants located at Tulliallan, Kincardine and Denny.

2.84 Aberdeenshire and Tayside Councils are each large producers of asphalt in their specific areas:

(a) Aberdeenshire Council owns and operates three quarries and three asphalt plants that supply both its own in-house downstream organization and the

external market around Aberdeen and throughout Aberdeenshire. The council also produces a small amount of recycled aggregates through its network of recycling centres.

(b) Tayside Contracts⁴⁶ is a local authority contracting organization, which leases and operates Collace quarry, including an asphalt plant located in the quarry. It supplies its own contract surfacing operations as well as the general market throughout the region. It also operates five recycling centres, which handle construction waste and produce recycled aggregates.

2.85 Pat Munro (Alness) Ltd is a privately-owned contractor based in Alness in the Highlands of Scotland. It owns and operates quarries, and manufactures asphalt and RMX. It currently has over [REDACTED] million tonnes (Mt) of reserves and supplies some [REDACTED] tonnes of aggregates a year.

2.86 Other competitors that individually have a share of supply that is less than 5 per cent across north-east Scotland but that have a material role in a relevant local area are discussed further in Section 6.

3. The merger and the relevant merger situation

Outline of merger situation

3.1 Breedon told us that [REDACTED].

3.2 [REDACTED]⁴⁷

3.3 [REDACTED]

3.4 [REDACTED]

⁴⁶ Established by its three constituent members, namely Angus Council, Dundee City Council and Perth & Kinross Council.

⁴⁷ [REDACTED]

- 3.5 Aggregate Industries told us the contract surfacing business was ‘a peripatetic activity, [REDACTED].
- 3.6 A £34 million cash offer, which met Aggregate Industries’ asset disposal requirement of [REDACTED], was ultimately accepted. [REDACTED] In addition, [REDACTED].
- 3.7 As a result of the Sale and Purchase Agreement (SPA) executed on 10 April 2013 between Aggregate Industries, Breedon and Breedon Scotland, Breedon Scotland acquired control over the sites, other assets and relevant supply contracts (see Figure 2 and paragraphs 2.12 and 2.13 for a description of the acquired sites).
- 3.8 Conditional contracts were exchanged on 10 April 2013 and at the same time Breedon announced a share placing of £61 million to fund the £34 million acquisition⁴⁸ from Aggregate Industries, for a separate £19.4 million acquisition of certain quarrying assets from Marshall Mono Limited [REDACTED].⁴⁹
- 3.9 The share placement was to be on AIM. The acquisition and share placing were conditional upon, among other things, shareholder approval which was given at an Extraordinary General Meeting held on 26 April 2013. Completion took place at close of business on 30 April 2013.⁵⁰
- 3.10 [REDACTED]^{51,52,53}

⁴⁸ [REDACTED]

⁴⁹ Breedon initial submission, p8, paragraph 3.4.

⁵⁰ ibid, p8, paragraphs 3.4 & 3.5.

⁵¹ Leiths purchased [REDACTED] per cent of Alexander Ross in early 2011.

⁵² [REDACTED]

⁵³ [REDACTED]

The rationale for the merger

- 3.11 Breedon told us that the acquisition of operations in north-east Scotland and the Hebrides geographically complement its other activities in the region, offering integration with its existing businesses and expanded geographic coverage. They also complement Breedon's strategy of growing the business both organically and through earnings-enhancing acquisitions at the fragmented, smaller end of the heavy building materials industry, and will assist it in challenging the Majors in GB.⁵⁴ Breedon intends to invest £[REDACTED] million in capital expenditure (capex) in the acquired operations over the next three years, with £[REDACTED] million capex authorized to date.
- 3.12 Breedon also told us that it had a lean management structure, with low overheads, which it believed would enable it to operate the business more profitably than Aggregate Industries. It estimated that the acquisition would increase Breedon Scotland's revenues by over [REDACTED] per cent and its EBITDA by around [REDACTED] per cent. The acquisition would significantly expand its asset base. It would more than double Breedon's mineral reserves (mainly at the Tom's Forest quarry) to more than 400 Mt.
- 3.13 Aggregate Industries told us the decision to sell its operations in north Scotland was taken following an internal review process (October/November 2012) that identified the potential for [REDACTED]. Aggregate Industries told us that the region also suffered inconsistent demand [REDACTED]. We discuss further the performance of Aggregate Industries' north Scottish operations in paragraphs 5.5 to 5.7.

Jurisdiction

- 3.14 Under section 35 of the Enterprise Act 2002 (the Act) and our terms of reference (see Appendix A), we are required to report on whether a relevant merger situation has been created.

⁵⁴ [Breedon initial submission](#), p9,

- 3.15 Section 23 of the Act provides that a relevant merger situation is created if:
- (a) two or more enterprises have ceased to be distinct within the statutory period for reference; and
 - (b) either the share of supply test or the turnover test specified in that section of the Act is satisfied.

Enterprises ceasing to be distinct

- 3.16 The Act defines an 'enterprise' as 'the activities or part of the activities of a business'.⁵⁵ The CC's Merger Assessment Guidelines (the Guidelines)⁵⁶ state that in making a judgement as to whether or not the activities of a business, or part of a business, constitute an enterprise under the Act, the Authorities will have regard to the substance of the arrangement under consideration, rather than merely its legal form. An enterprise may comprise any number of components, most commonly including the assets and records needed to carry on the business, together with the benefit of existing contracts and/or goodwill. In some cases, the transfer of physical assets alone may be sufficient to constitute an enterprise, for example where the facilities or site transferred enable a particular business activity to be continued.
- 3.17 We are satisfied that Breedon is an enterprise for the purposes of the Act because, as we have summarized in paragraphs 2.1 to 2.4, it carries on business in the UK. We consider in the following paragraph whether the assets and other elements that were acquired by Breedon under the SPA constitute an enterprise within the meaning of the Act.

⁵⁵ Section 129(1) of the Act.

⁵⁶ CC2, paragraphs 3.2.2–3.2.4.

- 3.18 Under the SPA between Aggregate Industries, Breedon and Breedon Scotland, Breedon Scotland acquired the business⁵⁷ together with certain Scottish assets of Aggregate Industries which included: the fixed and current assets, the goodwill, all the information, know-how and technique (IT system), the benefit of business contracts and most of the employees previously employed by Aggregate Industries in north Scotland and the contracts under Transfer of Undertakings (Protection of Employment) Regulations 2006 (TUPE) arrangements. We refer to this package (for all the sites that transferred to Breedon on completion) as ‘the acquired operations’.
- 3.19 Although the transaction did not include senior management, certain administrative staff or a number of support services, we note that since the acquisition Breedon Scotland has been operating the acquired operations as a going concern.
- 3.20 Having regard to the assets that were acquired as referred to in paragraph 3.18, we are satisfied that the acquired operations constitute an enterprise.
- 3.21 We are satisfied that Breedon and the acquired operations have ceased to be distinct as a result of the transaction described in paragraphs 3.7 to 3.9.

Turnover test/share of supply test

- 3.22 The share of supply test is satisfied if the merger creates or increases a share of at least one-quarter in the supply of goods or services of any description in the UK, or in a substantial part of the UK.⁵⁸ The concept of goods or services of ‘any description’ is broad. For the purpose of the jurisdiction test in section 23 of the Act, the CC is able to apply such criterion or such combination of criteria as it considers appropriate. The share of supply used for the purpose of the test is different from a market share, and

⁵⁷ Business is defined in the Sale and Purchase Agreement as the operational activities carried on by the Seller Group at the properties before and up to the Effective Time.

⁵⁸ [Section 23\(2\)\(b\)](#) of the Act.

goods or services to which the share of supply test is applied need not amount to the market defined for the economic analysis.⁵⁹

3.23 Breedon's overall share of supply in GB is estimated at 3 per cent for aggregates, 2 per cent for RMX and 5.5 per cent for asphalt.⁶⁰ Following the acquisition, its share of supply in the UK as a whole would therefore be well below 25 per cent. Consequently, we have considered whether the share of supply test is satisfied in respect of a substantial part of the UK.

3.24 Breedon and the acquired operations both serve customers in Grampian, Tayside, Fife and the Highlands,⁶¹ which together form north-east Scotland. In the House of Lords judgment in *R v MMC and another ex parte South Yorkshire Ltd*,⁶² it was held that for a given area to be a substantial part of the UK it must be 'of such size, character and importance as to make it worth consideration for the purposes of the Act'. The case was concerned with the share of the supply test under the Fair Trading Act 1973; however, the same principles will apply to the share of supply test under the Act. We therefore first considered whether the area we have referred to as north-east Scotland is a substantial part of the UK.

3.25 When doing so, we considered the population of the area. The total populations of Grampian, Tayside, Fife and the Highlands are estimated to be: 526,000, 410,000, 365,000 and 232,000 respectively. Together, these regions account for approximately 1.5 million people or 29 per cent of the Scottish population.⁶³

⁵⁹ CC2, paragraph 3.3.5.

⁶⁰ Breedon, based on the CC's market investigation for aggregates and RMX. BDS estimates for asphalt.

⁶¹ This refers to geographic areas as defined by the Office for National Statistics. We exclude the Hebrides from our definition of north-east Scotland. The population of the Hebrides is just below 50,000.

⁶² [1993] 1 WLR, p23.

⁶³ Source: ONS, 2011 census.

3.26 Having regard to the above factors, we considered that north-east Scotland is a substantial part of the UK. However, we also considered that each of its four component parts referred to in paragraph 3.24 would also each separately constitute a substantial part of the UK, having regard to the size of the population.⁶⁴

3.27 In applying the share of supply test under the Act, we examined Breedon's share of supply of each of the relevant products (aggregates, RMX, and asphalt) collectively for the whole of north-east Scotland and for each of the four areas which make up north-east Scotland. This is shown in Table 9.

TABLE 9 **Shares of supply in north-east Scotland, 2012**

	<i>per cent</i>		
	<i>Aggregates</i>	<i>RMX</i>	<i>Asphalt</i>
<i>Post-merger</i>			
Grampian	[30–40]	[50–60]	[30–40]
East Highlands	[10–20]	[20–30]	[40–50]
Tayside	[20–30]	[10–20]	[40–50]
Fife	[30–40]	[30–40]	[70–80]
Total north-east Scotland	[20–30]	[30–40]	[40–50]
<i>Breedon pre-merger</i>			
Grampian	[20–30]	[30–40]	[20–30]
East Highlands	[5–10]	[10–20]	[20–30]
Tayside	[10–20]	[10–20]	[40–50]
Fife	[30–40]	[30–40]	[70–80]
Total north-east Scotland	[20–30]	[20–30]	[40–50]

Source: CC analysis of Breedon, Aggregate Industries, third party and BDS data.

3.28 Post-merger Breedon will have a share of supply greater than one-quarter for each of the relevant products (aggregates, RMX and asphalt) in north-east Scotland. On this basis alone, the share of supply test is met. We note also that post-merger Breedon will have a share of supply of greater than one-quarter for the relevant products in the majority of the areas of north-east Scotland, as set out in Table 9 above.

⁶⁴ In the CC's merger inquiry report [Tesco plc/Co-operative Group \(CWS\) Limited store at Uxbridge Road, Slough](#), published on 28 November 2007, the population of Slough being 120,000 was considered to constitute a substantial part of the UK for the purposes of the Act.

3.29 Having met the share of supply test for the reasons set out in paragraph 3.28 above, we do not need to consider whether the turnover test in section 23(1)(b) of the Act is met.

Timing of the reference

3.30 Under section 24 of the Act, a reference of a completed merger may be made if two or more enterprises have ceased to be distinct no more than four months before the date of the reference. The four-month period starts to run from the date on which the enterprises cease to be distinct,⁶⁵ or the date on which notice of material facts about the completion of the transaction has been given to the OFT or made public.

3.31 As the transaction was completed on 30 April 2013, the original statutory deadline was 30 August 2013. However, the OFT stopped the statutory clock several times. Under section 25(1) of the Act, the statutory deadline was extended by the OFT to 22 November 2013. The reference was made to the CC on 24 September 2013 and was therefore made in time.

Provisional conclusions on relevant merger situation

3.32 We therefore provisionally conclude that the jurisdiction test under the Act is satisfied and a relevant merger situation has been created.

4. Market definition

Analytical framework

4.1 The purpose of market definition is to provide a framework for the CC's analysis of the competitive effects of the merger. The relevant market (or markets) is the market within which the merger may give rise to an SLC and contains the most significant competitive alternatives available to the customers of the merged companies.

⁶⁵ As defined in [section 27](#) of the Act.

However, market definition is not an end in itself, and the boundaries of the market do not determine the outcome of the CC's analysis of the competitive effects of the merger in a mechanistic way. The CC may also take into account constraints outside the relevant market (or markets).⁶⁶

4.2 As explained in paragraph 6.39, our assessment of the competitive effects of the merger focuses on the likelihood of unilateral effects in local areas of north-east Scotland that were served by both Breedon and Aggregate Industries prior to the transaction. Our approach to market definition and the competitive effects of the merger takes into account the heterogeneity of supply and demand conditions across the various areas concerned.

4.3 In line with normal practice, we examine in this section two dimensions of market definition:

- (a) the product dimension (paragraphs 4.4 to 4.44); and
- (b) the geographic dimension (paragraphs 4.45 to 4.72).

Product market

4.4 The assessment of the relevant product market starts with the product groups of the merging parties, in this case aggregates, RMX, asphalt and contract surfacing services.⁶⁷ Using the theoretical framework of the hypothetical monopolist test, we qualitatively explore the scope for substitution between products, either by customers (demand-side) or by suppliers (supply-side) in response to a small but significant price rise. We examine properties, usage and production processes in order to assess the extent of the demand- and the supply-side substitutability between products (further details on the analytical framework applied for each product are set

⁶⁶ CC2, paragraphs 5.2.1 & 5.2.2.

⁶⁷ We do not need to explore the market in which the acquired operations supplied concrete blocks, as Breedon does not supply those products and we have received no evidence to suggest that any of the products supplied by Breedon is substitutable for concrete blocks.

out in paragraphs 4.5 and 4.6, 4.19, and 4.28 below). We also considered the views of the main and third parties regarding the appropriate product market definition.

Aggregates

4.5 For aggregates, we considered the following issues as part of our assessment of the relevant product market:

- (a) whether different types (eg sand and gravel, crushed rock) and grades (eg coarse, fine, etc) of primary aggregates are part of the same market;
- (b) whether recycled aggregates⁶⁸ should be included in the relevant market;
- (c) whether internal sales of aggregates to suppliers' downstream operations (RMX, asphalt or concrete block production) should be included in the relevant market; and
- (d) whether decorative aggregates are part of the same market as aggregates used in general construction or in the production of other construction materials (eg RMX, asphalt).

4.6 We first examined how various types and grades of aggregates (including recycled aggregates) are used in order to understand demand-side substitutability. In particular, we obtained evidence on the extent to which they are used for the production of asphalt or RMX. We then considered whether we should include both internal and external sales of primary aggregates in defining the product market. Finally, we assessed how much scope there was to switch production between different grades of aggregates in order to understand supply-side substitutability.

Views of parties

4.7 Breedon told us that most producers of RMX and asphalt were vertically integrated and self-supplied aggregates and that the relevant market for aggregates should only

⁶⁸ We do not consider secondary aggregates as they are not generally produced in Scotland

include external sales of aggregates, which were primarily sold for general construction purposes. It argued that secondary and recycled aggregates were substitutes for primary aggregates (produced from both crushed rocks and sand and gravel) for such purposes and that it could be difficult to make clear distinctions between primary and secondary/recycled aggregates. In support of its view that recycled aggregates were a strong competitive constraint on primary aggregates, it provided estimates of their share of supply which ranged from 25 per cent for the whole of Scotland to 38 per cent in the Aberdeen area. It also provided examples of contracts it had lost to competitors supplying recycled aggregates [REDACTED] and extracts from board papers [REDACTED] was mentioned.

- 4.8 Aggregate Industries made similar comments to those of Breedon about the substitutability of secondary and recycled aggregates for primary aggregates. It commented that it was straightforward to switch production between grades of primary aggregates and that this was done on a daily basis with minimal costs involved in making modifications.
- 4.9 Other third parties (Leiths, RJ McLeod, Balfour Beatty, [REDACTED], Aberdeenshire Council, Pat Munro) considered that crushed and sand and gravel aggregates were generally substitutable, although for certain specifications of aggregates or for certain applications it might not be the case, and Lafarge Tarmac commented that in asphalt production crushed rock or recycled aggregates were preferred owing to their greater granularity.
- 4.10 Similarly, the evidence we received from competitors and customers suggested that recycled aggregates were generally substitutable for primary aggregates, provided they meet the required specification. There were, however, examples of applications for which they were not suitable, such as structural concrete and wearing course

asphalt products. Examples of issues mentioned to us included the following: the risks of contamination from deleterious materials meant that recycled aggregates could only be used for low-grade concrete and basal asphalt layers (Leiths); [REDACTED]; recycled aggregates might not be appropriate for certain parameters of concrete strength or certain project specifications (RJ McLeod); users would not necessarily know the content of recycled aggregates and might therefore not want to use them for concrete production (a builder's merchant, [REDACTED]); there could be some resistance to their use by clients (Balfour Beatty); and clients defined the specification for the aggregates that could be used ([REDACTED]).

- 4.11 In our survey of the main parties' smaller customers in north-east Scotland, we asked respondents whether they could have switched from primary aggregates to secondary or recycled aggregates. Of the 102 surveyed customers⁶⁹ who purchased primary aggregates from the parties' sites, 48 per cent said that they could not have used secondary or recycled aggregates instead of primary aggregates, and 46 per cent said they could have used secondary/recycled on some occasions; only 1 per cent said they could have changed on every occasion.

Our assessment

- 4.12 Based on the evidence we received from customers and suppliers (summarized in paragraphs 4.7 to 4.11) and our analysis (set out in detail in Appendix C, paragraphs 2 to 16 and 20 to 28), we reached the view that:
- (a) There is limited or no demand-side substitutability between specific aggregate products (eg fills vs single-size graded) for particular end-uses in general construction, but there appears to be substantial scope for supply-side substitutability.

⁶⁹ Details of the survey can be found in Appendix A, paragraph 6. This survey question was based on those that indicated that they specified which aggregates they wanted from their supplier. Some caution needs to be heeded when interpreting these results as all respondents to the survey are selected because they buy from either Breedon or Aggregate Industries' sites which sell very limited volumes of recycled aggregates.

(b) Sand and gravel and crushed rock aggregates are generally substitutable on the demand side, and, where they can be substituted, the extent to which that can occur will depend on availability. An exception to this appears to be the use of aggregates in the production of asphalt, where the majority of the input tends to be crushed rock rather than sand and gravel (sands are used as fine aggregates in asphalt).

(c) Recycled aggregates can be used as a substitute for primary aggregates in sub-bases and fills applications (which are estimated to account for around half of all aggregates volumes GB-wide), but generally not in other applications.

4.13 We provisionally decided to include all types of primary aggregates supplied to all construction end-uses in the same product market.

4.14 We provisionally decided that on balance, because recycled aggregates could be substituted for primary aggregates for a substantial proportion of applications, they should also be included in the same market as primary aggregates. We recognized that the extent to which recycled aggregates would exert a constraint on Breedon's competitive behaviour would vary considerably between areas, depending on the level of demolition work taking place, and therefore the local availability of recycled aggregates. The extent of this constraint also varies between customers, as recycled aggregates are not suitable for all end-uses. These issues are considered further in our competitive assessment.

4.15 We also considered whether internal sales of primary aggregates to downstream operations (generally for the production of RMX and asphalt) should be included in the market definition. The detail of our analysis is set out in Appendix C, paragraphs 29 to 39. We noted the following points:

- (a) Our analysis showed that the majority of sales of aggregates by suppliers in the north-east Scotland are external sales. Breedon's and [X] sales data indicates that those types of aggregates which are used in the production of asphalt and RMX (and possibly other value-added products and other applications such as pipe bedding) are supplied principally internally, although there are some external sales.
- (b) Breedon argued that with excess capacity in the industry, producers did not need to switch away from internal sales to increase their supplies to the external market. It also argued that if internal sales were included in the market, undue weight would be given to those who only supplied their own downstream operations and were therefore not competitors in the supply of aggregates to external customers.
- (c) The principal reason to self-supply aggregates appears to be strategic, whether it is to ensure continuity of supply, quality or other reasons. We were told that, where economic to do so and depending on availability, a vertically-integrated company would generally favour internally supplied inputs.
- (d) Other than strategic considerations, there do not appear to be any economic or technical (product specification) reasons why internal and external sales of aggregates would not be substituted in response to a price rise if it were profitable to do so.

4.16 We provisionally concluded that on balance both internal and external sales of primary aggregates should be included in the product market because it appears that there is no technical reason to prevent suppliers from switching between internal and external sales. For these reasons, in principle suppliers would be able and would have more of an incentive to substitute between internal and external sales in response to a small but significant increase in the external price of aggregates. We

took account of the extent to which internal sales pose a competitive constraint in practice in our competitive assessment.

4.17 Finally, we considered whether aggregates that are used for their colour and appearance, referred to as decorative aggregates (see paragraph 2.26(d)), should be in the same market as other types of aggregates:

(a) Lafarge Tarmac told us that the colour and shape, and therefore the source of the decorative aggregate, was important.

(b) Based on Appendix C, Table 9, we note that decorative aggregates are produced by a more limited number of quarries than the number of quarries in north Scotland producing other types of aggregates used in construction.

(c) Aggregate Industries told us that while decorative aggregates were substitutes for other aggregates, substitution did not work the other way around, as decorative aggregates were used where particular colourings or aesthetics were required.

[✂]

(d) Breedon submitted that some recycled aggregates, if they were of suitable appearance, could be used in decorative applications (eg crushed slate and crushed brick).

(e) Evidence shows that the price of decorative aggregates is substantially higher than the price of other types of primary aggregates (see Appendix H for our analysis; and comments made by third parties, eg Leiths⁷⁰).

4.18 Therefore we provisionally concluded that there was limited demand- and supply-side substitutability between decorative aggregates and other types of primary aggregates and that decorative aggregates were in a separate product market.

⁷⁰ [Hearing summary](#), paragraph 15.

RMX

- 4.19 We considered: whether product specification could have an effect on the substitutability of different types of RMX; the cost of supplying RMX from a fixed plant compared with a mobile plant; and whether fixed plants were capable of producing different types of RMX. The evidence is set out in Appendix C, paragraphs 40 to 46. We also considered the conclusions reached by the CC in its aggregates, cement and ready-mix concrete market investigation (the market investigation), as set out in paragraphs 5.96 to 5.102 of its final report.⁷¹

Views of parties

- 4.20 Breedon told us that the market for RMX included all grades from fixed and mobile plants as well as those supplied in specialist volumetric trucks. It noted that the CC's provisional findings for the market investigation⁷² suggested that there was evidence that volumetric trucks were used in small projects and evidence of use on some larger projects, although it admitted that it had limited understanding of any technical limitations that may be associated with volumetric trucks, as it did not operate any itself. It also believed there was a degree of substitution between products where the customer could cast in place of using RMX or purchase precast products.⁷³
- 4.21 Aggregate Industries noted that from a supply-side point of view, all of the divested RMX plants were capable of manufacturing all standard RMX mixes.
- 4.22 Accumix operates a volumetric RMX business near Inverness and explained that on price it would lose to most of its competitors, but was successful where either volume was small, exact measures were difficult, or others could not deliver at the required

⁷¹ www.competition-commission.org.uk/assets/competitioncommission/docs/2012/aggregates-cement-and-ready-mix-concrete/140114_aggregates_final_report.pdf.

⁷² www.competition-commission.org.uk/assets/competitioncommission/docs/2012/aggregates-cement-and-ready-mix-concrete/130523_provisional_findings_report.pdf.

⁷³ Breedon initial submission, paragraph 4.25, p17.

time. It saw its main competitors being operators of static sites, such as HCM, Breedon, Aggregate Industries, Leiths, etc.

4.23 RJ McLeod told us that volumetric trucks for the supply of RMX were not suitable for large volumes or for technologically demanding projects that required strict quality control. It explained that it was more difficult to control the quality of the RMX produced with a volumetric truck. It added that volumetric trucks were good for areas where transport was an issue, such as the islands, where it had used volumetric trucks itself.

4.24 Another customer, [X], told us that whilst volumetric trucks could mix small amounts of RMX as required, its project required larger quantities than could be supplied by a volumetric mixer.⁷⁴

4.25 Transport Scotland said that generally volumetric trucks were used for most of its RMX contracts in Scotland, but batching plants were also often created on the larger contracts to allow for the mixing of the concrete on site.

Our assessment

4.26 On the basis of the evidence we received from customers and suppliers (summarized in paragraphs 4.20 to 4.25) and of our analysis, we reached the view that:

- (a) There is significant supply-side substitutability between different specifications of RMX as plants routinely switch to produce different specifications of RMX; customers can substitute between different specifications of RMX depending on their needs (see analysis in Appendix C, paragraphs 44 to 46).
- (b) Volumetric trucks can be substitutes to fixed plants for smaller projects, and they may possibly be serving different types of projects or customers, such as more

⁷⁴ [Hearing summary](#), paragraph 13.

remote projects. Third parties have suggested that there may be quality issues with RMX supplied by volumetric trucks. Nevertheless the market investigation report outlined evidence of a constraint posed by volumetric trucks on fixed plants (see paragraph 5.101 and 5.102).

(c) Mobile plants are substitutes to fixed plants for larger projects (in terms of volume, duration, etc) (see analysis in Appendix C, paragraphs 43 and 44 and Table 15).

4.27 Therefore, we provisionally concluded that all types of RMX should be included in the same product market, including RMX supplied by fixed, mobile plants and volumetric trucks. We took account of possibly differing competitive constraints that the different types of RMX production units pose as part of our competitive assessment.

Asphalt

4.28 We considered the demand and supply-side substitutability between different specifications of asphalt, and between asphalts produced at different types of plant (ie fixed plant vs mobile plant).

Views of parties

4.29 Breedon told us that the market for asphalt should contain all grades from fixed and mobile plants.⁷⁵ It also believed that asphalt competed with RMX products that were produced to supply the same end-use, as well as concrete block paving products that were currently favoured in many applications (as they had a perceived higher aesthetic value).⁷⁶

4.30 Breedon's view was that special types of asphalt (such as those with polymers or additives) were substitutable with non-polymer asphalt in that they performed the

⁷⁵ Breedon response to issues statement, paragraph 2.18, p13.

⁷⁶ Breedon initial submission, paragraph 4.31, p19.

same or similar end-uses and producers could switch easily with little cost or risk.⁷⁷

Breedon also submitted that asphalt for road sub-surfaces increasingly used reclaimed asphalt.⁷⁸

- 4.31 Aggregate Industries submitted that switching aggregates in the production of asphalt was not uncommon, and in some cases would be decided by the customer. It noted that quite often, recycled and secondary materials would be provided by the customer (for instance, asphalt planings). It estimated that [REDACTED].
- 4.32 Aggregate Industries told us that mobile asphalt plants could be used for large asphalt contracts [REDACTED].
- 4.33 Lafarge Tarmac explained that while it had not used a mobile asphalt plant in north Scotland, it did have the capability to move one anywhere in the country.
- 4.34 Aberdeen City Council told us that different quarries made different proprietary mixes, so it sometimes chose a specific quarry due to the specific material that it wanted. Breedon made a high bitumen content small chip-sized surfacing material that was very hard wearing. Aberdeen City Council used this for very thin overlays on housing estates, and whilst Leiths produced a similar mix, it was not so tightly bound and Aberdeen City Council felt that it would not fare so well in the harsher weather.
- 4.35 Transport Scotland told us that for small asphalt repairs, mobile facilities in the form of 'hot boxes' were used. The majority of blacktop material used on major resurfacing projects was transported from the quarry to the site.

⁷⁷ [Breedon response to issues statement](#), paragraph 2.19, p13.

⁷⁸ Reclaimed asphalt can comprise millings, recycled asphalt planings, return loads and offcuts. See [Breedon response to issues statement](#), paragraph 1.27, p8.

- 4.36 RJ McLeod told us that it would only use mobile asphalt plants for larger projects of a value of over £20 million. A similar comment was made by [X], which said that mobile asphalt plants would only be suitable for contracts requiring at least 40,000 tonnes of asphalt (eg if a motorway was resurfaced).

Our assessment

- 4.37 We obtained from Breedon the material composition of different types of asphalt it produces and obtained evidence from Breedon and other relevant parties on the substitutability between fixed and mobile plants. This evidence is presented in Appendix C, paragraphs 47 to 55.
- 4.38 On the basis of the evidence we received from customers and suppliers (summarized in paragraphs 4.29 to 4.36), we reached the view that:
- (a) there is a single market for all specifications of asphalt as there is significant supply-side substitutability; and
 - (b) mobile plants or site plants are substitutes to fixed plants for larger projects.
- 4.39 Therefore, we provisionally concluded that all types of asphalt should be included in the same product market, including asphalt supplied by fixed and mobile plants.

Contract surfacing services

- 4.40 As explained in paragraph 2.44, contract surfacing services refer to the application of asphalt that is used to surface or resurface roads and other paved areas. Breedon submitted to the OFT that the relevant market was the supply of services for contract surfacing, where the service provider procured asphalt, RMX or aggregates, and used these materials for applications such as building or surfacing roads, car parks, footpaths and pavements. This definition was adopted by the OFT in its decision to refer the transaction to us.

- 4.41 In a previous OFT decision (Aggregate Industries/Foster Yeoman⁷⁹), the OFT considered the market for the supply of contract surfacing services (referred to as road surfacing services in that decision).
- 4.42 None of the parties we talked to suggested that the market should be defined differently, although it was argued by Aberdeen City Council that vertical integration was a significant advantage to a company wanting to undertake surfacing contracts. This position was, however, not supported by other evidence, which is set out in detail in our competitive assessment (see paragraphs 6.238 to 6.249). In particular, we have seen ample evidence that suppliers of contract surfacing services are able to compete effectively even if they do not produce asphalt or other materials in-house.
- 4.43 We therefore saw no reason to take a different position from that previously adopted by the OFT and provisionally concluded that the supply of asphalt or any other relevant material used for surfacing roads and other paved areas and the surfacing services themselves were in separate markets.

Provisional conclusions on product market definition

- 4.44 We provisionally concluded that the competitive effects of the transaction should be analysed in the following product markets:
- (a) aggregates, including all types of primary aggregates (except decorative aggregates) and recycled aggregates, whether they are sold to external customers or used downstream for the production of RMX, asphalt or other products;
 - (b) decorative aggregates;
 - (c) RMX, including RMX supplied from fixed plants, mobile plants and volumetric trucks;

⁷⁹ www.offt.gov.uk/shared_offt/mergers_ea02/2006/Aggregate.pdf.

- (d) asphalt, including asphalt supplied from fixed plants and mobile plants; and
- (e) contract surfacing services.

Geographic market and catchment area analysis

Approach

- 4.45 The geographic markets for aggregates, RMX and asphalt, as defined in paragraph 4.44, are local due to high haulage costs and in the case of RMX perishability issues (see paragraph 2.38). Different considerations apply to contract surfacing services and decorative aggregates, which we consider separately in paragraphs 4.64 to 4.66 and 4.67 and 4.68 respectively.
- 4.46 As explained in the Guidelines,⁸⁰ when assessing mergers involving a large number of local geographic markets, the CC may start by examining the geographic catchment area within which the great majority of the relevant site's custom is located. Catchment areas will typically be narrower than geographic markets and are a pragmatic way of identifying a local market that requires further examination. They are used as a tool to assist the CC's analysis of the competitive effects of the merger and therefore do not represent an alternative conceptual approach. Rather, they provide a useful framework for excluding local areas from further analysis without reaching firm conclusions on the boundaries of that particular relevant geographic market. This is the framework we adopted for aggregates, RMX and asphalt.
- 4.47 We estimated catchment areas for all of the pre-existing Breedon sites and the acquired sites in north-east Scotland and derived average catchment areas in terms of radial distances across all sites. Our general approach has been to use average 80 per cent catchment areas (ie the average distance over which 80 per cent of the

⁸⁰ [Paragraph 5.2.25.](#)

external sales volume of a particular product was delivered). The methodology is explained in detail in Appendix D (see paragraphs 8 to 13 in particular).

- 4.48 The evidence and analysis set out in Section 6 show that there is significant heterogeneity in the characteristics of local demand and supply for aggregates, RMX and asphalt in north-east Scotland. This is due to a combination of different demand patterns driven by varying levels of construction output across north-east Scotland⁸¹ (which can also change significantly over time, depending on the start and completion of large construction projects—see paragraphs 2.48 and 2.49), locations of production sites relative to those of customers or projects, the characteristics of the road network between supply sites and construction sites and density of supply sites which varies significantly between the most remote parts of north-east Scotland and the urban areas. These explain why certain quarries and plants have significantly larger catchment areas than others and why the distance over which a quarry or plant supplies its products to its customers may change significantly from one year to another. This is shown in Appendix D, Tables 9, 14 and 19.
- 4.49 As we set out in paragraph 4.46, one of the purposes of our analysis of catchment areas was to identify local areas that require further examination. Taking into account that competition could occur over greater distances than 80 per cent catchment areas, the variability of catchment areas over time and across sites, and given evidence from the main and the third parties on the geographic extent of competition, we then considered an appropriate ‘uplift’ to the estimated average catchment areas for each product. The purpose of this was to estimate an ‘extended’ catchment area which, when applied, would allow us to identify potential competitive constraints from outside the estimated catchment areas in our competitive assessment, and hence provide a further measure for filtering out sites for which the transaction is unlikely to

⁸¹ See Appendix H, Figure 6.

lead to competitive concerns. As explained below in paragraphs 4.54, 4.58 and 4.63, we found that an ‘uplift’ of 50 per cent on the average 80 per cent catchment area distances was a reasonable and pragmatic approach to estimating these extended catchment area distances.

- 4.50 In paragraphs 4.51, 4.55 and 4.59, we summarize the views of parties on the size of catchment areas and geographic scope of competition for aggregates, RMX and asphalt respectively. In paragraphs 4.52 to 4.54, 4.56 to 4.58, 4.60-4.63 and 4.69, we summarize the findings of our catchment area analysis and resulting geographic boundaries, which provide the starting point for our competitive assessment for aggregates, RMX and asphalt.

Aggregates

Parties’ views

- 4.51 Breedon told us that in general a catchment area of 30 miles was a reasonable basis for the analysis of the geographic markets for aggregates, although the distance from a quarry to the centres of local demand could affect delivery distances for specific sites. It considered that the use of 80 per cent catchment areas⁸² was arbitrary. It considered that the incremental cost of delivery over 30 miles, as opposed to [REDACTED] miles, was [REDACTED] and provided estimates which suggested that this would equate to a [REDACTED] per cent price increase on the delivered price. Both Leiths and Aggregate Industries agreed that a 30-mile catchment area was suitable, with Leiths, however, commenting that the average distance for the supply of lower-quality aggregates could be lower, although this depended on the area. The delivery distances suggested by other parties ranged from 15 miles (Tayside Contract) to 50 miles for specialist stone requirements (RJ McLeod). Similarly, the evidence received indi-

⁸² 80 per cent catchment areas are average distances from production sites within which 80 per cent of sales to customers occur. The use of 80 per cent catchment areas is common practice in the analysis of local markets.

cated that transport costs, an important driver of the delivered price of aggregates, varied significantly across north-east Scotland due to the nature of the road network.

Analysis

4.52 We estimated 80 per cent catchment areas⁸³ for Breedon's pre-existing aggregate sites and the acquired aggregates sites in north-east Scotland using radial distances. Our results are summarized in Table 10 below. Catchment areas for aggregates differ by site, with an overall average across sites of 18 miles for primary and recycled aggregates. The average for Breedon's pre-existing sites for primary aggregates is [X] miles, and the average for the acquired sites is [X] miles. These are based on radial distances.

TABLE 10 Aggregates: 80 per cent catchment areas by site, 2012

Site	Primary	Recycled
Breedon sites*	[X]	[X]
Balmullo	[X]	[X]
Boyne Bay	[X]	[X]
Capo	[X]	[X]
Clatchard	[X]	[X]
Craigenlow	[X]	[X]
Ethiebeaton	[X]	[X]
Meadowside	[X]	[X]
Morefields	[X]	[X]
Netherglen	[X]	[X]
Orrock	[X]	[X]
Rothes Glen	[X]	[X]
Shierglas	[X]	[X]
Stirlinghill	[X]	[X]
Aggregate Industries sites*	[X]	[X]
Beaully	[X]	[X]
Edzell	[X]	[X]
Powmyre	[X]	[X]
Tom's Forest	[X]	[X]
All sites*	18	18

Source: CC calculations based on data provided by Breedon and Aggregate Industries.

*Volume-weighted average.

†[X]

4.53 We carried out a number of sensitivity tests on aggregates' catchment areas (see Appendix D, paragraphs 17 to 27) and found that:

⁸³ This excluded Aggregate Industries sites in the Hebrides and Breedon sites on the west coast of north Scotland.

- (a) Catchment areas appear to differ by aggregates product sub-category (eg Type 1 sub-base, sands, single-size graded, etc), but sample sizes are often too small to draw any firm conclusions from this sensitivity analysis.
- (b) Catchment areas differ from year to year, and the 2012 estimates we use are somewhat higher than estimated catchment areas in 2010 and 2011, and 2010 to 2012 overall (the latter is 16 miles, which is a weighted average across all Breedon and Aggregate Industries sites).
- (c) Average 90 per cent catchment areas for aggregates are [X] miles for Breedon sites and [X] miles for Aggregate Industries sites.

4.54 We calculated that the weighted average 80 per cent catchment area for primary and recycled aggregates across Breedon's pre-existing sites and the acquired sites was 18 miles. We considered that a 50 per cent increase on the average 80 per cent catchment area distance—ie to 27 miles—would be an appropriate extended catchment area distance for the purpose of filtering out sites for which the transaction is unlikely to lead to competition concerns (alongside the estimated average catchment area distance of 18 miles), and when considering competitive constraints outside the catchment areas in our competitive assessment. We noted that 27 miles is close to estimates provided to us by Breedon, Aggregate Industries and Leiths. We also note that it is greater than our estimates for average 90 per cent catchment areas.

RMX

Parties' views

4.55 Breedon submitted that in rural areas and/or where there was lower plant density, such as in the North of Scotland, RMX would typically travel further than in other parts of GB. It suggested that a 15-mile radius centred on RMX plants would better represent the competitive conditions in north-east Scotland and provided examples to support its view. The majority of the other parties we talked to (Aggregate Industries,

Lafarge Tarmac and [REDACTED] considered that RMX would typically be delivered within a 10-mile radius. Leiths considered that this would be the case in an urban area, but that this would extend to 15 to 20 miles in a rural environment (eg on the west coast of Scotland). Pat Munro (which is based near Inverness) told us that 80 per cent of its RMX sales were within a 25-mile radius of its sites. An operator of volumetric trucks, Accumix, told us that 80 per cent of its sales volumes were within 35 miles, although it occasionally delivered RMX over a distance of 100 miles.

Analysis

- 4.56 We estimated 80 per cent catchment areas for Breedon's and the acquired RMX sites in north-east Scotland.⁸⁴ Our results of catchment areas by site are summarized in Table 11. Catchment areas for RMX differ by site, with an overall average across sites of 13 miles. The average for Breedon is [REDACTED] miles, and the average for Aggregate Industries is [REDACTED] miles. These are based on radial distances.

⁸⁴ This excluded Aggregate Industries sites in the Hebrides and Breedon sites on the west coast of north Scotland.

TABLE 11 RMX: 80 per cent catchment areas by site, 2012

Site	Type of site*	80% catchment area (miles)
Breedon sites†		[X]
Aviemore	Satellite	[X]
Boyne Bay	Quarry	[X]
Bridge of Don	Satellite	[X]
Capo	Quarry	[X]
Clatchard	Quarry	[X]
Craigenlow	Quarry	[X]
Dunfermline	Satellite	[X]
Ethiebeaton	Quarry	[X]
Inverness	Satellite	[X]
Inverurie	Satellite	[X]
Kirkcaldy	Satellite	[X]
Morefields	Quarry	[X]
Netherglen	Quarry	[X]
Orrock	Quarry	[X]
Roths Glen	Quarry	[X]
Shierglas	Quarry	[X]
Stirlinghill	Quarry	[X]
Westhill	Satellite	[X]
Aggregate Industries sites†		[X]
Beaully	Quarry	[X]
Dundee	Satellite	[X]
Dyce	Satellite	[X]
Edzell	Quarry	[X]
Perth	Satellite	[X]
Peterhead	Satellite	[X]
Tom's Forest	Quarry	[X]
Tullos	Satellite	[X]
All sites†		13

Source: CC calculations based on data provided by Breedon and Aggregate Industries.

*A quarry site is an RMX located at a quarry, and a satellite site is a stand-alone RMX (ie not located at a quarry).

†Volume-weighted average.

Note: Aviemore and Clatchard were mothballed in 2013. Dunfermline is only occasionally used. Edzell was mothballed in 2012. Perth was mothballed in 2012 but reopened in 2013.

4.57 We carried out a number of sensitivity tests on RMX catchment areas (see Appendix D, paragraphs 28 to 35), and found that:

- (a) If we compare average 80 per cent catchment areas of RMX sites and satellite sites, we observe [X] for Breedon sites ([X]); the average catchment area is [X] miles for RMX sites and [X] miles for satellite sites for Aggregate Industries.
- (b) Catchment areas differ from year to year, but the 2012 average we use (13 miles) is similar to average 80 per cent catchment area across all Breedon and Aggregate Industries sites in the period from 2010 to 2012 (which is 12 miles).
- (c) Average 90 per cent catchment areas for RMX are [X] miles for Breedon sites and [X] miles for Aggregate Industries sites.

4.58 We calculated that the weighted average 80 per cent catchment area for RMX across Breedon's pre-existing and acquired sites is 13 miles (based on radial distances). We considered that a 50 per cent increase on the average 80 per cent catchment area distance—ie to 20 miles⁸⁵—would be an appropriate extended catchment area distance for the purpose of filtering out sites for which the transaction is unlikely to lead to competition concerns (alongside the estimated average catchment area distance of 13 miles), and when considering competitive constraints outside the catchment areas in our competitive assessment. We note that 20 miles is at the upper end of the range of estimates provided to us by Breedon, Aggregate Industries and most third parties. We also note that a 20-mile radius is at the upper end of the range of site-specific catchment areas and that it is greater than our estimates for average 90 per cent catchment area. We acknowledge that delivery distances for RMX delivered with volumetric trucks may be higher and take this into account in our competitive assessment.

Asphalt

Parties' views

4.59 Breedon submitted that 30 miles was a reasonable basis for the analysis of the geographic market for asphalt, with exceptions linked to specific local market conditions, eg in remote areas distances travelled may be longer. In addition, transport costs could vary significantly depending on the nature of roads and journey times. This was reflected in the range of transport costs that were quoted to us. There was little commonality in the figures provided by other parties, with radial distances quoted ranging from 20 miles (Tayside Contracts for the majority of its sales) to 30 miles (Leiths).

⁸⁵ We get 20 miles, rather than 19.5 miles due to rounding.

Analysis

- 4.60 We estimated 80 per cent catchment areas for Breedon's pre-existing asphalt sites and acquired asphalt sites in north-east Scotland.⁸⁶ Our results of catchment areas by site are summarized in Table 12. Catchment areas differ by site, with an overall average across the parties' asphalt sites of 17 miles. The average for Breedon is [REDACTED] miles, and the average for Aggregate Industries is [REDACTED] miles. These are based on radial distances.

TABLE 12 Asphalt: 80 per cent catchment areas by site, 2012

Site	80% catchment area (miles)
Breedon sites*	[REDACTED]
Daviot†	[REDACTED]
Clatchard	[REDACTED]
Craigenlow	[REDACTED]
Ethienbeaton	[REDACTED]
Netherglen	[REDACTED]
Orrock	[REDACTED]
Shierglas	[REDACTED]
Stirlinghill	[REDACTED]
Aggregate Industries sites*	[REDACTED]
Mid Lairgs‡	[REDACTED]
Tom's Forest	[REDACTED]
All sites*	17

Source: CC calculations based on data provided by Breedon and Aggregate Industries.

*Volume-weighted average.

†Daviot is located at a Lafarge Tarmac quarry (near Inverness). All other asphalt sites are co-located with a Breedon quarry.

‡Mid Lairgs is located at an Alexander Ross quarry (near Inverness).

- 4.61 These estimates, however, are based on limited data, particularly for Aggregate Industries, where the estimate is based on less than [REDACTED] of sales. This is because a significant proportion of asphalt is sold through the parties' contract surfacing businesses (these sales represent around [REDACTED] per cent of Breedon's asphalt sales and [REDACTED] per cent of Aggregate Industries' asphalt sales volumes in the data we used), and we could not obtain data on the customers or the delivery locations for asphalt sold through this route; neither could we obtain delivery locations for pur-

⁸⁶ This excluded Aggregate Industries sites in the Hebrides and Breedon sites on the west coast of north Scotland.

chases collected by customers. Thus, catchment area estimates for asphalt should be used with caution.

4.62 We carried out a number of sensitivity tests on asphalt catchment areas (see Appendix D, paragraphs 36 to 42), and found that:

(a) Catchment areas differ from year to year, but the 2012 average we use is the same as the average 80 per cent catchment area across all Breedon and Aggregate Industries asphalt sites in the period from 2010 to 2012 (which is 17 miles).⁸⁷

(b) Average 90 per cent catchment areas are [X] miles for Breedon sites and [X] miles for Aggregate Industries sites.

4.63 We considered that a 50 per cent increase on the average 80 per cent catchment area distance of 17 miles—ie to 25 miles—would be an appropriate extended catchment area distance for the purpose of filtering out sites for which the transaction is unlikely to lead to competition concerns (alongside the estimated average catchment area distance of 17 miles), and when considering competitive constraints outside the catchment areas in our competitive assessment. However, we noted that these figures were lower than those suggested by parties and that we were not able to factor into our analysis the sales/deliveries of asphalt made through suppliers' contract surfacing businesses. For example, Breedon indicated that sales of asphalt through its contract surfacing services may have wider catchment areas than direct external sales, [X]. Therefore we also considered an extended catchment area distance of 35 radial miles. We take this into account in our competitive assessment.

⁸⁷ Average 80 per cent catchment area for Breedon sites is [X] miles when measured in road distances; Aggregate Industries' data set does not include road distances.

Decorative aggregates

4.64 Breedon submitted that it considered the market for decorative aggregates to be at least regional (ie Scotland-wide).⁸⁸ Aggregate Industries told us that the aggregate products from Corrennie were sold predominantly into north Scotland and the Central Belt. [REDACTED] Other parties (Laird Brothers, Leiths) also commented that decorative aggregates tended to travel long distances

4.65 Our calculations (based on Breedon transaction data only) resulted in an average 80 per cent catchment area of [REDACTED] miles (see Table 13).

TABLE 13 **Decorative aggregates: 80 per cent catchment areas by site, 2012**

Site	Decorative
[REDACTED]*	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]†
[REDACTED]	[REDACTED]†
[REDACTED]	[REDACTED]†
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]†
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]
[REDACTED]	[REDACTED]†
[REDACTED]	[REDACTED]†
All sites*	[REDACTED]

Source: CC calculations based on data provided by Breedon.

*Volume-weighted average.

†[REDACTED]

4.66 Based on the evidence set out in paragraphs 4.64 and 4.65, we considered that the geographic market for decorative aggregates was likely to be Scotland wide and possibly wider.

Contract surfacing services

4.67 The evidence we received from Breedon and other parties (Aggregate Industries, Tayside Contracts, Leiths, RJ McLeod) suggests that the geographic markets for

⁸⁸ [Breedon initial submission](#), paragraph 4.16.

contract surfacing services are generally local but are broader than the markets for aggregates, RMX and asphalt. Both Breedon and Aggregate Industries emphasized the mobility of the teams and equipment used. [REDACTED] Leiths told us that for large contracts, such as the project under way at Inverness Airport, competition could come from other parts of the UK and Ireland. For certain projects, however, competition is likely to be local or regional: Tayside Contracts told us that it operated its contract surfacing services on a regional basis, ie in Tayside, and RJ McLeod told us that competition in contract surfacing services was mainly local.

- 4.68 Based on the evidence we received from Breedon and other parties, we reached the view that the relevant markets were likely to encompass other parts of Scotland beyond the immediate vicinity of the centre of demand and beyond north-east Scotland [REDACTED]. We recognize, however, that the nature of competition for larger projects and smaller projects may differ, with the latter potentially facing only local competition.

Provisional conclusions on geographic market definition

- 4.69 In the case of aggregates, RMX and asphalt, we have not defined local geographic markets. Our approach is to start our competitive assessment with reference to catchment areas. As noted, catchment areas will typically be narrower than the geographic market identified using the hypothetical monopolist test. Delivery distances also vary significantly between sites and years. In light of these two observations, we used average catchment area distances as the starting point for our competitive assessment, but we also considered the constraint posed on the parties by rivals located further away than implied by the average 80 per cent catchment area distances. For this purpose, we apply 'extended' average catchment area distances, which are average 80 per cent catchment area distances for each product 'uplifted' by 50 per cent and by 100 per cent for asphalt.

4.70 Thus, based on our analysis of catchment areas for aggregates, RMX and asphalt, and taking into account other evidence we have received from the main and the third parties, we provisionally adopted the following catchment areas for our competitive assessment for each product (referred to as the defined catchment areas in the remainder of the provisional findings):

(a) aggregates: 18 and 27 miles;

(b) RMX: 13 and 20 miles; and

(c) asphalt: 17, 25 and 35 miles.

4.71 We provisionally conclude that the geographic market for decorative aggregates is likely to be Scotland wide and possibly wider.

4.72 We provisionally conclude that the geographic market for contract surfacing services is likely to be wider than the immediate vicinity of centres of demand and to extend to other parts of Scotland.

5. Counterfactual

5.1 Before we turn to the effects of the transaction, we need to assess what we expect would have been the competitive situation in the absence of the transaction. This is called the ‘counterfactual’.⁸⁹ It provides a benchmark against which the expected effects of the transaction can be assessed. The CC will typically incorporate into the counterfactual only those aspects of scenarios that appear likely on the basis of the facts available to it and the extent of its ability to foresee future developments.⁹⁰

5.2 Breedon told us that it believed that, if the present transaction had not taken place and Aggregate Industries had not found an alternative buyer for all the operations which it acquired from Aggregate Industries (see paragraphs 2.12 and 2.13 and

⁸⁹ CC2, [paragraph 4.3.1](#).

⁹⁰ CC2, [paragraph 4.3.6](#).

Figure 2 for a list of the acquired sites and their locations), it was most likely that Aggregate Industries would have retained them and that [REDACTED]. Breedon believed that had Aggregate Industries not divested the acquired operations to Breedon, [REDACTED]. Breedon therefore submitted that the most likely counterfactual was the retention of the acquired operations by Aggregate Industries.⁹¹

5.3 Aggregate Industries told us that if it had not found a buyer for its operations in north Scotland, it would have continued to operate them as previously.

5.4 We examined three possible scenarios: we first considered whether the acquired operations would have been likely to close down altogether. We then examined whether, absent the transaction, the operations were likely to have been acquired by another purchaser. Finally we examined whether, had Aggregate Industries continued to operate the sites, there would have been changes to the way in which those sites were operated and to the way in which they competed. In this section, we first set out the circumstances prior to the merger, before turning to our assessment of each scenario and conclusions on the most likely counterfactual.

The circumstances prior to the merger

5.5 Aggregate Industries' overall profitability had declined between 2011 and 2012. This reflected one-off exceptional restructuring costs and impairments of £22 million and cost of sales and administration expenses declining more slowly than turnover. The business continued to generate a positive EBITDA margin in 2012.

5.6 [REDACTED]

⁹¹ [Response to the issues statement](#), section 4.

- 5.7 We reviewed the profitability of the acquired operations. The [REDACTED] majority of the operations⁹² across all products were profitable:
- (a) Aggregates: [REDACTED]⁹³.⁹⁴
 - (b) RMX: [REDACTED].
 - (c) Asphalt: The asphalt operations [REDACTED]. Aggregate Industries told us that [REDACTED]. The site at Mid Lairgs [REDACTED]. Aggregate Industries had a lease on the site until 27 March 2018 [REDACTED].
 - (d) Contract surfacing services: The contract surfacing business [REDACTED].
 - (e) Concrete blocks: The two concrete block operations [REDACTED]. The main acquired operation is at Kemnay, which [REDACTED].
- 5.8 Aggregate Industries told us that due to the weakening of demand since 2007 Aggregate Industries had started in recent years to undertake regular strategic and operational reviews of its UK businesses. The reviews had resulted in [REDACTED]. Aggregate Industries told us that it had [REDACTED].

Our assessment of the counterfactual

Scenario 1: Closure of the acquired operations

- 5.9 Given that the acquired operations delivered a positive EBITDA margin and performed in line with the rest of Aggregate Industries' operations, and given that Aggregate Industries told us that if it had not found a buyer for the acquired operations, it would have continued to operate them as previously, we have no reason to believe that the operations would have been closed altogether. As the various product lines all delivered positive EBITDA margins, we also have no reason to believe that Aggregate Industries would have withdrawn from the supply of any of the products it was previously supplying in north Scotland.

⁹² See Figure 2 for the list of sites and paragraph 2.12 which identifies the few sites that are not operational.

⁹³ [Breedon 2012 Annual Report](#).

⁹⁴ [REDACTED]

Scenario 2: acquisition by one or several alternative purchasers

- 5.10 As explained in paragraph 3.13, the objective of the sale was to [REDACTED].
- 5.11 We asked Aggregate Industries whether in the absence of the transaction there was a possibility that it would have attempted to sell the acquired operations as separate packages to more than one buyer. It told us that [REDACTED].
- 5.12 We therefore considered it unlikely that Aggregate Industries would have pursued the piecemeal disposal of its portfolio of sites in north Scotland to separate purchasers.
- 5.13 We asked Aggregate Industries what process it had carried out and which potential purchasers it had approached. It told us that it carried out an internal review and looked at all options that were available to it. Only then did it approach Breedon, [REDACTED].
- 5.14 We also considered whether it was likely that one of the Majors would have been interested in the acquired operations based on what they told us about their strategies for north Scotland:
- (a) Lafarge told us that operations in north Scotland represent only 1 per cent of its turnover and that it was currently reviewing its strategy for northScotland.
 - (b) [REDACTED]
 - (c) Hanson has sold its north Scotland aggregates operations to focus on cement and concrete.
 - (d) HCM told us that it operated 155 RMX plants across GB and the two operational plants in the Scottish Highlands were not high on its future strategic determination. HCM said that it was currently pleased with their performance and had no desire to change the present business model.

- 5.15 Breedon did not consider it likely that any of the Majors would have been interested in acquiring the operations of Aggregate Industries in north Scotland.
- 5.16 Based on the evidence set out in paragraphs 5.13 and 5.14, we provisionally concluded that the Majors were unlikely to be interested in the acquired operations.
- 5.17 We then considered Leiths' interest in certain of Aggregate Industries sites and the likelihood that it would have bought some or all of them absent the merger. Leiths told us that: [REDACTED].⁹⁵
- 5.18 Aggregate Industries confirmed⁹⁶ [REDACTED].
- 5.19 [REDACTED] As part of the analysis undertaken, it was noted that [REDACTED]. No decision, however, was made, as the options being considered were superseded by negotiations with Breedon.
- 5.20 With regards to Leiths' interest in the Mid Lairgs asphalt plant, we noted that [REDACTED].
- 5.21 With regard to the potential sale of Beaully to Leiths, although Leiths had expressed an interest in purchasing the site, it had not made an offer.
- 5.22 We therefore did not consider it likely that Aggregate Industries would have sold either the Mid Lairgs plant or the Beaully site to Leiths. We also did not consider it likely that Leiths would have bought any other site, as there had been no formal negotiations regarding any other site or plant. In addition, as noted in paragraph 5.11,

⁹⁵ [REDACTED]

⁹⁶ Early on in our inquiry, Aggregate Industries told us that it was approached by Leiths in late 2012, but clarified its position in response to our further enquiries.

Aggregate Industries told us [REDACTED]. We therefore provisionally concluded that Aggregate Industries would not have sold any of its sites or plants to Leiths.

5.23 We considered whether there were any other potential purchasers. Aggregate Industries told us that [REDACTED].

5.24 Given the objectives of Aggregate Industries, we considered it unlikely that other potential purchasers would have acquired Aggregate Industries operations in north Scotland.

Scenario 3: continued ownership of the acquired operations by Aggregate Industries

5.25 Aggregate Industries told us that if it had not found a buyer for its operations in north Scotland, it would have continued to operate them as previously: [REDACTED]. Aggregate Industries also told us that [REDACTED]. We noted that [REDACTED].

5.26 We considered whether Aggregate Industries would have been likely to reopen [REDACTED]. Aggregate Industries told us that [REDACTED]. We asked Breedon whether the demand conditions in the markets served by these two plants had changed or were likely to change. Breedon told us that it was not aware of anything that could lead to a significant increase in the level of demand in the areas around [REDACTED].

5.27 We therefore considered that the two plants would have been likely to remain closed under Aggregate Industries' ownership. [REDACTED] but we have no evidence that they would have closed.

5.28 We have seen no evidence to suggest that Ardchronie would have reopened and we note that Breedon has not sought to reopen it to date (although it has been used on

occasions to fulfil specific opportunities). We have seen no evidence that any other closed site would have been reopened.

- 5.29 We considered whether the operations at Mid Lairgs would have remained competitive. Breedon told us [REDACTED]. Aggregate Industries' strategic review stated (paragraph 5.19 above) that [REDACTED]. It also stated that [REDACTED]⁹⁷).
- 5.30 We considered it likely that Aggregate industries would have invested sufficiently in the site to enable it to continue to operate. However, we considered that it was unlikely that the lease at Mid Lairgs would have been renewed after March 2018.
- 5.31 More generally, we considered whether the competitiveness of individual acquired sites would have been likely to decline substantially in the time period over which we carried out our competitive assessment. Aggregate Industries told us [REDACTED]. However, we have seen no evidence that would enable us to conclude that any operation would have ceased production. We also noted that [REDACTED]. However, Aggregate Industries told us that [REDACTED] and there is therefore no reason to believe that Aggregate Industries would not have modified this policy if it had been necessary [REDACTED].

Provisional conclusion on the counterfactual

- 5.32 We provisionally concluded that of the three counterfactual scenarios outlined in paragraph 5.4, the third was most likely for the following reasons:
- (a) As Aggregate Industries' operations in north Scotland were profitable overall, we concluded that Aggregate Industries would not have closed them in the absence of a sale to Breedon.

⁹⁷ Aggregate Industries' central procurement team enters into centrally-negotiated bitumen supply agreements, which include a central rebate. The rebate is then allocated to the various business units according to the volume of bitumen purchased by the business unit.

(b) In the light of Aggregate Industries' preference [REDACTED] and the lack of other potential purchasers for all of the operations, we considered that the sale to another purchaser was not likely.

5.33 We provisionally concluded that it was most likely that, absent the merger, Aggregate Industries would have continued to operate in north Scotland broadly as it had done before [REDACTED]. Sites that had been mothballed or closed would have remained mothballed or closed, [REDACTED].

5.34 With regards to Mid Lairgs, we provisionally concluded that Aggregate Industries would have been likely to retain ownership of the asphalt plant and that it was likely that it would have continued to operate it for a period of up to five years to the end of the lease in 2018.

6. Assessment of the competitive effects of the merger

Introduction

6.1 In this section, we first examine the nature of pre-merger competition, including the purchasing processes adopted by customers (paragraphs 6.2 to 6.11), the approach to pricing taken by suppliers (paragraphs 6.12**Error! Reference source not found.** to 6.21), and the closeness of competition between Breedon and the acquired operations (paragraphs 6.22 to 6.32). We then analyse the local effects of the transaction for the aggregates, RMX and asphalt markets (paragraphs 6.33 to 6.237). Finally, we examine the effects of the transaction for contract surfacing services and decorative aggregates (paragraphs 6.238 to 6.255).

Pre-merger competition

Purchasing processes

- 6.2 We sought evidence from both suppliers and competitors on the process through which aggregates, RMX, asphalt and contract surfacing services are purchased.
- 6.3 Breedon told us that the vast majority of its and the acquired operations' external sale orders were secured against a quotation and were not subject to formal tender processes, but that it was typical for the customer to seek quotations from other suppliers before making its decision. Breedon believed that substantially all of its customers would purchase materials from a variety of different suppliers depending on price and location, and that usually customers would approach two to three suppliers to obtain prices before placing an order. Typically Breedon would be asked to provide prices for the supply of the relevant products to a specific location. It told us that for contract surfacing services, it often participated in formal tenders. Data it provided on the methods through which contract surfacing services were awarded included: competitive tenders, whether or not followed by negotiation; framework agreements; repeat business and word of mouth.
- 6.4 Aggregate Industries told us that for non-major projects, which accounted for approximately [REDACTED] per cent of all its aggregates supply to external customers, it would be approached by a construction contractor at a local level to quote for the potential supply of aggregates, asphalt or RMX to a specific project and typically contracts would be negotiated on a bilateral basis in face-to-face meetings. Formal tenders were not common for these types of projects. Aggregate Industries said that customers routinely used their negotiating power to obtain better pricing and non-pricing terms. [REDACTED]

- 6.5 Our survey of smaller customers⁹⁸ and evidence we received from larger customers and competitors through our questionnaires and hearings showed that informal price negotiations, involving the comparison of quotes obtained from suppliers, was common and that those negotiations tended to be carried out for individual projects:
- (a) Customers who responded to our survey (there were 231 respondents, with 146 responses in relation to aggregates purchases, 111 for RMX, and 43 for asphalt) largely purchased relatively small quantities from a given site (less than 500 tonnes/m³ of the relevant products in 2012). For all three products, a significant proportion of respondents said that they collected quotes from a number of suppliers, and most said that they always or sometimes negotiated on price. Over half of respondents for each product said that they did not agree or sign a contract for ongoing requirements. Formal tenders were more frequent for asphalt than for aggregates and RMX.
 - (b) Leiths told us that long-term contracts were unusual and that most work was won based on the price given after an enquiry. It was only involved in one long-term contract through its asphalt surfacing operations. Other local competitors we talked to ([REDACTED], Tayside Contracts) described negotiations with customers in similar terms.
 - (c) [REDACTED]
 - (d) Hanson told us that its sales of RMX were secured through a mixture of formal and informal tenders.
 - (e) RJ McLeod told us that it purchased products at a site level and on a project-by-project basis. Another large customer, [REDACTED], also purchased the relevant products on a project-by-project basis.
 - (f) [REDACTED], a supplier of services to the water power and rail industries, told us that it always sought informal quotes, except if there was only one supplier in an area.

⁹⁸ We commissioned DJS Research Limited (DJS) to carry out a survey of the main parties' smaller customers for aggregates, asphalt and RMX in north-east Scotland. DJS completed 231 telephone interviews and prepared a presentation and a report setting out the results of the survey, which were published on the [CC website](#).

Where buying building materials for a client, it would have to take account of the client's framework agreements [§] similarly told us that it made use of framework agreements.

6.6 Some customers, however, also use formal tender processes:

- (a) One large customer, Balfour Beatty, told us that it purchased for multiple projects and sites and tended to put out formal tenders (the formal tenders often take the shape of a fax or email).
- (b) Two councils we talked to (Fife Council and Aberdeen City Council) both put out formal tenders for asphalt surfacing contracts. For its product purchases, Fife Council put out tenders to companies with which it had a framework agreement. Aberdeen City Council put out a schedule of rates to quarry suppliers for materials on an annual basis so that it would have a fixed price for asphalt for the year. However, because of the fluctuation in the price of bitumen, fixed prices had had to be amended over the last few years. Aberdeenshire Council puts out to competitive tender approximately 10 per cent of its contract surfacing services budget.
- (c) Pat Munro told us that 95 per cent of its work was won in response to formal tenders and that a large proportion of those were either directly, or indirectly, for the Highland Council.
- (d) We also obtained tender data from RJ McLeod, Transport Scotland, Angus Council, Fife Council and I&H Brown⁹⁹ (see Appendix E). This showed that formal tenders were used not only for contract surfacing services but also for the three relevant products. The value of the tenders we saw ranged from £1,200 (supplying RMX) to £4.9 million (contract surfacing) and £6.3 million (construction projects).

⁹⁹ We also obtained tender data from Breedon (the analysis of which is presented in Appendix E), but it contains a mix of formal and informal tenders.

6.7 The way in which work carried out on behalf of Transport Scotland is purchased is a mix of formal tenders for contracts over a certain value and long-term supply arrangements put in place by the operating companies:

- (a) Transport Scotland told us that regarding the maintenance of the trunk roads in north Scotland (see paragraph 2.58), the North East operating company was responsible for procuring works up to a threshold of £250,000 (rising to £350,000 in April 2014) and the North West operating company was responsible for procuring works up to a threshold of £350,000.
- (b) As explained in paragraph 2.58, BEAR Scotland currently manages both operating companies responsible for north Scotland. It told us that as Breedon was a shareholder in BEAR Scotland, BEAR Scotland utilized Breedon's quarries, concrete plants and asphalt surfacing services as a matter of course. BEAR Scotland's tender strategies and pricing were done with this embedded as part of its bid. Consequently, it did not tender works in the North of Scotland, but market tested to ensure that shareholder value was achieved. In areas where Breedon did not trade, BEAR Scotland tendered the services and the winning supplier was employed as a Supply Chain Partner that it looked to work with over the full term of its contracts. In the south-east area, its partner was Aggregate Industries. Other companies were also employed but on an ad-hoc and spot-price basis.
- (c) Balfour Beatty told us that it had had a long-term agreement with Breedon for the supply of asphalt in the past (when it was responsible for the management and maintenance of the Trunk Road Network in north-west Scotland through its TranServ JV).
- (d) Over the two relevant thresholds contracts are competitively tendered as works contracts.

(e) Transport Scotland told us that the sourcing of asphalt surfacing services above the thresholds was generally led through direct procurement by itself with assistance from the operating companies in the drafting of the documents.

6.8 The evidence set out in paragraphs 6.2 to 6.7 shows that a range of methods is used to purchase aggregates, RMX, asphalt and contract surfacing services. The evidence shows that the three relevant products are most often purchased through an informal process in which the purchaser asks for quotes from a number of local suppliers on a project-by-project basis. The methods include tenders which may be formal or informal, negotiations—which may or may not have been preceded by a formal tender process—and some framework agreements. The evidence shows that large contracts for the supply of building materials and contract surfacing services tend to be awarded through formal tenders. Local councils and other government bodies also tend to procure through formal tenders. Framework agreements and ongoing supply contracts appear to be only occasionally used.

Criteria used to select suppliers

6.9 We obtained evidence through our survey and questionnaires on the criteria used to select suppliers of aggregates, RMX and asphalt:

- (a) Our survey of smaller customers showed that price, product quality, service quality, location and delivery lead time were key considerations for selecting a supplier. For all three products, aggregates, RMX and asphalt, price was most commonly given as the most important of these criteria. However, in the case of RMX, product quality was given as the most important criterion for nearly as many respondents as price.
- (b) Balfour Beatty Utilities Solutions told us that when deciding which supplier to use, the location of the plants and quarries was key. RJ McLeod told us that the criteria used to choose a supplier were price, quality, safety, environmental

aspects and ability to supply the amount of materials needed within the time frame of the project. Another customer, [REDACTED], told us that price and service were the two elements on which suppliers competed and as service was similar across the three main suppliers (Leiths, Breedon and Aggregate Industries), price was a key determinant. It also said that the quarry or asphalt plant that was nearest to the job was the one that offered the most competitive price as haulage was such a significant cost.

- (c) Aberdeen City Council commented that it did not believe that there was much to choose from between the three quarry companies (Breedon, Leiths and Aggregate Industries) in terms of price or quality, so the key factor for it was geography. Whilst it would normally take the lowest-priced materials, the geographic layout of the quarries was crucial as, depending on where it was working in the city, the lowest-priced material might be the most expensive once transport costs were included.
- (d) Aberdeenshire Council told us that it sourced the materials used for providing asphalt surfacing services from local suppliers (rather than its internal arm) where the location of their site was closer than Aberdeenshire Council's own site to the project that it was undertaking. It told us that price was the determining factor in choosing a supplier, although when procuring materials from quarries, location was of importance, as it usually bought ex-works, and transport costs became an important factor in determining best value.
- (e) Fife Council told us that the criteria stated in its tender documents for inclusion in its framework agreements (which relate to the purchase of products only) included price (which accounted for 65 per cent of the overall rating) and quality (which accounted for the remaining 35 per cent).
- (f) Leiths told us that jobs were won on price, although quality and service could be a consideration.
- (g) [REDACTED]

(h) Pat Munro told us that its main customers were won by geographical location and the resultant price and transport costs and this would apply to all products supplied. Thus, provided they received an acceptable price, clients would purchase all of their materials for a given contract from Pat Munro if they were within its catchment area.

6.10 We received limited evidence on the criteria used to select contract surfacing services. Transport Scotland told us that it did not have any evaluation criteria and that the specification within the tender documents would identify what was required. Fife Council told us that contract surfacing services were generally not complex and were offered on the basis of lowest price. Aberdeenshire Council told us that price was the determining factor, although contractors had to be registered with a pre-qualification body (eg Constructionline). Based on a sample of tender decision documents supplied to us by Breedon, we observed that price and, in some instances, time for project delivery were listed as the criteria considered when selecting competitive tender winners by local councils.

6.11 Thus the evidence we have received shows that a number of criteria are used in selecting suppliers but that the most important factors are the price and the closeness of the production site to the delivery site, due to the high haulage costs for all products.

Pricing

6.12 [✂]

6.13 [✂]

- 6.14 Aggregate Industries also [REDACTED]. When Aggregate Industries provides transport, the cost is based on the delivery distance per tonne/m³ of material transported.
- Aggregate Industries' haulage costs are based on radial distances for RMX and on road distance for asphalt.
- 6.15 Lafarge Tarmac told us that it did not publish price lists; instead prices were negotiated with each customer, for each contract, in an informal bidding process. A sales representative uses a 'Prompt Price' tool which is set by pricing regions which typically correspond to postal districts.
- 6.16 HCM told us that it initially set prices according to a pricing calculator which considered all costs and the margin.
- 6.17 [REDACTED] told us that factors taken into account during negotiations included mix design costs, transport costs, the size of contract, and customer attractiveness (their creditworthiness, chance of repeat business and the breadth of future opportunities).
- 6.18 Some local competitors (Accumix, Angle Park, James Jamieson) told us that they used a price list as a starting point for negotiations, while others (Tayside Contract, Pat Munro, [REDACTED]) did not use price lists and determined prices based on the specific circumstances of the contract.
- 6.19 Aberdeenshire Council told us that it published prices which were based on the level of revenue required to meet its budget and estimates of costs based on previous years' data. Its prices did not take account of what was charged by other suppliers. It had clear internal guidelines on what discounts to apply but these were not published on its website.

6.20 [REDACTED]

6.21 The evidence shows that although some competitors use internal price lists for aggregates, RMX and asphalt, this is not always the case, and in the vast majority of cases prices are negotiated. The exception to this is Aberdeenshire Council which publishes price lists and offers set discounts.

Closeness of competition between Breedon and Aggregate Industries in north-east Scotland

Survey and questionnaire responses

6.22 We asked other suppliers of aggregates, RMX, asphalt and contract surfacing services about which firms they regarded as their main competitors in north Scotland. Their responses generally indicate that they viewed Breedon and Aggregate Industries¹⁰⁰ as their competitors, across all areas and products. In some instances, only a few other names are mentioned (eg [REDACTED]). Some competitors operating mainly in Tayside and Fife (eg [REDACTED]) do not name Aggregate Industries as their competitor (but they do name Breedon); it is unclear whether these instances are due to the merger, ie whether these suppliers refer to the merged entity or the pre-merger situation.

6.23 We also asked Breedon and Aggregate Industries customers (a mix of customers for materials and/or contract surfacing) about their alternative suppliers. Most of the responses received named Breedon and Aggregate Industries, among other companies, as their alternative suppliers across the product groups, although there was some variation across product groups, customer types (eg materials only vs contract surfacing), and it is not always clear that these customers refer to the pre-merger situation.

¹⁰⁰ When we are reporting the results of the survey and of responses to our questionnaire, the term 'Aggregate Industries' refers to its operations in north-east Scotland.

- 6.24 As such, it is difficult to judge the closeness of competition between Breedon and Aggregate Industries based on these responses, but they indicate that Breedon and Aggregate Industries are generally considered as competitors or alternatives, although not by everyone and not necessarily across all areas. These responses also illustrate that, overall, there appear to be more alternative suppliers for aggregates and contract surfacing services than for asphalt and RMX, but this differs across areas.
- 6.25 We gathered evidence from smaller customers through a telephone survey. One of the questions we asked was what the customers would have done if the site from which they purchased aggregates, RMX or asphalt in 2012 had been closed.¹⁰¹ Very few customers said that they would have stopped purchasing the product or would have purchased reduced quantities; most said that they would have purchased the product in question from one or a combination of sites. 11 per cent of respondents purchasing aggregates from Breedon's pre-existing sites mentioned one or more acquired sites as sites to which they would have switched, and 75 per cent mentioned at least one competitor site. For RMX, the respective numbers are 27 and 48 per cent, and for asphalt they are 11 and 61 per cent. 17 per cent of respondents purchasing aggregates from an acquired site mentioned one or more Breedon pre-existing sites as sites to which they would have switched, and 88 per cent mentioned at least one competitor site. For RMX, the respective numbers are 29 and 69 per cent, and for asphalt they are 57 and 86 per cent. This is shown in Table 14; the results should be interpreted with caution given that sample sizes in some instances are relatively small (see note 1 to the table). On the whole, this indicates that Breedon's pre-existing sites and the acquired sites are considered as close alternatives to each other across the three products, but that many customers name

¹⁰¹ This is question 23 of the survey. The survey is published on our website: www.competition-commission.org.uk/our-work/directory-of-all-inquiries/breedon-aggregates-aggregate-industries/evidence/cc-commissioned-research-and-surveys.

competitor sites as alternatives. We also observe that for RMX for both Breedon's pre-existing sites' and the acquired sites' customers, competitor sites are named as alternatives less frequently than for the other products. We note, however, that this does not reveal the variations across local areas or sites.

TABLE 14 Customer survey responses (Q23): 'Which other site(s) would you have made the purchases from?'

	<i>per cent</i>		
	<i>Aggregates</i>	<i>RMX</i>	<i>Asphalt</i>
<i>Breedon customers</i>			
Breedon to Aggregate Industries	11	27	11
Breedon to Breedon	11	25	21
Breedon to competitor	75	48	61
Don't know	17	21	21
Location not given	14	19	4
<i>Aggregate Industries customers</i>			
Aggregate Industries to Breedon	17	29	57
Aggregate Industries to Aggregate Industries	0	34	7
Aggregate Industries to competitor	88	69	86
Don't know	7	17	0
Location not given	7	6	0

Source: CC survey.

Notes:

1. The sample for this question is all customers who would consider another site. For Breedon customers this is: 88 respondents purchasing aggregates, 67 – RMX and 28 – asphalt. For Aggregate Industries customers this is: 42 respondents purchasing aggregates, 35 – RMX and 14 – asphalt.
2. Numbers add up to more than 100 per cent because respondents could indicate multiple sites to which they would have switched.

Analysis of tender data

6.26 There are a large number of informal and formal tenders for contract surfacing and construction materials procurement.¹⁰² We collected tender data from a number of larger customers, where for each tender we sought lists of bidders, the winners and where possible the actual bid amounts. We analysed tender data from Transport Scotland, Angus Council, Fife Council, RJ McLeod and I & H Brown Limited. This covered the supply of materials directly (eg aggregates and RMX tendering by RJ McLeod) and the supply of materials (asphalt primarily) through contract surfacing

¹⁰² For instance, we noted nearly 300 tenders in which Breedon competed in 2012 in North and North East Regions (as defined and used by Breedon internally) in Breedon's 'Contracting Tender Register' (a spreadsheet identifying contract surfacing projects of which Breedon was aware during the period 2010 to 2012).

services (eg Transport Scotland). For some customers the tender data covered only the ten largest tenders in 2012.

6.27 Evidence from the data showed that there was competition between Breedon and Aggregate Industries for many contracts across regions and products. We observed that Transport Scotland's data highlighted strong competition between the merging parties in relation to contract surfacing tenders for its North East and North West operating regions.¹⁰³ Both Breedon and Aggregate Industries bid in 77 of the 113 tenders, while only one of the parties bid in 11 tenders. In [REDACTED] tenders Breedon and Aggregate Industries were the top two bidders. Tender data from both RJ McLeod and I & H Brown highlighted competition in aggregates and RMX between Breedon and Aggregate Industries. Aggregate Industries competed in three of the eight RJ McLeod tenders that Breedon also competed in, and five of the nine I & H Brown tenders that Breedon competed in. Further results and analysis from third parties tender data can be found in Appendix E, paragraphs 8 to 34.

6.28 The data showed that Leiths was an important competitor across regions and products. Leiths bid in 44 of the 77 Transport Scotland tenders that Breedon and Aggregate Industries both competed in. [REDACTED] We also observe in the Transport Scotland data other competitors bidding, at times successfully, for a number of contracts—mainly Tayside Contracts, Highland Quality, RJ McLeod and Lafarge Tarmac. Appendix E provides more detailed findings from this tender data.

6.29 We also examined Transport Scotland's contract surfacing tender data in the North East and North West operating regions separately to understand geographic variations. When comparing regions we observed a similar pattern in both operating regions in terms of Breedon's bids and success rates, and that Aggregate Industries

¹⁰³ The description of these regions, as defined by Transport Scotland, can be found in Appendix E, Annex 1.

and Leiths appeared to be the closest competitors to Breedon, also bidding for a large fraction of the contracts in both operating regions. The other bidders mentioned in paragraph 6.28 above also participated in the tenders, although [REDACTED] and [REDACTED] did not win any of the contracts in the North-East covered by this analysis.

Analysis of customer win and loss data

- 6.30 Breedon supplied the CC with its 2012 win and loss reports broken down by North Scotland and north-east Scotland,¹⁰⁴ as well as a tender register containing data on contract surfacing tenders it had bid for between 2010 and 2012.
- 6.31 Both Breedon's tender and win and loss data shows that Breedon was facing competition from Aggregate Industries and Leiths in aggregates, asphalt and RMX in the North-East and, to a lesser extent, the North regions (as defined and used by Breedon for internal reporting). However, [REDACTED]. In the North, the data suggested that [REDACTED]. However, [REDACTED].

Provisional conclusions

- 6.32 Overall the evidence shows that Breedon and Aggregate Industries were perceived as competitors in north-east Scotland prior to the transaction. However, in the overall context of north-east Scotland there were also many other competitors (particularly in the supply of aggregates). Tender analysis shows that there was competition between Breedon and the acquired operations for many contracts across regions and products. The survey evidence of smaller customers suggests competition between Breedon's pre-existing sites and the acquired sites, and also competition from competitors' sites (less so in the case of RMX); however, it does not reveal local aspects of competition relevant for our assessment.

¹⁰⁴ The North and North East are defined here according to Breedon's own data sets, where we note that the North includes the sites of Daviot, Netherglen, Elgin, Morefields, Shierlgas, Meadowside, Aviemore, Inverness and Rothes Glen, and the North East includes the sites of Craigenlow, Clatchard, Orrock, Stirlinghill, Ethiebeaton, Aberdeen, Capo and Balmullo.

Analysis of local effects for aggregates, RMX and asphalt

6.33 In this section (paragraphs 6.34 to 6.238) we analyse the effects of the transaction in the local areas for aggregates, RMX and asphalt. We analyse the effects of the merger in the relevant geographic markets for contract surfacing services in paragraphs 6.238 to 6.249 and the effects of the merger on the relevant geographic market for decorative aggregates in paragraphs 6.250 to 6.255.

Approach

Theories of harm

6.34 In our statement of issues,¹⁰⁵ we identified two ways in which the transaction could give rise to an SLC:

(a) *Theory of Harm 1: loss of actual competition at the local level.* The concern under this theory of harm is that the removal of a competitor, in some or all of the areas where Breedon's pre-existing operations overlap with the acquired operations, could lead the merging parties to increase the prices of their products and/or services or reduce service quality locally, including by closing or reducing the level of activity of sites.

(b) *Theory of Harm 2: loss of a potential competitor at the local level.* The second theory of harm is that the merger may lead to a loss of a potential competitor in an area. In particular, such an adverse effect may arise if, prior to the transaction, the behaviour of either party was influenced by the threat of the other expanding and entering into direct competition with it. Under this theory of harm, by removing a potential competitor from some local markets, the merger may reduce the competitive pressure in those markets.

¹⁰⁵ www.competition-commission.org.uk/assets/competitioncommission/docs/2013/breedon-aggregates-aggregate-industries/breedon_issues_statement.pdf.

6.35 With regard to Theory of Harm 2, we did not receive any evidence that suppliers of the relevant products took account of the possibility of a new facility being built in their vicinity in any of the decisions they made. In addition, the evidence we received from Aggregate Industries showed that it was unlikely either to expand its current facilities or to invest in new facilities in any of the areas of Scotland that we have examined. Further, we saw no evidence to suggest that Breedon had any plan to expand into areas of North Scotland where Aggregate Industries had operations but Breedon did not (eg the Hebrides).

6.36 We sought to understand whether closed or mothballed sites could be brought back into use easily and at relatively low cost in order to establish whether the competitive constraint posed by these sites should be considered under Theory of Harm 1. Breedon's evidence to us shows that in general its mothballed sites can be reopened easily and at a relatively low cost, although this will depend on the condition in which the site was maintained while it was mothballed. [REDACTED] It added that should a new contract be targeted near to one of the mothballed plants, consideration would be given to reopening the relevant plant. There are also some sites which are used occasionally, ie they are not closed or mothballed, and are not active throughout the entire year, but produce as and when required to serve a specific project or a customer.

6.37 We obtained from Breedon further information on the status of its own and the acquired mothballed sites and sites which are used occasionally, in order to understand the nature of the competitive constraint they are likely to pose on sites used on an ongoing basis in the relevant markets. Breedon told us that:

(a) [REDACTED]

(b) Its [REDACTED] plant would require [REDACTED] to reopen.

- (c) The acquired Ardchronie aggregates quarry was operated on an occasional use basis to fulfil specific supply opportunities, using mobile processing equipment. The site could be brought into full-time operation using either mobile equipment or installing a fixed plant.
- (d) The acquired Corrennie aggregates quarry [REDACTED].
- (e) The acquired Edzell aggregates quarry had a stockpile of [REDACTED] of materials on site from which occasional sales were made. It also had an old fixed processing plant on site. The quarry could therefore quickly be brought back into production with a relatively small amount of expenditure. The acquired Edzell RMX plant had been used since the acquisition to produce approximately [REDACTED] m³ for two customers. It could be quickly and easily brought back into full-time production.

6.38 This evidence shows that all the relevant sites (ie sites that are mothballed or are used occasionally) are able to be either brought back into operation or used more intensively at short notice and easily in response to market demand. Consequently we considered it appropriate to examine the competitive constraint posed by mothballed sites and sites that are occasionally used on other sites within our analysis of Theory of Harm 1. We therefore considered that it was not necessary to consider Theory of Harm 2 separately.

6.39 In line with our theory of harm, our assessment focused on the unilateral competitive effects of the merger on each relevant product in the relevant local areas identified through our analysis.

Framework used to analyse the effect of the merger on the markets for aggregates, RMX and asphalt

6.40 As set out in paragraph 6.9, evidence shows that location and price are the most important criteria in selecting a supplier for aggregates, RMX and asphalt. Evidence presented in paragraphs 6.2 to 6.5 shows that customers of aggregates, RMX and

asphalt obtain better prices by playing competitors against each other. This indicates that the availability of outside options, in the form of alternative suppliers of aggregates, RMX and asphalt, is important in price formation, therefore the loss of an important outside option in price negotiations or price setting may affect the price that the customers pay in an adverse way, in particular if there is a lack of suitable and competitive alternative suppliers.

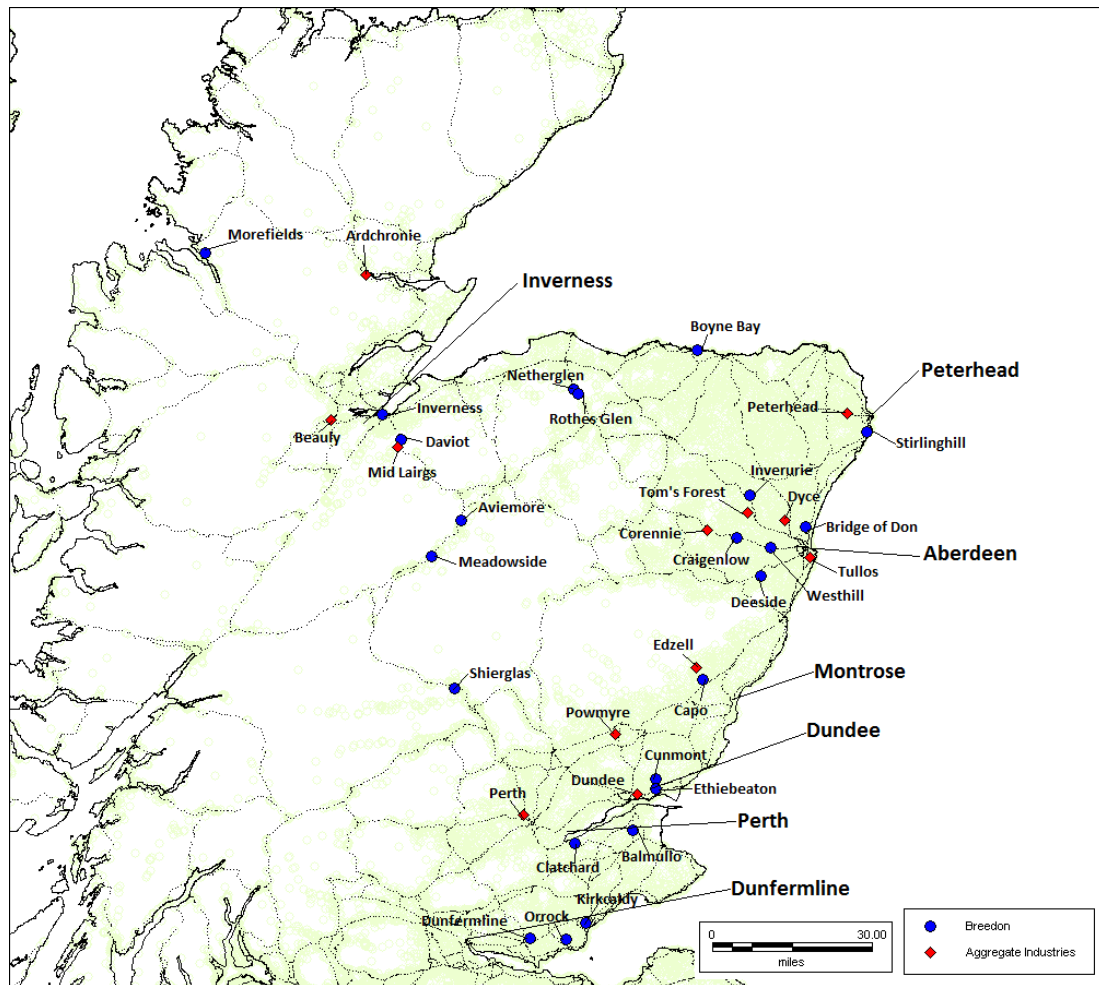
6.41 Therefore, our competitive assessment considers evidence on the availability of credible alternatives to the pre-existing Breedon sites and the acquired operations to customers of aggregates, RMX and asphalt, and how likely these alternatives are to be able to meet the needs of these customers (particularly in terms of price, delivery distance, specification and quantity). Thus, the locations of suppliers relative to each other and to customers (ie physical closeness of competition) and the extent to which they were competitive (eg as indicated by their size and range of customers served) were important dimensions to examine in our competitive assessment of the effects of the merger.

6.42 We started our analysis with Breedon's 23 pre-existing sites and 12 acquired sites located in north-east Scotland.¹⁰⁶ They are shown in Figure 8.

¹⁰⁶ This included active, mothballed and occasional use sites.

FIGURE 8

Breedon's pre-existing and acquired sites in north-east Scotland



Source: CC analysis.

6.43 Of all the acquired sites, there is only one site—Tom's Forest—that produces all three overlap products (aggregates, asphalt and RMX). There are a number of Breedon sites (Clatchard, Craigenlow, Ethiebeaton, Netherglen, Orrock, Shierglass, Stirlinghill) producing all three overlap products. Table 15 shows which sites are relevant to which products.

TABLE 15 Relevant pre-existing Breedon sites and acquired sites and their products

	<i>Sites</i>	<i>Aggregates</i>	<i>RMX</i>	<i>Asphalt</i>
Breedon	Aviemore		Yes (mothballed)	
	Balmullo	Yes		
	Boyne Bay	Yes		
	Bridge of Don		Yes	
	Capo	Yes	Yes	
	Clatchard	Yes	Yes (mothballed)	Yes
	Craigenlow	Yes	Yes	Yes
	Cunmont	Yes		
	Daviot			Yes
	Deeside		Yes (mothballed)	
	Dunfermline		Yes (occasional use)	
	Ethiebeaton	Yes	Yes	Yes
	Inverness		Yes	
	Inverurie		Yes	
	Kirkcaldy		Yes	
	Meadowside	Yes (contract crushing)		
	Morefields	Yes	Yes	
	Netherglen	Yes	Yes	Yes
	Orrock	Yes	Yes	Yes
	Roths Glen	Yes	Yes	
	Shierglas	Yes	Yes	Yes
	Stirlinghill	Yes	Yes	Yes
	Westhill		Yes	
Acquired operations	Ardchronie	Yes (occasional use)		
	Beaully	Yes	Yes	
	Corrennie	Yes (occasional use)		
	Dundee		Yes	
	Dyce		Yes	
	Edzell	Yes (occasional use)	Yes (mothballed)	
	Mid Lairgs			Yes
	Perth		Yes	
	Peterhead		Yes	
	Powmyre	Yes		
	Tom's Forest	Yes	Yes	Yes
	Tullos		Yes	

Source: CC analysis.

6.44 For each of the three overlap products, we carried out a two-stage process:

- (a) The first stage was designed to filter out those product-site combinations which are unlikely to give rise to concerns based on first whether there was overlap between the areas served by the sites based on their distance apart and on customer locations, and second, on the calculation of post-merger shares of production¹⁰⁷ and the number of competitors to Breedon remaining within the two defined catchment areas (see paragraph 4.69).

¹⁰⁷ We considered whether shares of capacity should be used in our assessment instead, as in the three product markets examined they convey useful information about the competitive strength of the suppliers. However, we used production since capacity of aggregates, RMX and asphalt production is difficult to estimate consistently, and reliable and comprehensive capacity data was not available to us for the purposes of the filtering stage. We considered capacity of suppliers in our detailed competitive assessment (the second stage).

(b) In the second stage, we carried out an in-depth analysis of the production sites and associated areas shortlisted through the initial filtering process in order to assess whether the transaction would be likely to raise competition concerns in any of those local areas.

Step 1: Filtering out of sites based on overlap and concentration analysis

6.45 We first describe the method we used to filter out sites for which the transaction is unlikely to result in competition concerns. We then summarize the outcome of this process. More detail is provided in Appendix F.

Approach

6.46 The filtering out of sites involved two steps. As a first step, for each overlap product and each acquired site in north-east Scotland, we identified geographic overlaps between Breedon's pre-existing sites and the acquired sites on the basis of the sites being within a distance of each other that was twice the average 80 per cent catchment area distances that we had calculated for aggregates, RMX and asphalt. We also considered possible overlaps between sites on the basis of customer locations, and, on a cautious basis, included sites which were further than twice the average 80 per cent catchment areas apart, but which appeared to serve similar customer locations to some extent.

6.47 The second step was to filter out those overlap sites for each overlap product which were unlikely to give rise to competition concerns based on indicators of post-merger local concentration of production and competitor counts.¹⁰⁸

6.48 The Guidelines note that when products are undifferentiated, unilateral effects are more likely where: the market is concentrated, there are few firms in the affected

¹⁰⁸ Several sites under the ownership of one company would count as one competitor. In the context of retail mergers, this is referred to as a 'fascia'.

market post-merger; the merger results in a firm with a large market share; and there is no strong competitive fringe of firms.¹⁰⁹ The Guidelines further note that market share of firms in the market, both in absolute terms and relative to each other, can give an indication of the potential extent of a firm's market power. The combined market shares of the merger firm, when compared with their respective pre-merger market shares, can provide an indication of the change in market power resulting from a merger.¹¹⁰ In relation to competitor counts, the Guidelines note that, when assessing unilateral effects from local markets of mergers involving retailers, a count of the different suppliers (fascias) in a local area also conveys some information about concentration; however, counting firms does not take into account differences in market share and the size distribution of firms.¹¹¹

- 6.49 Our filtering process therefore uses a set of filters, which are based both on production shares and on competitor counts; however, our filtering process used shares of production and competitor counts within defined catchment areas around sites rather than market shares.¹¹²
- 6.50 We considered what would be appropriate thresholds for production shares and competitor counts to use for the filtering step. We designed filters that we considered were consistent with the approach identified in paragraph 5.3.5 of our Guidelines on the use of fascia counts and market shares in the assessment of mergers, while noting that we were using catchment areas as proxies for local geographic markets. We note that it is not uncommon to use a 33 per cent share threshold, which, under certain assumptions, corresponds also to a reduction in the number of competitors

¹⁰⁹ CC2, [paragraph 5.4.4](#).

¹¹⁰ *ibid.*, [paragraph 5.3.4](#).

¹¹¹ *ibid.*, [paragraph 5.3.4](#).

¹¹² We used production shares as opposed to market shares as we had more comprehensive and comparable data for the former. Market shares are shares of sales in the market. The data available did not allow us, for both the main parties and competitors on a comprehensive basis, to identify locations or areas into which the sales were made from a specific plant (eg we could not distinguish between sales from a specific plant which remained in a local area around the plant and sales into a different area).

from four to three, for filtering out sites which are unlikely to give rise to competition concerns.¹¹³ On a cautious basis, we decided to use conservative thresholds for our filters of 25 and 33 per cent production shares, and five to four and four to three fascia count reductions.

6.51 Thus, we used the following combination of indicators to filter out unproblematic sites:

- (a) if the post-transaction share of the parties was between 25 per cent (inclusive) and 33 per cent *and* there would remain four or more competitors in both of the defined catchment areas;
- (b) if the post-transaction share of the parties was less than 25 per cent *and* there would remain three or more competitors in both of the defined catchment areas; and
- (c) if the post-transaction share of the parties was between 25 per cent (inclusive) and 33 per cent in one of the defined catchment areas, but less than 25 per cent in the other defined catchment area *and* there would remain three or more competitors in one of defined catchment areas, but four or more in the other defined catchment area.

6.52 Only sites falling within one of the above three categories were eliminated from further analysis. Thus, at this stage of the analysis, we applied what we considered to be conservative filters to exclude sites which are unlikely to give rise to competition concerns (ie the filters were such that we would exclude fewer rather than more sites).

6.53 The indicators of post-merger local concentration we used were calculated for each of the relevant products, as defined in paragraph 4.44(a), (c) and (d). In other words,

¹¹³ See, for example, the CC report on the [Anglo American/Lafarge JV merger inquiry](#), in relation to aggregates.

for aggregates, we included the production of all primary and recycled aggregates used in construction (excluding decorative aggregates) within both defined catchment areas; for RMX, we included the production of all types of RMX by fixed and mobile plants and volumetric trucks; and for asphalt, we included the production of all types of asphalt by fixed and mobile plants. We also considered how sensitive the outcome of the filtering analysis was to the product market definition, and therefore examined post-merger local concentration for aggregates for a scenario in which internal sales were excluded and a scenario in which recycled aggregates were excluded, and for RMX for a scenario which excluded the supply of RMX by volumetric trucks.

6.54 The analysis of geographic overlaps and the filtering analysis are set out in detail in Appendix F.

6.55 Having eliminated, using the filtering process described, those sites that were unlikely to raise competition concerns, we grouped the parties' remaining sites based on their proximity to each other and to population centres and thus identified areas on which we carried out a detailed competitive assessment (the short-listed areas) for each of the three overlap products.

Results

- *Aggregates*

6.56 In carrying out the analysis of geographic overlaps between the parties' aggregates sites, we found that the only Breedon pre-existing aggregate quarry within 36 miles of Beaulieu was Meadowside, which carries out contract crushing. Given the distance between the two sites, the location of Meadowside and the nature of its activities (which are limited to contract crushing), we considered it unlikely that the two sites overlapped in practice. We therefore filtered out both Meadowside and Beaulieu's aggregate sites. Similarly, although Breedon's Morefields site is within 30 radial miles

from the acquired Ardchronie site, which is used on an occasional basis, the location of the two sites relative to each other and in a remote rural area, and other evidence received, suggested that these sites are unlikely to overlap in practice.

6.57 We were left with four Aggregate Industries sites (Corrennie, Edzell, Powmyre, and Tom's Forest) and 12 Breedon sites (Balmullo, Boyne Bay, Capo, Clatchard, Craigenlow, Cunmont, Ethiebeaton, Netherglen, Orrock, Rothes Glen, Shierglass and Stirlinghill) to analyse further.

6.58 Using the filters described in paragraph 6.51, we identified a further ten sites which were unlikely to raise competition concerns. They were: Powmyre, Balmullo, Boyne Bay, Clatchard, Cunmont, Ethiebeaton, Netherglen, Orrock, Rothes Glen and Shierglass.¹¹⁴

6.59 Three of these sites, Powmyre, Cunmont and Ethiebeaton (near Dundee), were not filtered out when recycled aggregates were excluded from the calculations. We noted, however, that their shares of production within the defined catchment areas would remain below 33 per cent and that there would be at least two competitors to Breedon remaining within the average 80 per cent catchment area (at least four if recycled aggregates suppliers were included, and more if the 'extended' average catchment area of 27 radial miles is considered). We also noted that Breedon's board papers identified recycled aggregates as a significant constraint in the Dundee area and therefore considered that the merged parties' share of production of primary aggregates was likely to overestimate the strength of their competitive position in this area. We therefore provisionally concluded that the transaction was unlikely to result in competition concerns for these three sites.

¹¹⁴ We note that the following Breedon sites, identified as possible overlap sites, were filtered out on the basis that they were further than 27 miles away from any of the acquired Aggregate Industries aggregates sites: Balmullo, Clatchard, Boyne Bay, Netherglen, and Rothes Glen. We were mindful of these sites in our competitive assessment, to the extent that there was evidence to suggest that they posed, or could pose, a constraint on the acquired Aggregate Industries sites.

6.60 Two other sites, Edzell and Capo (near Montrose), were filtered out if internal sales were excluded from the analysis but were not filtered out if recycled aggregates were excluded from calculations. In the latter scenario, the share of production within the 27-mile catchment area of Edzell would be [33–50] per cent and the number of remaining competitors within its 18-mile catchment area would be two. We considered that a more detailed competitive assessment was necessary for these two sites.

6.61 For the detailed competitive assessment, we grouped the remaining sites based on how close they were to each other and to population centres. The groupings were as follows:

- (a) sites near Montrose: Capo and Edzell;
- (b) sites near Aberdeen: Corrennie, Craigenlow and Tom's Forest; and
- (c) sites near Peterhead: Stirlinghill.

- *RMX*

6.62 There did not appear to be an overlap between Breedon's Aviemore, Netherglen and Rothes Glen RMX plants and any of the acquired Aggregate Industries RMX plants. Using the filters described in paragraph 6.51, we identified four further sites which were unlikely to raise competition concerns under either of the two scenarios (ie whether volumetric trucks and mobile plants were included or not in the analysis. See paragraph 6.53). They were: Perth, Clatchard, Dundee and Ethiebeaton.

6.63 For the detailed competitive assessment, we grouped the remaining sites based on how close they were to each other and to population centres. The groupings were as follows:

- (a) sites near Montrose: Capo and Edzell;

(b) sites near Aberdeen: Bridge of Don, Craigenlow, Deeside, Dyce, Inverurie, Tom's Forest, Tullos and Westhill;

(c) sites near Peterhead: Peterhead and Stirlinghill; and

(d) sites near Inverness: Inverness and Beaully.

- *Asphalt*

6.64 There did not appear to be an overlap between Breedon's Clatchard, Ethiebeaton, Orrock and Shierglass asphalt plants, all located in the Tayside and Fife region, and any of the acquired Aggregate Industries asphalt plants. Using the filters described in paragraph 6.51, we did not identify any further sites that would be unlikely to raise competition concerns.

6.65 For the detailed competitive assessment, we grouped the asphalt sites based on how close they were to each other and to population centres. The groupings were as follows:

(a) sites near Aberdeen: Craigenlow, Tom's Forest and Stirlinghill;¹¹⁵ and

(b) sites near Inverness: Daviot, Mid Lairgs and Netherglen.

Step 2: Detailed analysis of the competitive effects of the transaction in the relevant product markets and local areas

6.66 Our competitive assessment draws upon evidence and analysis set out in Appendices D to I and should be read in conjunction with those appendices. In this section, we explain our reasoning by highlighting some of the most relevant aspects of this evidence, and cross-refer to the more detailed analysis contained in the appendices where appropriate.

¹¹⁵ The overlap with Tom's Forest is mainly south of Peterhead and for ease of analysis we have therefore grouped Stirlinghill with the sites near Aberdeen.

- 6.67 For each local area, we first give an overview of the relevant Breedon's pre-existing and acquired sites (the overlap sites) and broad demand characteristics in the area. We then summarize our competitive assessment for each product. This includes:
- (a) A description of the level of production, geographic proximity and area in which deliveries were made by the overlap sites in 2012. This provides an indication of the competitive constraint the overlap sites exerted on each other in the relevant market.
 - (b) The share of production of Breedon within the relevant catchment area distances (as set out in paragraph 4.70) post-transaction. This provides a high level indicator of local concentration resulting from the transaction.
 - (c) A count and a description of the competitors within the relevant catchment area distances, including their level of production, their location vis-à-vis the overlap sites and vis-à-vis the areas where the overlap sites made most of their deliveries in 2012. This provided a high-level indication of the likely competitive constraint exerted by other suppliers on the overlap sites.
 - (d) Other qualitative and quantitative evidence that assisted us in understanding the competitive dynamics in the local area.
- 6.68 For each product and short-listed area, we used a data set¹¹⁶ containing various information on the parties' and competitors' sites and their activities, including: site location,¹¹⁷ distance between the respective sites, type of site, site production and/or sales volume, share of production by supplier,¹¹⁸ delivery destinations¹¹⁹ and, for

¹¹⁶ All data used was for the full year 2012.

¹¹⁷ Site location was considered by: (a) proximity of the parties' sites to each other within the catchment area and to the centres of the local population; and (b) proximity of competitors' sites to the parties' sites and to the centres of the local population. This analysis involved the examination of maps, in addition to the calculation of radial distances.

¹¹⁸ We made these calculations for the two defined catchment areas. For completeness, we also reported data on sites outside the extended average catchment areas but within twice the average catchment areas to make sure that all competitive constraints were captured; we only considered these further-away sites to the extent there was evidence that they were a competitive constraint.

¹¹⁹ We analysed delivery destinations from Breedon's and the acquired sites and where relevant transport networks.

aggregates only, types of product produced/sold (primary or recycled) and proportions of internal and external sales.¹²⁰

6.69 In making our competitive assessment we also considered comments made by the parties and third parties on the nature of competition and the effect of the merger in the relevant area, telephone survey evidence, evidence on the level of spare capacity¹²¹ available at competitors' sites, transport costs and our own pricing analysis. This information was considered on a case-by-case basis where it was relevant to the particular circumstances of a given area and product. It was used as distinguishing or corroborating evidence to assess the effects of the merger on competition across each product market.

6.70 Our analysis and provisional conclusions for each area and each product are presented as follows:

- (a) sites near Montrose (6.71 to 6.89): aggregates (6.73 to 6.82) and RMX (paragraphs 6.83 to 6.89);
- (b) sites near Aberdeen (paragraphs 6.90 to 6.141): aggregates (paragraphs 6.92 to 6.113), RMX (paragraphs 6.114 to 6.126), and asphalt (paragraphs 6.127 to 6.141);
- (c) sites near Peterhead (paragraphs 6.142 to 6.162): aggregates (paragraphs 6.144 to 6.153) and RMX (paragraphs 6.154 to 6.162); and
- (d) sites near Inverness (paragraphs 6.163 to 6.189): RMX (paragraphs 6.166 to 6.175), and asphalt (paragraphs 6.176 to 6.189).

¹²⁰ For aggregates, we factored into our competitive assessment the share of recycled aggregates within the two defined catchment areas around the parties' sites. We also measured the level of vertical integration of competitor sites to provide an indication of the competitive constraint imposed by the internal provision of recycled and primary aggregates to RMX and asphalt operations.

¹²¹ There are difficulties in obtaining reliable figures for aggregates, as reserves give an indication of long-term capacity but may be difficult to access in the short to medium term and there are many variables in determining short-term capacity. The average capacity RMX and asphalt plants can also be misleading because of significant variations in demand and the impact of various factors that are unique to each plant. We therefore relied on suppliers' views of the level of spare capacity they have where appropriate but recognize the limitations of this analysis.

Sites near Montrose

6.71 Breedon's Capo site and Edzell (the acquired site) both supplied aggregates and RMX in 2012. The Edzell RMX plant was mothballed in 2012 and the quarry does not currently produce any aggregates. However, as explained in paragraph 6.37(e), both the quarry and RMX plant could quickly be brought back into production. Both sites are located in Angus, close to the border with Aberdeenshire, in a rural area that is characterized by a relatively dispersed population. Edzell and Capo are approximately 10 and 8 radial miles to the north-west of Montrose respectively and they are both 31 miles to the south of Aberdeen. The two sites are approximately 2 radial miles apart.

6.72 The evidence we have received suggests that demand is principally concentrated in Dundee and Montrose and that demand characteristics are unlikely to change in the near future: Laird Brothers told us that over the past two to three years there had been significant demand in the Montrose and Aberdeen areas, but that there had been little in South Tayside. Breedon did not expect any significant change in demand in the near future and did not consider that it would supply products for the AWPR from this location.

- *Aggregates: competitive assessment*

- *Closeness of competition between the overlap sites and measure of post-transaction concentration*

6.73 In 2012, Capo produced [REDACTED] tonnes of aggregates, while Edzell produced [REDACTED] tonnes (compared with [REDACTED] tonnes in 2011 and [REDACTED] tonnes in 2008). As noted in paragraph 6.71, the two sites are close to each other and to the Montrose area.

6.74 As shown in Appendix G, Figure 2, Capo's deliveries were concentrated within the triangle formed by the A90, A92 and A934 linking Forfar, Montrose and Stonehaven, with some deliveries being made as far north as Aberdeen and as far south as

Lothian. As shown in Appendix G, Figure 1, deliveries from Edzell focused on the area to the east of the site and into Montrose, although we note that 2012 may not have been typical due to the closure of the site partway through the year. This showed that there was an overlap in the delivery locations of the two sites in 2012.

6.75 Our catchment area analysis for the two sites shows significant variation between 2010 and 2012 with delivery distances ranging from [X] radial miles for Edzell and from [X] radial miles for Capo (see Table 4, Appendix D). We therefore examined carefully the strength of competitive constraints both close to the overlap sites and in a wider area.

6.76 The post-transaction shares of production of the two sites within an 18-mile radial around each of them would be [0–25] per cent. The post-merger share of Breedon would be [0–25] per cent within 27 radial miles of Capo, and it would be [33–50] per cent within 27 radial miles of Edzell.

◦ *Competitive constraint posed by other suppliers*

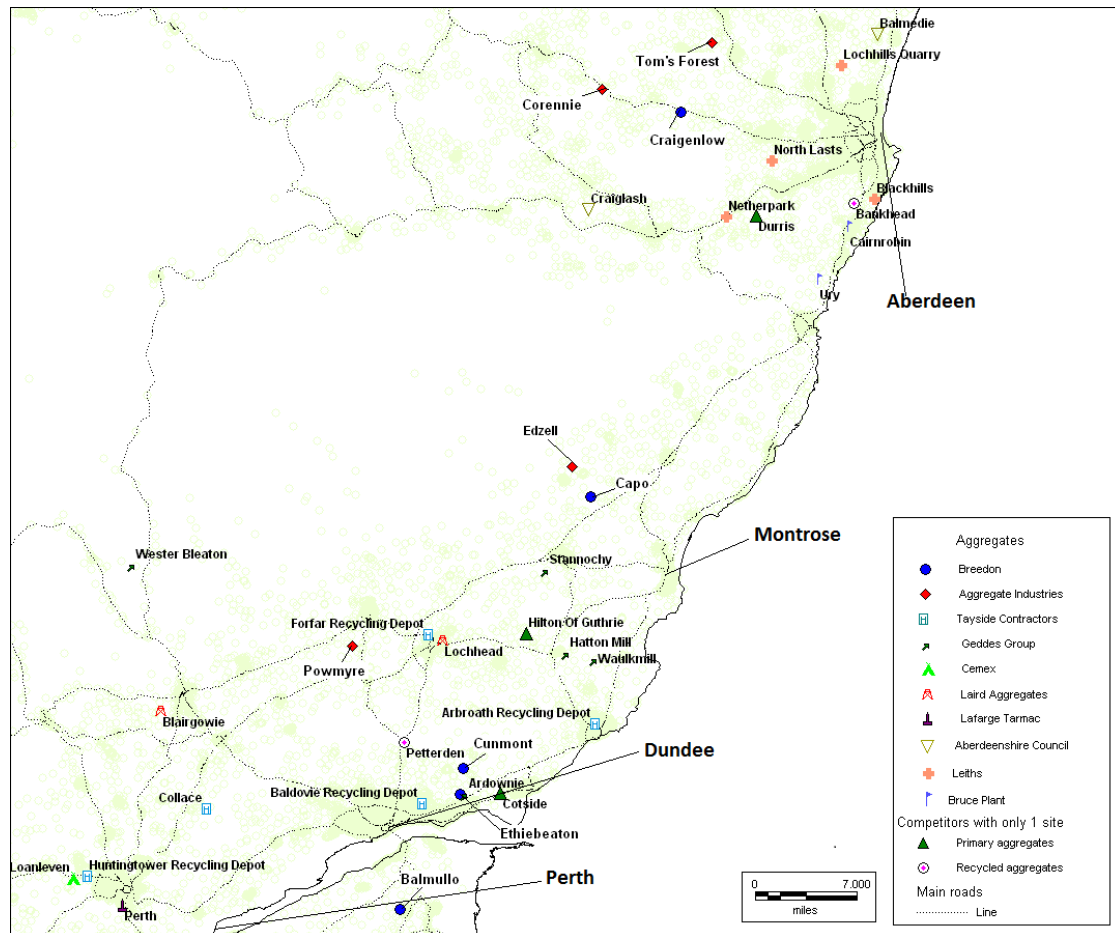
6.77 Following the transaction, within 18 miles, there remain two competitors to Breedon for Capo and three competitors for Edzell (five and four respectively if smaller suppliers are included). There are ten or more competitors (including smaller competitors¹²²) within 27 radial miles of Capo or Edzell.

6.78 Figure 9 shows the locations of Edzell, Capo and suppliers of aggregates in their vicinity.

¹²² This includes suppliers that have a share of production that is less than 5 per cent in the defined catchment areas.

FIGURE 9

Locations of suppliers of aggregates near Montrose



Source: CC analysis.

6.79 Geographically, the closest competitor to both sites is Geddes Group's Stannochy quarry, located 6 radial miles from Capo and 7 radial miles away from Edzell.¹²³ It is located close to Brechin and around 8 radial miles away from Montrose town centre, and produced [X] tonnes of aggregates in 2012. To the south of Stannochy, approximately 7 to 17 miles from Montrose town centre, there are a further five sites that produced between them [X] tonnes. The largest (Lochhead, owned by Laird

¹²³ Based on radial distances.

Brothers) produced [REDACTED] tonnes and is 16 radial miles from Montrose. Breedon's board papers identified the following competitive constraints. [REDACTED].¹²⁴

- 6.80 There are also some large competing sites situated south of Aberdeen (eg Leiths' Blackhills and Chap Quarries' Durris quarries) that may be able to compete with both Edzell and Capo in the area north of Montrose, given the distances involved (for example, Chap Quarries' Durris is located 21 radial miles from Edzell and 26 radial miles from Montrose town centre). Similarly, there are a number of large aggregates sites, including recycled aggregates sites, near Dundee which are within 27 miles of Edzell and Capo (eg D J Laing's Petterden site, Geddes Group's Ardownie site).
- 6.81 We also noted that following the transaction there would remain four and five competitors in the 27-mile catchment areas of Edzell and Capo respectively (11 and 10 competitors respectively if smaller competitors are included) and that if internal sales were excluded from the analysis the two sites would have been filtered out in our preliminary analysis (see paragraph 6.60).

◦ *Provisional conclusions*

- 6.82 Taking into account the evidence set out in paragraphs 6.73 to 6.81, we provisionally concluded that the transaction was unlikely to result in competition concerns with regard to the supply of aggregates from the Edzell and Capo sites: in particular, there would remain over four competitors within a 27-mile radial of the overlap sites, including large competitors and/or competitors supplying recycled aggregates, able to supply aggregates in the area served by these two quarries; there were some large competitors in close proximity to the overlap sites; and Breedon's post-transaction shares of production within the relevant radials is relatively low. Furthermore, Edzell

¹²⁴ Refers to the closure of the Edzell site.

was closed¹²⁵ in 2012 and Aggregate Industries had no plan to reopen this site unless there was a change in market outlook.

- *RMX: competitive assessment*

- *Closeness of competition between the overlap sites and measures of post-transaction concentration*

6.83 In 2012, Capo produced [X]m³ of RMX and Edzell produced [X]m³ (compared with [X] in 2011 and [X] in 2010). As noted in paragraph 6.71, the two sites are close to each other and to the Montrose area.

6.84 As shown in Appendix G, Figures 6 and 7, the 2012 deliveries were mainly made to the south-east and north-east of the two sites into Montrose and the area south of Stonehaven. This showed that there was a substantial overlap in the delivery locations of the two sites in 2012.

6.85 80 per cent of deliveries from Capo were made within a radial distance of [X] miles in 2012 (but [X] miles in 2011 and 2010). For Edzell, 80 per cent of deliveries were made within a radial distance of [X] miles in 2012 (and [X] miles in 2009 and 2010). These delivery distances were consistent with the defined catchment areas we had defined in paragraph 4.70(b).

6.86 The post-transaction shares of production of the two sites within 13 radial miles of the sites would be [50–100] per cent. However, the post-merger share of the two sites is only [0–25] per cent within 20 radial miles of the sites as some more competitor sites are located further away from the Montrose area.

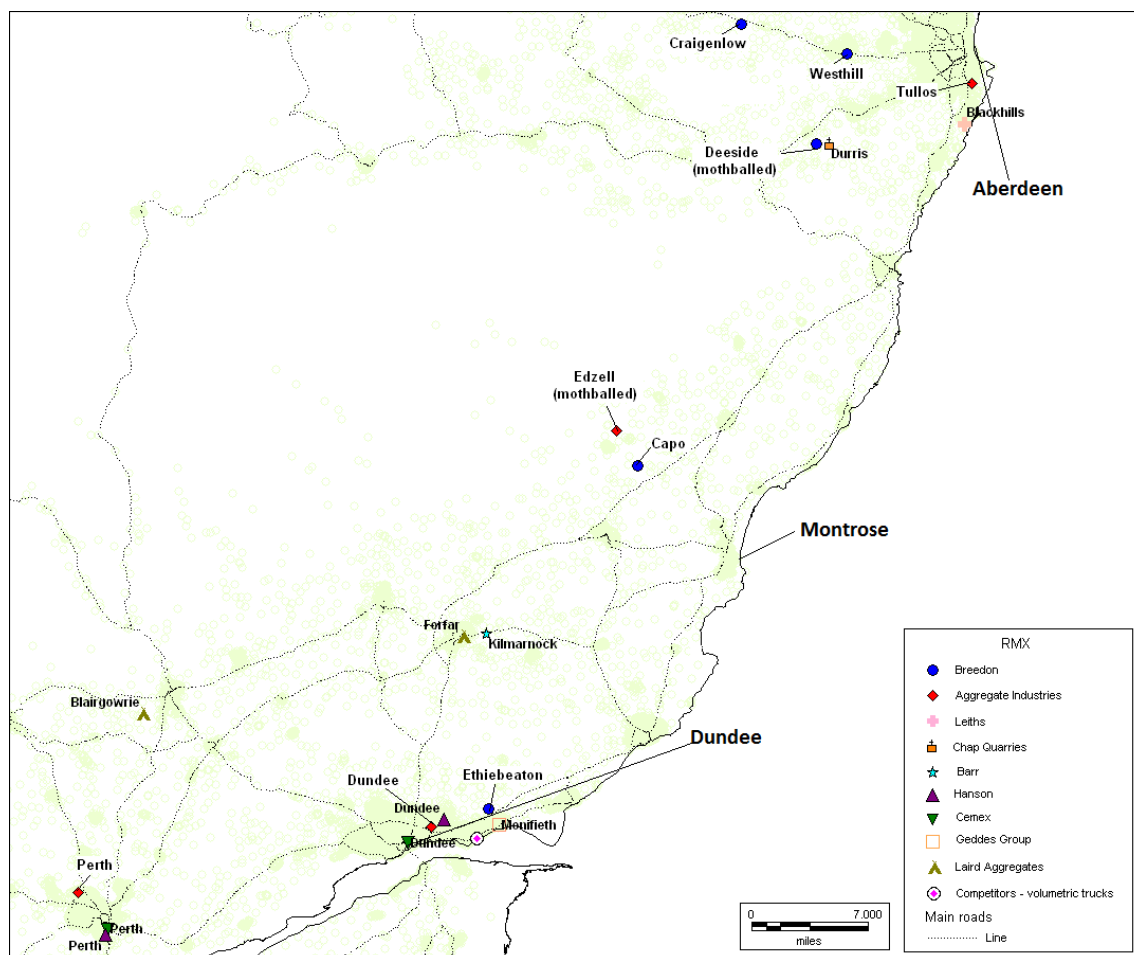
¹²⁵ There are, however, stock piles of aggregates on-site that can be used. See paragraph 6.37(e).

- *Competitive constraints posed by other suppliers*

6.87 Figure 10 shows the locations of Edzell, Capo and suppliers of RMX in their vicinity.

FIGURE 10

Locations of suppliers of RMX near Montrose



Source: CC analysis.

6.88 Although there is no competitor to the two sites within a 13-mile radius, there are two large competing sites near Forfar, around 15 miles south of Edzell and Capo: Barr at Kilmarnock produced $[\text{X}]\text{m}^3$ of RMX in 2012 and Laird Brothers' Forfar plant produced $[\text{X}]\text{m}^3$. Breedon's board papers identified $[\text{X}]$. The strength of the competitive constraint is evidenced $[\text{X}]$. Comments made by smaller customers in response to our survey tended to suggest that Capo and Edzell faced competition from a number of sites, that the customers who commented in general found it easy to switch and expressed little concern about the impact of the transaction on RMX

supplies and prices (we note, however, that the number of responses for each site was small; see Appendix I).

◦ *Provisional conclusions*

- 6.89 Taking into account the evidence set out in paragraphs 6.83 to 6.88, we provisionally concluded that the transaction was unlikely to result in competition concerns with regard to the supply of RMX from the Edzell and Capo sites: in particular, there would remain two competitors that produce significantly more RMX than Capo and Edzell within 15 radial miles, and there are more competitors within 26 radial miles. In addition, internal board papers suggested that the area in which Capo and Edzell supplied products was characterized by vigorous competition, a view which was also supported by customer comments. Furthermore, Edzell was mothballed in 2012 and Aggregate Industries had no plan to re-open this site [REDACTED].

Sites near Aberdeen

- 6.90 Breedon's Craigenlow and Tom's Forest (acquired site) both supply aggregates, RMX and asphalt. Craigenlow and Tom's Forest are less than 10 radial miles from each other and about 13 radial miles from Aberdeen city centre. Corrennie (acquired site) supplies small volumes of aggregates, and is located around 19 radial miles from Aberdeen city centre. Three Breedon sites (Bridge of Don, Inverurie and Westhill) and two acquired sites (Dyce and Tullos) supply RMX only. They are all located within a 15-mile radius of Aberdeen city centre. Deeside, a mothballed Breedon RMX plant, is located 10 radial miles from Aberdeen city centre. The main roads into Aberdeen are the A90 (north to south) and the A96 (east to west). We received evidence from a number of parties ([REDACTED], Breedon, Leiths, Savoch Quarry) that demand for construction materials in the Aberdeen area had been resilient in the economic downturn due to its reliance on the oil and gas industry and it was expected to be dynamic over the next few years as a result of the building of the

Aberdeen ring road. The high level of demand in the area is illustrated by Appendix H, Figure 6.

6.91 As noted in paragraph 2.49(a), the construction of the AWPR is a major project that could in principle result in a significant increase in the demand for construction materials in the Aberdeen area in the next few years: [REDACTED]. However, due to its size, this project (like the recent Forth crossing one—see paragraph 2.48(e)) could attract suppliers from other parts of the UK (and indeed [REDACTED]) and may obtain some of its construction materials through the use of borrow pits and mobile plants. It is therefore unclear how much demand will be fulfilled by local suppliers, as several industry participants told us.¹²⁶ Aberdeen City Council thought the AWPR might act as a catalyst to a major operator opening a quarry which would be taken over by other companies after the bypass had been built.¹²⁷

- *Aggregates: competitive assessment*
 - *Closeness of competition between the overlap sites and measures of post-transaction concentration*

6.92 With 2012 production volumes of [REDACTED] tonnes and [REDACTED] tonnes respectively, Tom's Forest and Craigenlow are the largest aggregate sites in the area surrounding Aberdeen. The two sites are close to each other and to Aberdeen.

6.93 Between 2010 and 2012, 80 per cent of the deliveries from Craigenlow were made within a [REDACTED]-mile radius and tended to focus on Aberdeen (see Appendix G, Figure 4). Few sales were made further north towards Peterhead. Similarly, 80 per cent of deliveries from Tom's Forest were made within a [REDACTED]-mile radius and tended to be made in the area of Aberdeen (see Appendix G, Figure 3), although more sales were made towards the north of Grampian and Peterhead by Tom's Forest than by

¹²⁶ Hearing summaries

¹²⁷ [Summary of hearing](#).

Craigienlow. This showed that there was substantial overlap in the delivery locations of the two sites in 2012 and that a substantial proportion of those deliveries were in Aberdeen and its close vicinity.

6.94 The post-transaction shares of production of Craigienlow, Corrennie and Tom's Forest, combined, is in excess of 33 per cent both within 18 and 27 radial miles from the sites. Post-transaction shares based on 18- and 27-mile radials around customer locations indicate a significant increment resulting from the transaction and post-transaction shares in excess of 33 per cent for customers located in Aberdeen and the area surrounding it. (See Appendix F, Table 4.) We note that post-transaction share of production for the three sites is in excess of 33 per cent in the defined catchment areas also when internal sales are excluded, and significantly in excess of 33 per cent if recycled aggregates are excluded.

6.95 We further note that, to the extent that recycled aggregates are suitable alternatives to primary aggregates for some customers, our estimated Breedon post-merger share of production may be overstated as our data does not capture all the sources of recycled aggregates.

◦ *Competitive constraints posed by other suppliers*

6.96 For both Corrennie and Craigienlow, post-transaction there remain three competing suppliers within 18 miles and four within 27 miles (four or more within 18 miles and ten or more within 27 miles if smaller suppliers are included). For Tom's Forest, the equivalent numbers are four and five (8 and 13 respectively if smaller suppliers are included).

6.97 Figure 11 shows the locations of Craigienlow, Tom's Forest, Corrennie and suppliers of aggregates in their vicinity.

Locations of suppliers of aggregates in Grampian



6.99 Although there are a number of other suppliers, each has a share of production which is less than 10 per cent within a 27-radial mile catchment area. One customer ([REDACTED]) commented that aside from Breedon, Aggregate Industries and Leiths, there was only competition at the periphery and those competitors tended to be smaller operators that could not always supply the large volumes that were required. Leiths

considered that smaller independents tended to compete more at the lower-quality end of the market and so focused on basic fills and layers to go under better-quality materials. Nevertheless we noted that Chap Quarries (in Durris to the south of Aberdeen) produced [X] tonnes in 2012 and James Jamieson (in Ardlethen, to the north) produced [X] tonnes. Both suppliers serve mainly the external market. In addition, Breedon provided evidence that it had lost some sizeable contracts, including to Leiths and to James Jamieson among others and of the volume of work that it had bid for and lost.

6.100 A number of aggregates sites are vertically integrated into RMX and/or asphalt.¹²⁸ All Aberdeenshire Council's quarries have an asphalt plant located on them, Leiths' Lochhills and Blackhills quarries have both asphalt and RMX plants. A substantial proportion of Leiths' sales in 2012 were to its own downstream operations. Chap Quarries, Bridgend Sand & Gravel and Lovie's Methlick and Blackhills quarries have RMX plants on them. A significant proportion of sales from some of the quarries are internal. On average, aggregates sites within 18 or 27 radial miles from Tom's Forest, Corrennie and Craigenlow sell [X] to [X] per cent of the produced aggregates externally. We noted that when taking account of only the external sales of Breedon and of its competitors, the shares of production of Breedon post-transaction were between [X] and [X] per cent lower in the Aberdeen area than when including both internal and external sales. This suggested that Breedon's overall share of production in the defined catchment areas might somewhat overstate its actual competitive strength.

6.101 We assessed the strength of the competitive constraints posed by Aberdeenshire Council: it has three aggregate quarries which together produced [X] tonnes of

¹²⁸ Our definition of vertical integration here captures only those instances where there is an asphalt and/or an RMX plant located at an aggregates site, and both the aggregates site and the RMX and/or asphalt plant are operated by the same company.

aggregates in 2012. However, evidence we received from several parties (Aberdeen City Council, [redacted], Leiths) suggests that Aberdeenshire Council is focused on its own internal needs, and does not pursue new customers aggressively. Aberdeenshire Council confirmed that this was the case and that its prices were based on its costs, with set discounts being provided to customers, regardless of the prices offered by other suppliers. Some customers told us that Aberdeenshire Council's prices were higher than those of other suppliers. Our analysis of its list prices showed that they tended to be [redacted] than Breedon's list prices but we were not able to compare actual prices paid by customers. We noted nevertheless that the production of asphalt would entail the extraction of lower-quality aggregates that would need to be removed from site and that this would give an incentive to Aberdeenshire Council to sell products externally, and that indeed it sold substantial volumes into the marketplace (around 69 per cent of its aggregates sales were external in 2012/13). In addition, Aberdeenshire Council told us that if there was a price increase in the external market, it would seek to meet to an extent any additional demand for its products that might result from this. Taking all this evidence into account, we considered that Aberdeenshire Council exerted some level of competitive constraint on Breedon, albeit to a more limited extent.

- 6.102 We noted that there were more quarries to the north of Aberdeen than to the south, with competition to the north of Aberdeen likely to come not only from the quarries that were close to Aberdeen, but also from quarries in the direction of Peterhead (eg James Jamieson's Ardlethen quarry and Lovie's Methlick quarry). We considered whether competitive pressures might be more subdued to the south of Aberdeen:
- (a) Breedon and other parties (eg Chap Quarries) told us that road congestion through Aberdeen was an issue. James Jamieson told us that it saw Aberdeen as having two different markets divided into the north and the south and that it did not venture too far south as it was difficult to offer competitive prices. [redacted] In

addition, we noted that vehicles travelling from the north on the A90 would be required to cross the River Don to the north and the River Dee to the south. We understand that the crossing of the Don has been recognized as a significant issue and that Aberdeen City Council is committed to building a third bridge, although this has met with considerable local opposition.¹²⁹ We also understand that the crossing over the River Dee is also a cause of congestion and is not suitable for heavy goods vehicles, thus forcing them to make a 3 mile detour on local roads.¹³⁰ Breedon told us that it did not consider crossing of the river to be a significant issue and considered that, at most, the current situation might cause an insignificant increase in delivery costs.

- (b) A customer, [REDACTED], described competitive constraints in the Aberdeen area in terms of a south–north divide¹³¹ and highlighted the ability of Leiths, Breedon and the acquired operations to supply competitively into all the parts of Aberdeen because they had facilities surrounding the city.¹³²
- (c) Our survey provided some limited insight into the willingness and ability of customers to switch between facilities situated to the north and the south of the city: customers were asked which quarries they would use as an alternative if the quarry they had purchased from was closed. Of the 21 customers who had purchased aggregates from Tom’s Forest and named a diversion site, seven mentioned Leith’s Blackhill site which is south-east of the bridge across the Dee. Among Craigenlow’s aggregates customers, Blackhills was the most cited quarry (8 of the 12 respondents naming at least one diversion alternative).
- (d) We noted that unlike RMX and to a lesser extent asphalt, there was no need to deliver aggregates within a specific timeframe and/or at a particular time in the

¹²⁹ North EastNorth Eastwww.bbc.co.uk/news/uk-scotland-north-east-orkney-shetland-20782100; www.bbc.co.uk/news/uk-scotland-north-east-orkney-shetland-21178244.

¹³⁰ www.kwells.org/aberdeen-access-south-bridge-dee-study/.

¹³¹ Hearing summary, paragraph 6.

¹³² *ibid*, p18.

day and therefore traffic congestion would be less problematic for deliveries of aggregates than for the other two products.

6.103 Given the above evidence, we were not persuaded that there was a clear market segregation between the north and south of Aberdeen but recognized that the competitive advantage that is generally gained by a given supplier from being closer to a delivery site would be exacerbated in certain cases in the Aberdeen area by the effect of traffic congestion through the city centre.

6.104 As explained in paragraph 4.14, we defined the aggregate market to include recycled aggregates, but recognized that the strength of the competitive constraint exerted by recycled aggregates would vary between different local areas. In paragraphs 6.105 to 6.108 we consider this competitive constraint in the Aberdeen area.

6.105 Our estimates suggest that the share of production of recycled aggregates within the two defined catchment areas of the three sites (Craigenlow, Corrennie and Tom's Forest) are in the range of 8 to 11 per cent, depending on the radial used and site. Evidence from third parties suggested that this was not a significant constraint in the Aberdeen area:

- (a) One customer ([REDACTED]) commented that one or two of the smaller suppliers produced recycled aggregates.
- (b) Another customer, RJ McLeod, said that recycled aggregates were often difficult to source.
- (c) Chap Quarries told us that two [REDACTED] sites reprocessed aggregates, but that competition from recycled aggregates was not a major consideration as often the material would remain on the demolition site. This had an impact on overall demand but was not something that the company took into account. It further

commented that there were not many demolition sites and volumes of recycled aggregates were not large.

(d) Leiths confirmed that most of the recycled material it produced was reprocessed and reused on the demolition sites and it therefore supplied externally only very small amounts. Leiths thought that the proportion of the total supply of aggregates would be lower in the Aberdeen area than in the UK overall, as there were not many demolition contracts with a surplus of materials and a higher percentage of aggregates went into the production of added-value products, ie asphalt and RMX.

(e) We noted that none of the respondents to our survey mentioned recycled aggregates as a competitive constraint or a possible reason why the merger might not lead to competition concerns (see Appendix I for detailed customer commentaries).

6.106 We noted that Breedon's own board reports did not mention the competitive constraint of recycled aggregates (by contrast with its board reports commenting on competition in the Tayside area). Breedon, however, told us that this reflected different approaches taken by local managers in their reports. It said that whereas the production of recycled aggregates had seen strong growth in Tayside in recent years, competition from recycled aggregates had been an established feature in the Aberdeen area for several years, and was therefore less likely to attract comment in board reports in the absence of additional factors. Breedon also argued that the BDS estimate of 280,000 tonnes for the supply of recycled aggregates in the Aberdeen area and Grampian was a significant underestimate. On our site visit in Aberdeen, it showed us over 13 sites which it estimated produced 1.3 Mt of recycled and secondary aggregates (as defined by Breedon, see paragraph 2.29). It further argued that the fact that a corollary to the high level of construction activity in the Aberdeen

area was a high level of demolition activity and therefore availability of recycled aggregates. We noted that:

- (a) The definition adopted by Breedon for recycled aggregates is broader than that used by the CC and includes borrow pits and non-registered quarrying activities and there may be some duplication, as these two types of activities produce what are normally defined as primary aggregates (see paragraphs 2.29 and 2.31).
- (b) Breedon acknowledged that the amounts estimated for each site identified could vary significantly from one year to the next and that variation in production (upwards or downwards) for any individual site could be 25 per cent.
- (c) We were not able to cross-check Breedon's figures as they were essentially based on the company's market knowledge, informal enquiries and visual assessments. The fact that the estimates included non-registered quarrying activities and non-permanent sites make it particularly difficult to verify their accuracy. Furthermore, some of the estimates seem to refer to the totality of available aggregates from temporary sites in a given year (which are then annualized) rather than to annual output.
- (d) Breedon's estimate which equates to [X] per cent of external sales in the Aberdeen area appears inconsistent with the views of other market participants which generally considered recycled aggregates not to be a significant feature in this area.

6.107 We accepted that BDS's figures were likely to underestimate the supply of recycled aggregates as they only included permanent facilities, but we did not consider that Breedon's figures were necessarily more reliable. In making our assessment of the strength of the competitive constraint posed by recycled aggregates, we took account not only of our estimates for recycled aggregates but also of the views of market participants.

6.108 We recognized that recycled aggregates posed a competitive constraint in the Aberdeen area but given the evidence we received from customers and other suppliers, we were not convinced that it was as strong as suggested by Breedon (see paragraph 4.7). We also noted, as explained in paragraph 4.12(c), that recycled aggregates were not suitable for all applications.

6.109 We also considered the views expressed by customers in response to our survey. Although qualitative in nature, the comments tended to emphasize the closeness of competition between Tom's Forest and Craigenlow and the shortage of alternatives (aside from Leiths). Appendix I provides further details.

◦ *Provisional conclusions*

6.110 We noted that Breedon's two quarries at Tom's Forest and Craigenlow produced large amounts of aggregates and that the only other large producer of primary aggregates in the Aberdeen area was Leiths. There were, however, a large number of remaining suppliers of primary aggregates in the area, including Aberdeenshire Council's quarries, Chap Quarries, and James Jamieson, although we recognized that the level of the competitive constraint exerted by Aberdeenshire Council was more limited due its trading practices and focus on internal needs. We also recognized that some competing suppliers were small.

6.111 We considered that although Breedon's post-transaction shares of production were in excess of 33 per cent, they were likely to overstate the strength of Breedon's competitive position for two reasons: the shares of production of recycled aggregates in the defined catchment areas that we had calculated were likely to be underestimated, and Breedon tended to sell more of its production to its downstream operation than its competitors did in the Aberdeen area.

6.112 We also noted that the products Breedon supplied to external customers were largely undifferentiated and that there was likely to be enough spare capacity in the local area for competitors to respond to a price rise.¹³³

6.113 For the reasons set out in paragraphs 6.110 to 6.112, we considered that while alternative suppliers individually had some limitations, collectively these suppliers would provide a sufficiently strong constraint to enable us to conclude provisionally that the transaction was unlikely to lead to competition concerns in relation to the supply of aggregates from Craigenlow, Corrennie and Tom's Forest.

- *RMX: competitive assessment*
 - *Closeness of competition between the overlap sites and measures of post-transaction concentration*

6.114 In 2012 Breedon produced [REDACTED]m³ of RMX at four sites (Inverurie, Westhill, Craigenlow and Bridge of Don) surrounding Aberdeen and close to main roads into Aberdeen. Breedon has a mothballed RMX plant (Deeside) 10 radial miles south-west of the Aberdeen city centre, which had historically produced nearly [REDACTED]m³ (in 2008).¹³⁴ Three acquired sites (Tullos, Tom's Forest and Dyce) were similarly located on main roads into Aberdeen. Together they produced [REDACTED]m³ of RMX. The acquired and Breedon RMX sites were all within a 15-mile radius of Aberdeen and therefore all able to compete with each other for customers in Aberdeen and its close vicinity. The largest sites are Dyce, Inverurie, Tullos and Westhill. They each produced [REDACTED]m³ or more in 2012.

6.115 Delivery locations from Tom's Forest, Inverurie and Craigenlow tended to be relatively dispersed within a 20-mile radius of the plants. Deliveries from Bridge of Don, Dyce, Westhill and Tullos tended to be more concentrated on the Aberdeen

¹³³ We understood that [REDACTED] all have enough spare capacity to increase their production of aggregates substantially.

¹³⁴ The Deeside RMX plant has been mothballed since 2010. [REDACTED]

area (see Appendix G, Figures 8 to 14). This evidence showed that there was substantial overlap between the delivery destinations of Breedon's pre-existing sites and the acquired sites in Aberdeen and its close vicinity.

6.116 The post-transaction shares of production are in excess of 50 per cent for all these sites within both 13 and 20 radial miles. Post-transaction shares based on 13-mile and 20-mile radii around possible customer locations also indicate a significant increment resulting from the transaction, with post-transaction shares in excess of 50 per cent for customers located in Aberdeen and the surrounding area. (See Appendix F, Table 10.)

◦ *Competitive constraints posed by other suppliers*

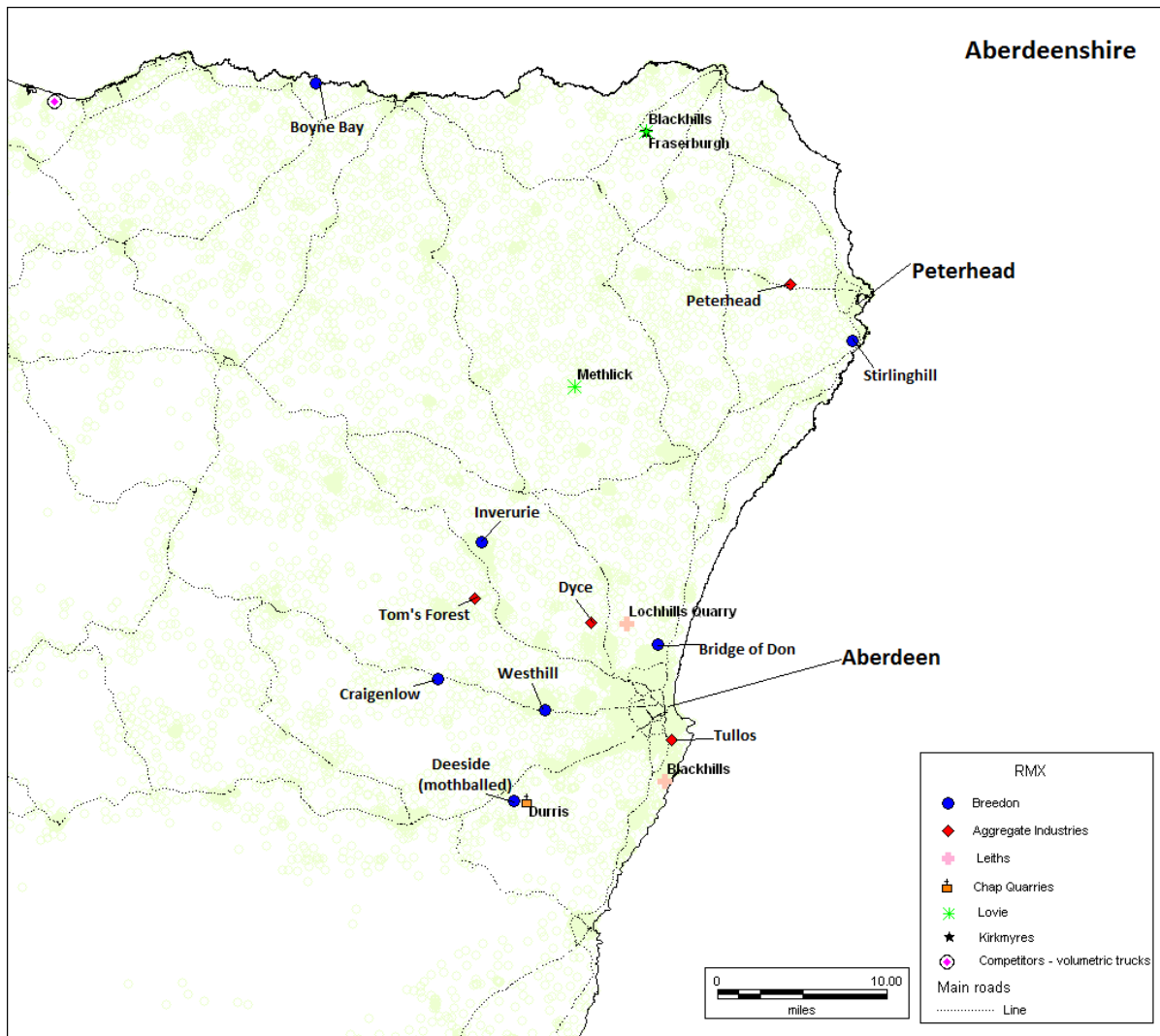
6.117 For Bridge of Don, Craigenlow, Inverurie, Westhill, Dyce, and Tom's Forest, post-transaction there remain 2 competing suppliers within a 13 mile radius and 3 within a 20 mile radius. For Tullos, the equivalent numbers are 2 competing suppliers with both 13 and 20 radial miles.¹³⁵

6.118 Figure 12 shows the locations of Tom's Forest, Inverurie, Craigenlow, Bridge of Don, Dyce, Westhill and Tullos and other suppliers of RMX in their vicinity.

¹³⁵ There are no suppliers with a share of production of less than 5 per cent.

FIGURE 12

Locations of suppliers of RMX in Grampian



Source: CC analysis.

6.119 To the north of Aberdeen, one potential competitor, Lovie, with a plant at Methlick, produced $[\text{X}] \text{m}^3$ in 2012. We noted that the plant appeared to be relatively far from main roads and that it was 20 radial miles from Aberdeen. One customer, $[\text{X}]$, told us that Lovie supplied RMX in the area comprising Pitligo, Fraserburgh, North Ellon and Banff. Given the location of its plant, we considered that any competitive constraint that Lovie posed on the parties was likely to be confined to the area north of Inverurie.

- 6.120 Leiths has two RMX plants which collectively produced [REDACTED]m³ in 2012. They are both close to Aberdeen city centre. One site is located on the north side of Aberdeen and one on the south side.
- 6.121 There is one other supplier in the vicinity of Aberdeen, Chap Quarries, which produced [REDACTED]m³ of RMX in a plant located 10 radial miles to the south-west of Aberdeen in 2012.
- 6.122 Leiths told us that the transaction would give Breedon a dominant position in the Aberdeen area. Chap Quarries echoed this view and commented that it had originally been concerned that Breedon would drop its prices to push competitors out of the market, although it seemed to be seeking to increase its prices at the moment. It considered, however, that Leiths would pose a sufficiently strong competitive constraint on Breedon to keep prices in check.
- 6.123 We considered the strength of the competitive position of Chap Quarries and its ability to constrain the behaviour of the parties and noted that:
- (a) The capacity of its plant was [REDACTED].
 - (b) It had [REDACTED] worth of reserves at its quarry [REDACTED].
 - (c) It considered that traffic conditions were difficult and it would take twice as long to transport its RMX to the north of Aberdeen as it would to the south. [REDACTED]
 - (d) Breedon has had an RMX plant (Deeside) on Chap Quarries' site since [REDACTED].
- 6.124 Customers' comments made in response to our survey of smaller customers tended to express concerns about the impact of the transaction on RMX prices in the Aberdeen area as there would be limited choice, although some customers were not concerned (see paragraphs 28 to 48 of Appendix I). When asked about alternative sites they would purchase RMX from in the event that the RMX plant near Aberdeen

from which they purchased in 2012 was closed, the sites most frequently mentioned were those owned by Breedon, Aggregate Industries, Leiths, Chap Quarries and Lovie. We noted, however, that this was based on a relatively small number of responses; see Appendix I for details.

6.125 We considered how the availability of spare capacity in the area would impact on the strength of competition following the transaction: Leiths commented that [REDACTED] that customers were limited in their ability to order evenly throughout the day by daylight hours and temperatures. We estimated the spare capacity at plants in the area by comparing historical volumes and the capacity of each plant as reported by the companies. Our calculations show that Leiths had [REDACTED] in 2012 across its two sites based on a 40 hour week with 100 per cent availability. [REDACTED] Chap Quarries that they have [REDACTED] spare capacity at their sites. We considered that [REDACTED] had potentially enough spare capacity to be able to respond to a price rise post-transaction, but noted that because of peaks in demand the level of spare capacity [REDACTED] may be overstated.

◦ *Provisional conclusions*

6.126 Following the transaction, Breedon has a share of production of RMX in excess of 50 per cent in the local area. There is only one other strong supplier: Leiths. The other two suppliers, Lovie and Chap Quarries, have only one site [REDACTED]. In addition, we noted that the location of Lovie's plant was relatively remote from Aberdeen. In the context of a market in which customers obtain better prices by playing competitors against each other (see paragraphs 6.2 to 6.5), we provisionally concluded that the loss of one of three strong competitors would lead to competition concerns in the market for RMX in the Aberdeen area.

- *Asphalt: competitive assessment*
 - *Closeness of competition between the overlap sites and measures of post-transaction concentration*

6.127 Breedon's Craigenlow plant produced [X] tonnes of asphalt in 2012 and its Stirlinghill site produced [X] tonnes. The acquired Tom's Forest site produced [X] tonnes. Craigenlow and Tom's Forest are close to each other and to Aberdeen. Stirlinghill is further north but sufficiently close to Tom's Forest for us to consider the effect of the transaction on the customers of these two sites.

6.128 As shown in Appendix F, Figure 12, Craigenlow's deliveries were more concentrated towards the east of the plant in the direction of Aberdeen than Tom's Forest, whose deliveries appeared to be more evenly spread within a [X]-mile radius around the plant, although we did not have sufficient data to examine the delivery locations fully. Therefore although the data shows an overlap between the delivery locations of the two plants, the extent of that overlap is difficult to judge. Stirlinghill's 2012 deliveries were mainly made in the vicinity of Peterhead and there appeared to be a degree of overlap with the deliveries made from Tom's Forest in the direction of Peterhead in 2012, although the data needs to be used with caution for the same reason.

6.129 Our analysis of tender data provided by Transport Scotland indicated that both Aggregate Industries and Breedon had bid for contracts put out by its North East operating company, which is responsible for the Aberdeen area.¹³⁶ This provides an additional indicator of active competition between Breedon's pre-existing asphalt sites and the acquired asphalt sites in this area.

6.130 Craigenlow's 80 per cent catchment area varied from [X] to [X] radial miles over the 2010 to 2012 period, while Tom's Forest catchment area was [X] radial miles in

¹³⁶ See Appendix E for a description of Transport Scotland's operating regions.

2010, [X] radial miles in 2011 and [X] radial miles in 2012. Stirlinghill's was [X] and [X] radial miles in 2010 and 2011 respectively but [X] radial miles in 2012. We took account of the variability in the sizes of the catchment areas in our assessment of the post-transaction measures of concentration and analysis of the competitor set.¹³⁷

6.131 The post-transaction shares of production within both a 17- and a 25-mile radius of the sites were [X] per cent for both the Tom's Forest and Craigenlow sites, with increments of [X] per cent. The post-transaction share of production within a 35-mile radius of Stirlinghill is [X] per cent, with an increment of [X] per cent (Stirlinghill is 27 radial miles from Tom's Forest).

◦ *Competitive constraint posed by other suppliers*

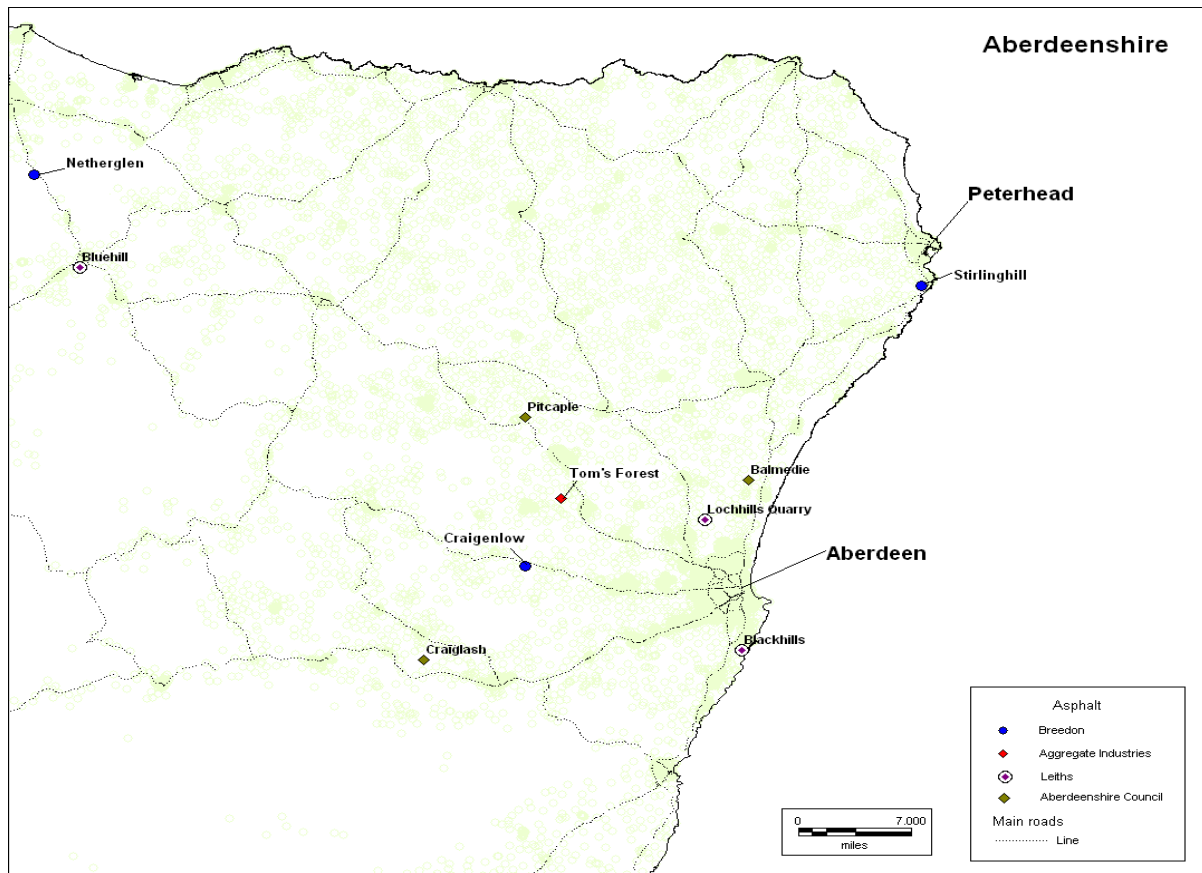
6.132 The number of remaining competitors to Breedon post-transaction is two within a 17- and a 25-mile radius of both Tom's Forest and Craigenlow. There are two remaining competitors for Stirlinghill both within a 25-mile radius and a 35-mile radius.

6.133 Figure 13 shows the locations of Tom's Forest, Craigenlow and Stirlinghill and suppliers of asphalt in their vicinity.

¹³⁷ We note, however, that we have no information on the delivery destinations of asphalt supplied through contract surfacing services, which represent a significant proportion of sales of asphalt from both Craigenlow and Tom's Forest.

FIGURE 13

Locations of suppliers of asphalt in Grampian



Source: CC analysis.

6.134 The two competitors are Leiths, whose three competing sites at Lochhills Quarry, Blackhills and Bluehill together produced [X] tonnes of asphalt in 2012 (Bluehill producing [X] tonnes of asphalt in 2012), however, is 47 radial miles from Aberdeen city centre and relatively remote (over 25 miles away) from Craigenlow and Tom's Forest); and Aberdeenshire Council, whose three sites at Pitcaple, Balmedie and Craiglash produced [X] tonnes of asphalt in 2012. We estimated the level of spare capacity held by these two competitors (by comparing historical volumes and the capacity of each plant as reported by the companies) and found that in 2012 Leiths [X] of spare capacity based on a 40-hour week with 100 per cent availability and Aberdeenshire Council had [X] tonnes of spare capacity. They would therefore both be able to increase production in response to a price rise by Breedon.

6.135 Customers who provided evidence to us (both through our survey of smaller customers, submissions in response to questionnaires for larger customers and in hearings) expressed concerns about the effect of the transaction, emphasizing the current shortage of suppliers in the Aberdeen area and potential of the transaction to result in price rises for asphalt. In particular, Aberdeen City Council considered that before the transaction there were only three suppliers of asphalt in the area (Breedon, Aggregate Industries and Leiths) and that even though it was one of the largest customers in the area, it did not consider itself to be in a strong negotiating position. It expected prices to go up as a result of the transaction. It noted that the price of asphalt in the North-East of Scotland was significantly higher than in Dundee.

6.136 Our calculations showed that the average price of asphalt was [REDACTED] at the sites in Grampian than in the Highlands or Tayside and Fife. [REDACTED]

6.137 We considered the strength of the competitive constraint that Aberdeenshire Council could be expected to exert on prices. In making our assessment, we noted that:

- (a) It was focused on its own needs, with 87 per cent of its sales of asphalt being for its internal use.
- (b) It did not pursue customers actively, and told us that it was restricted in its ability to do so by regulations (see, for example, comments made by Aberdeen City Council, [REDACTED] and Leiths¹³⁸).
- (c) It published prices but these were set by reference to its costs rather than competitors' prices.
- (d) The discounts offered to customers were based on volumes and followed a schedule rather than set in response to competitors' prices.

¹³⁸ [Aberdeen City Council hearing summary](#), paragraph 9; [\[Company A\] hearing summary](#), paragraph 8; and [Leiths hearing summary](#), paragraph 11.

- (e) Its offers to customers included a clause stating that it would only supply if it suited its production programme.
- (f) It perceived itself as a general benchmark.
- (g) In response to our survey of smaller customers, some customers mentioned Aberdeenshire Council as a supplier.
- (h) We heard from some competitors and customers that Aberdeenshire Council did not price competitively.
- (i) Only a small proportion of customer enquiries translated into actual sales.

◦ *Provisional conclusions*

6.138 There were overlaps in delivery locations of Breedon's pre-existing asphalt sites and the acquired site in the Aberdeen area and other evidence that Breedon's pre-existing sites and the acquired site were close competitors in the supply of asphalt in the area. Shares of production post-transaction are [%] per cent depending on the catchment area used for the calculations.

6.139 Customer comments and our pricing analysis suggested that competition in the asphalt market in the Aberdeen area may have been more subdued than in other parts of north-east Scotland. In addition to Breedon's pre-existing sites and the acquired sites, there are only two other suppliers: Aberdeenshire Council and Leiths.

6.140 The evidence we received suggests that Aberdeenshire Council's focus was on meeting its own internal needs and we considered that the competitive constraint it would exert on the other two remaining suppliers of asphalt in the Aberdeen area following the transaction would be limited.

6.141 Although Leiths' share of production is [%] than that of Breedon, in the context of a market in which customers obtain better prices by playing competitors against each

other (see paragraphs 6.2 to 6.5) and where shares of production can change depending on projects or tenders won each year and in specific locations, we provisionally concluded that the loss of one of three major competitors would lead to competition concerns in the market for asphalt in the Aberdeen area. We considered that these competition concerns would extend to the north of Aberdeen, because of the loss of competition between Stirlinghill and Tom's Forest asphalt plants.

Sites near Peterhead

6.142 Breedon's Stirlinghill site supplies aggregates, asphalt¹³⁹ and RMX. The nearby acquired Peterhead site produces RMX only. Stirlinghill and Peterhead sites are approximately 3 and 4 radial miles, respectively, from Peterhead town centre.

6.143 With a population of about 19,000 people,¹⁴⁰ Peterhead is the largest settlement in Aberdeenshire. Aberdeenshire Council's August 2009 structure plan¹⁴¹ identified the Blackdog to Peterhead area as a strategic growth area.

- *Aggregates: competitive assessment*
 - *Closeness of competition between the overlap sites and measures of post-transaction concentration*

6.144 In 2012, Stirlinghill produced [X] tonnes of aggregates. Our analysis showed that it overlapped with only one acquired site for aggregates, Tom's Forest, which is located 27 miles to the South-West.

6.145 Deliveries from Stirlinghill were focused on Peterhead and 80 per cent catchment areas ranged from [X] to [X] radial miles between 2010 and 2012. While deliveries from Tom's Forest were focused on the area near Aberdeen, there have been some

¹³⁹ We consider the effect of the merger on its asphalt supply within the Aberdeen area analysis.

¹⁴⁰ Source: www.scotlandscensus.gov.uk/ods-web/area.html.

¹⁴¹ www.aberdeenshire.gov.uk/planning/plans_policies/StructurePlan.pdf.

sales into the area near Peterhead, suggesting that Stirlinghill and Tom's Forest may have competed for some projects.

6.146 Following the transaction, the parties have a [33–50] per cent share of production within a 27-mile radius of Stirlinghill.

◦ *Competitive constraint posed by other suppliers*

6.147 There remain four competitors to Breedon (ten competitors if smaller suppliers are included) within a 27-mile radius in the Peterhead area.

6.148 The relevant sites and those of other suppliers of aggregates in the Peterhead area are shown in Figure 11 above.

6.149 Competitor sites are considerably closer to Stirlinghill than Tom's Forest. Excluding Aberdeenshire Council's Balmedie site (see paragraph 6.100 for the reasons for doing so), there are seven quarries that are within an 18-mile radius of Stirlinghill. Together these quarries produced [X] tonnes of aggregates in 2012. Of those, two are owned by Lovie and together produced [X] tonnes and another site owned by James Jamieson produced [X] tonnes.

6.150 [X]

6.151 Our survey evidence showed that, when asked about alternative sites for the purchases of aggregates in the event that Stirlinghill was closed, the six responses mentioned sites owned by Lovie, Aberdeenshire Council, Savoch Quarry, James Jamieson and Leiths, but not any Breedon or Aggregate Industries sites.

- *Provisional conclusions*

6.152 Although the post-transaction share of production is [33–50] per cent, evidence received from competitors and customers suggested that Breedon’s pre-existing site (Stirlinghill) and the acquired site (Tom’s Forest) were not close competitors. We also noted that there were seven quarries operated by other suppliers within 18 miles of Stirlinghill. Together these quarries produced a quantity of aggregates that was over twice as large as the production of Stirlinghill in 2012.

6.153 Given the number of remaining competitors, including some large sites, and their closeness to Stirlinghill and Peterhead town centre, and the relatively greater distance of Tom’s Forest to both, we provisionally concluded that the transaction was unlikely to lead to competition concerns with regard to the supply of aggregates from Stirlinghill.

- *RMX: competitive assessment*

- *Closeness of competition between the overlap sites and measures of post-transaction concentration*

6.154 In 2012, Peterhead and Stirlinghill RMX plants produced [X]m³ and [X]m³ of RMX respectively. The two sites are located close to each other and to Peterhead town centre.

6.155 As shown by Appendix F, Figure 12, delivery locations from Stirlinghill were focused on the Peterhead town area, and the 80 per cent catchment area varied between [X] and [X] radial miles over the 2010 to 2012 period. As shown by Appendix F, Figure 10, Peterhead’s delivery locations were more spread out towards the South-West and its catchment area varied between [X] and [X] radial miles over the 2010 to 2012 period. The catchment areas and maps of delivery locations showed that catchment areas for the two sites were relatively narrow and there was substantial

overlap between the delivery locations of the two sites, particularly in Peterhead and its closely surrounding area.

6.156 The post-transaction shares of production within a 13-mile radius of the sites are [33–50] and [50–100] per cent for Peterhead and Stirlinghill respectively. Within a 20-mile radius, the share is [33–50] per cent for both sites. Post-transaction shares based on 13- and 20-mile radii of customer locations also indicate a material increment resulting from the transaction. The post-transaction shares are in excess of 50 per cent in Peterhead town itself, but are not as high further away from the plants. (See Appendix F, Table 10.)

◦ *Competitive constraint posed by other suppliers*

6.157 Within a 13-mile radius, Stirlinghill would face no competition post-transaction, while there would remain two competing suppliers for the Peterhead RMX plant. There would remain two competing suppliers for both plants within a 20-mile radius.

6.158 The relevant sites and those of other suppliers of RMX in the Peterhead area are shown in Figure 12 above.

6.159 Lovie is the largest of the competing suppliers: its two sites (located in Methlick and Blackhills near Fraserburgh) produced $[X]m^3$ in 2012. Another supplier, Kirkmyres Sand and Gravel, located in Fraserburgh, produced an additional $[X]m^3$. Lovie's Blackhills RMX plant is located 16 radial miles from the Peterhead town centre, and its Methlick plant is 18 radial miles away. Kirkmyre's Sand and Gravel RMX plant is located 16 radial miles away. Leiths' Lochhills site, which produced $[X]m^3$ in 2012, is located further south near Aberdeen and 24 radial miles from Peterhead town centre.

6.160 Given that the Stirlinghill and Peterhead sites are both close to each other and to Peterhead town centre, whereas competitor sites are all located further away, we considered whether transport costs would materially impact on the competitiveness of the two competitors to Breedon. To do this analysis, we used Breedon's transport cost schedules and road distances in order to estimate the impact on the delivered price of RMX (assuming average ex-works prices charged by Peterhead and Stirlinghill in 2012).¹⁴² We found that the delivered price of RMX produced in Fraserburgh and delivered to Peterhead town centre would be around [X] than the price of RMX produced at Peterhead or Stirlinghill. These figures suggested that post-transaction, Breedon is likely to enjoy a transport cost advantage relative to competitors located further away from Peterhead town centre which might give it an ability and incentive to increase prices, as it is the only supplier in the immediate area around Peterhead.

◦ *Provisional conclusions*

6.161 The acquired Peterhead RMX plant is the closest to Breedon's Stirlinghill, and there are no other competitors within 13 miles and only two other competitors within 20 miles. Our estimates show that the location of both sites is likely to give them a significant cost advantage (because of haulage costs) over the closest competitors (located near Fraserburgh) when serving customers in Peterhead and its close vicinity.

6.162 For these reasons, we provisionally concluded that the transaction was likely to result in competition concerns in the market for RMX in the Peterhead area.

¹⁴²Assumptions: transport costs: £[X] per tonne for transport from [X] miles from the site, £[X] per tonne for transport from [X] miles from the site.; Stirlinghill ex-works price: £[X] per tonne; Peterhead ex-works price: £[X] per tonne; Distance from Stirlinghill to Peterhead town centre: 3.6 miles; from Peterhead RMX plant to Peterhead town centre: 4.5 miles; Fraserburgh sites to Peterhead town centre: 19.3 miles.

Sites near Inverness

6.163 Breedon has two sites in the Inverness area. One, in Inverness itself, produces RMX using aggregates sourced from Breedon's Morefields quarry (45 radial miles away). The other one, in Daviot, to the south-east of Inverness, produces asphalt. The Daviot plant is located on a quarry owned by Tarmac [REDACTED]. Breedon acquired two sites from Aggregate Industries. One, in Beaulieu to the south-west of Inverness, produces RMX, while the other one, at Mid Lairgs to the south-east of Inverness, produces asphalt. The acquired Mid Lairgs asphalt plant is located on a quarry owned by Alexander Ross, [REDACTED] by Leiths Group (as explained in paragraph 3.10).

6.164 Breedon told us that demand tended to be largely focused on the greater Inverness area. [REDACTED] Breedon also mentioned the opportunity arising from building the pylons for the future electricity supply from wind farms in the Hebrides.

6.165 Breedon told us that because of the rural nature of the market, building materials tended to travel over greater distances in the Highlands.

- *RMX: competitive assessment*
 - *Closeness of competition between the overlap sites and measures of post-transaction concentration*

6.166 Breedon's Inverness plant produced [REDACTED]m³ in 2012. The acquired Beaulieu plant produced [REDACTED]m³. The two plants are 9 radial miles apart and within easy reach of Inverness.

6.167 For Inverness, the 80 per cent catchment area varied from [REDACTED] to [REDACTED] radial miles over the three years to 2012 (and averaged [REDACTED] radial miles over the three years). For Beaulieu it varied from [REDACTED] to [REDACTED] (and averaged [REDACTED] radial miles). As shown in Appendix F, Figure 5, in 2012 delivery destinations from Inverness tended to be concentrated in the Inverness area and along the main axes (A82, A9, and A96).

Delivery destinations from Beauly appeared concentrated in the 'triangle defined by the A833, A92 and A9-A835, as shown by Appendix F, Figure 5. We considered that there was substantial overlap between the delivery destinations of the two sites, but noted that any assessment of the competitive constraints in the Inverness area needed to take account of the significant variability in the catchment areas over time.

6.168 The post-transaction shares of production within a 13-mile radius were [33–50] per cent for both sites. The shares were above 33 per cent within a 20-mile radius from the sites. Post-transaction shares based on 13 or 20 radial miles of possible customer locations indicate a material increment resulting from the transaction and shares in excess of 33 per cent for most potential customers in the Inverness area.

° *Competitive constraints posed by other suppliers*

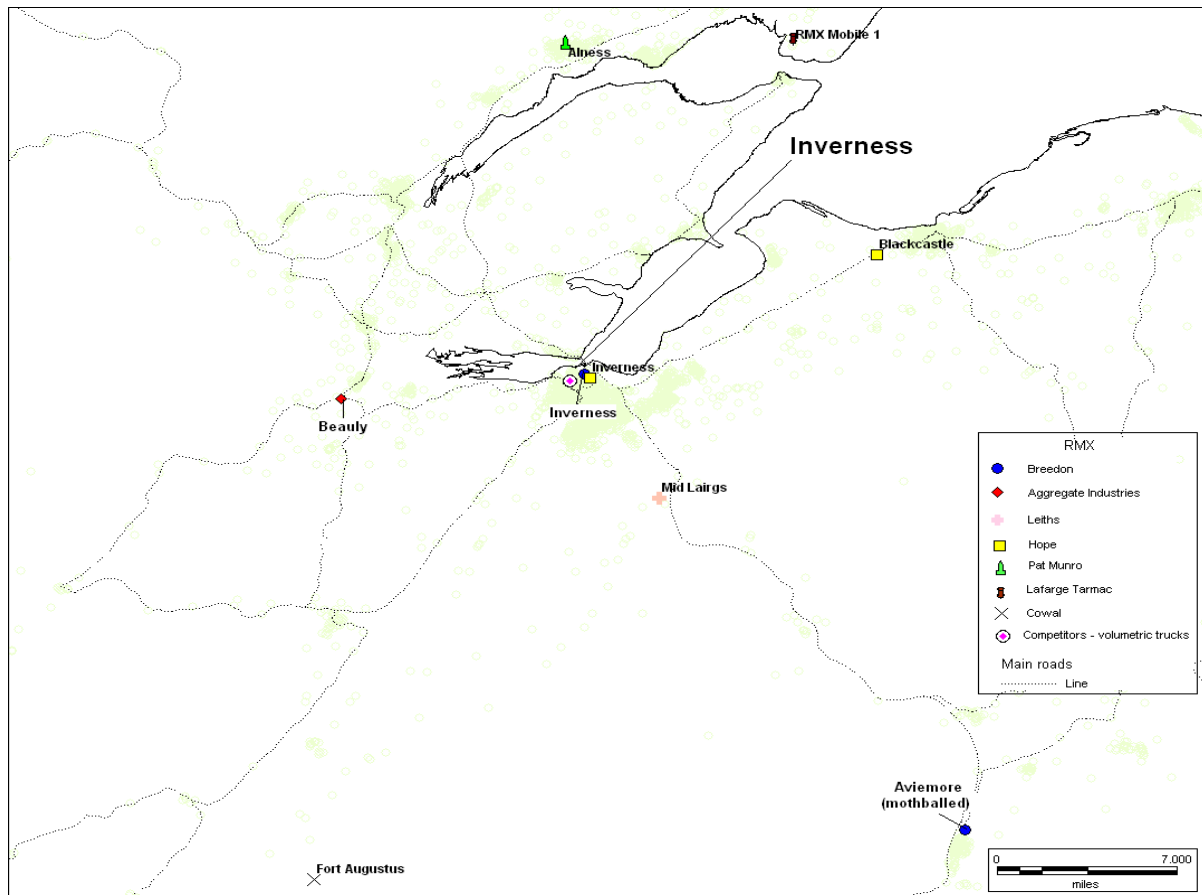
6.169 Within a 13-mile radius, Inverness continues to face competition from three competitors, while there remain two competing suppliers¹⁴³ for Beauly. This goes up to five and four respectively within a 20-mile radius. The analysis of the number of suppliers pre- and post-transaction based on 13-mile radii around customer locations suggests that for most customer locations, there would be a choice of at least three suppliers ([X]), excluding the merged entity (one less if volumetric trucks are excluded). (See Appendix F, Table 11.)

6.170 Figure 14 shows the locations of Beauly and Inverness and suppliers of RMX in their vicinity.

¹⁴³ [X]

FIGURE 14

Locations of suppliers of RMX near Inverness



Source: CC analysis.

6.171 The largest competitor in the area is HCM. In 2012, it produced $[\text{X}]\text{m}^3$ of RMX at its Inverness site in 2012, which is located next to Breedon's Inverness plant. It also produced $[\text{X}]\text{m}^3$ in Blackcastle, 13 radial miles of Inverness city centre (on the A96) and to the north-east, although this plant is presently mothballed. A volumetric truck supplier, Accumix, produced $[\text{X}]\text{m}^3$ and is also based in Inverness. Five radial miles from the Mid Lairgs quarry and to the south-east of Inverness city centre (on the A9), Leiths produced $[\text{X}]\text{m}^3$ at its Mid Lairgs RMX plant. The other three suppliers (Pat Munro, Lafarge Tarmac with a mobile plant and Cowal Concrete) are located further away (no more than 23 radial miles from Inverness city centre) and produced between them $[\text{X}]\text{m}^3$ of RMX. We note, however, that Pat Munro's Alness site and Lafarge Tarmac's RMX mobile plant are located across a firth from Inverness, thus

the road distances from these sites to the Beaulieu and Inverness plants, and to Inverness itself, are significantly greater than radial distances.

6.172 In response to our survey, 11 respondents purchasing RMX from Breedon's Inverness site indicated alternative sites they would purchase from in the event the Inverness site was closed. Sites owned by Breedon, Aggregate Industries, Pat Munro and Leiths were mentioned most frequently.

6.173 We considered how the level of spare capacity held by Breedon's competitors would affect their incentives and ability to compete. HCM estimated that its Inverness plant operated at just under [redacted] per cent of its capacity. In volume terms, its level of spare capacity currently is [redacted]m³ a year. [redacted] and Leiths [redacted] of spare capacity based on a 40-hour week with 100 per cent availability. We therefore considered that competitors had enough spare capacity to be able to respond to a price rise by Breedon.

◦ *Provisional conclusions*

6.174 Breedon's pre-existing site and the acquired site are close to each other and overlap substantially in the area they serve. We noted that even on a wide geographic basis, the post-transaction share of production of Breedon would be [50–100] per cent and that one of the suppliers, Accumix, would not be able to compete for all types of customers and contracts.

6.175 Nevertheless, we provisionally concluded that on balance the transaction was unlikely to lead to competition concerns in relation to the supply of RMX from Inverness and Beaulieu because of the large production site operated by HCM in Inverness and in the close proximity of Breedon's pre-existing site and the fact that, within a 20-mile radius, Inverness would face competition from five competitors and

Beaully from four. We considered this to be a substantial level of competition in a remote area where products tend to travel further.

- *Asphalt: competitive assessment*
 - *Closeness of competition between the overlap sites and measures of post-transaction concentration*

6.176 Breedon's Daviot plant produced [X] tonnes of asphalt in 2012. The acquired Mid Lairgs site produced [X] tonnes. The two plants are situated 1 mile away from each other and within easy reach of Inverness.

6.177 Daviot's 80 per cent catchment area was consistently [X] radial miles between 2010 and 2012. The catchment area of Mid Lairgs varied from [X] to [X] radial miles (and averaged [X] over the three years, with the average being driven by a large project in 2011). Deliveries from Mid Lairgs tended to be focused on the Inverness area, while Daviot delivered products within a wider area comprising the A9 to the south, and A96 and A95 towards the west. We considered that there was substantial overlap between the delivery destinations of the two sites, particularly in Inverness and its close vicinity, although caution needs to be exercised in using this information.¹⁴⁴ We noted that any assessment of the competitive constraints in the Inverness area needed to take account of the significant variability in the catchment areas over time,

6.178 Our analysis of tender data provided by Transport Scotland indicated that both Aggregate Industries and Breedon had bid for contracts put out by its North West operating company, which is responsible for the Inverness area.¹⁴⁵ This provides an additional indicator of active competition between Breedon's pre-existing asphalt sites and the acquired asphalt sites in this area.

¹⁴⁴ Our estimates do not include deliveries of asphalt supplied through contract surfacing services, which represent a significant proportion of sales of asphalt from both Mid Lairgs and Daviot; neither do they include collected purchases.

¹⁴⁵ See Appendix E for a description of Transport Scotland's operating regions.

6.179 The post-transaction shares within a 17-mile radius would be [50–100] per cent for both sites, and the increment resulting from the transaction would be [33–50] per cent. Within a 25-mile radius from the sites, the combined share would be [33–50] per cent for Daviot and [33–50] per cent for Mid Lairgs. Within a wider area of 35 radial miles from the sites, the combined post-merger market share would be [50–100] per cent from both Mid Lairgs and Daviot (Breedon's Netherglen would fall within the radius).

6.180 We considered whether Breedon's Netherglen asphalt plant competed in the Inverness area: although our analysis of concentration centred on Netherglen showed that the transaction [✂] share increment on a 17- or 25-radial mile basis, it resulted in an overlap on a 35-radial mile basis. In practice, Daviot and Netherglen both delivered to customers located between the two plants on the A96, A940/A939 and A95. By contrast, Mid Lairgs deliveries were focused on the Inverness area. In addition, Bluehill and New Forres (Leiths' plants) are closer to Mid Lairgs than Netherglen. Also we noted that in its strategic review of the Mid Lairgs plant, Aggregate Industries included a map showing alternative suppliers in the Inverness area—this included New Forres to the east, but not the Netherglen site. Given this evidence, we reached the provisional view that Netherglen and Mid Lairgs were unlikely to exert a competitive constraint on each other.

◦ *Competitive constraint posed by other suppliers*

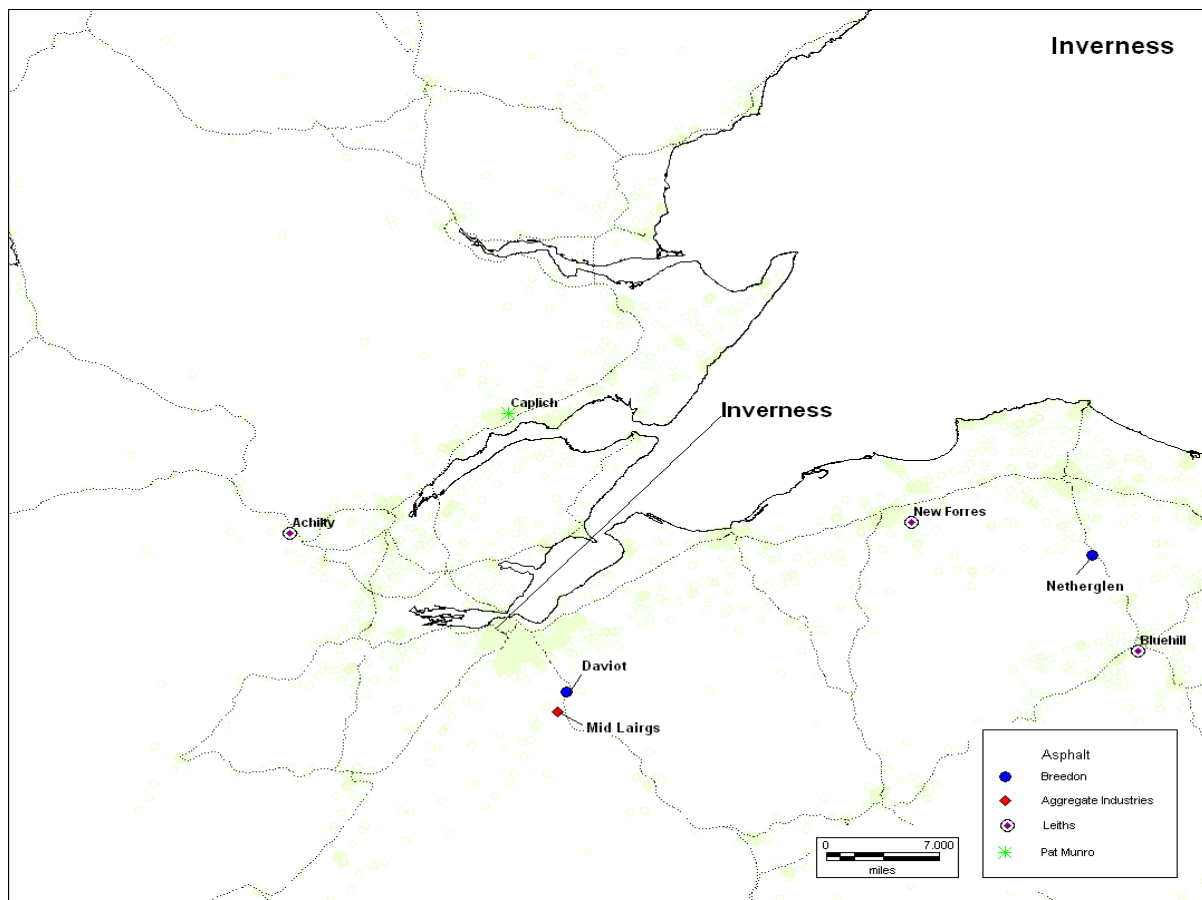
6.181 Within a 25-mile radius there would remain two competitors (Pat Munro and Leiths). There would still be the same two competitors remaining on the basis of 35-mile radii around the sites near Inverness.

6.182 Breedon told us that mobile plants were a genuine constraint on large contracts, as demonstrated by its loss of the Inverness Airport contract to a mobile plant (10,000 tonnes).

6.183 Figure 15 shows the locations of Daviot and Mid Lairgs and other suppliers of asphalt in their vicinity.

FIGURE 15

Locations of suppliers of asphalt near Inverness



Source: CC analysis.

6.184 The largest supplier of asphalt in the area is Pat Munro: its Caplich site is located about 20 radial miles north of the parties' Daviot and Mid Lairgs plants, in Alness on

the A9, north of the Moray Firth.¹⁴⁶ It produced [X] tonnes in 2012. It told us that at present it only served the Highlands and Moray areas, with the vast majority of sales serving the Ross-shire and Sutherland areas, north of Inverness. It told us that it had only a small market share in, around and south of Inverness. It said that over the past three years, it had operated [X] per cent capacity.

6.185 Leiths operates two asphalt plants: Achilty, which is around 20 to 21 radial miles to the west of Daviot and Mid Lairgs, and New Forres, which is around 24 to 25 radial miles from the sites, to the east on the A96. Together, they produced [X] tonnes in 2012. The level of spare capacity across the two plants was [X] (equating to about [X] per cent spare capacity).

6.186 We considered whether Leiths' Bluehill plant was a competitive constraint in the Inverness area. For similar reasons to those set out in paragraph 6.180 about Netherglen, we reached the view that Leiths' Bluehill was too remote from the Inverness area to be a competitive constraint on either Daviot or Mid Lairgs.

◦ *Provisional conclusions*

6.187 Our analysis shows that Daviot and Mid Lairgs are geographically the closest suppliers to each other. They are also both close to Inverness.

6.188 In production terms, Leiths also appears to be a strong competitor in the Inverness area, while it appears that Pat Munro's competitive position to the south of its plant and into Inverness is weak. We recognized that for certain large contracts the use of mobile asphalt plants would pose an additional constraint.

¹⁴⁶ The geography of the area north of Inverness and the location of the Caplich site means that the road distance to the parties' sites and Inverness is significantly greater than the radial distance of 20 miles.

6.189 In the context of a market in which customers obtain better prices by playing competitors against each other (see paragraphs 6.2 to 6.5), we provisionally concluded that the transaction would lead to the loss of one of three major competitors and thus result in competition concerns in the market for asphalt in the Inverness area. We noted, however, that under the counterfactual (see paragraph 5.34), we provisionally concluded that it was not likely that Aggregate Industries would have operated the Mid Lairgs asphalt plant beyond 2018 at the latest. Thus the effect of the transaction on competition is likely to be for a limited period of time.

Step 3: Countervailing factors: Likelihood of entry and expansion in the relevant product markets of the problem sites and buyer power

6.190 Based on our analysis of the competitive effects of the transaction in the markets for aggregates, RMX and asphalt, set out in paragraphs 6.42 to 6.189, we have identified that, absent countervailing factors, the transaction could be expected to lead to competition concerns in the following markets:

- (a) RMX in the Aberdeen area (see paragraph 6.126);
- (b) asphalt in the Aberdeen area, extending to the north of Aberdeen (see paragraph 6.1416.138);
- (c) RMX in the Peterhead area (paragraph 6.162); and
- (d) asphalt in the Inverness area (paragraph 6.189).

6.191 In this section, we consider whether entry or expansion or buyer power could be expected to mitigate the effect of the transaction in those relevant product markets and local areas.

Barriers to entry and likelihood of entry in the relevant product markets and local areas

6.192 Breedon told us that it considered barriers to entry in all the product markets affected by the merger low, both for new entrants and for expansion by existing competitors. It

told us that second-hand equipment for the production of RMX cost only £[X] and that a second-hand asphalt plant could be acquired for approximately £[X]. Existing aggregates producers would be able to utilize their own products as input materials, and could achieve significant cost reductions as regards haulage by locating an RMX or asphalt plant at or near existing aggregates production. Breedon was aware, however, of various non-integrated RMX and asphalt producers (some of these plants sat on a quarry owned by a third party), demonstrating that vertical integration was not necessary for new entry. It argued that entry into local RMX markets was also possible by the use of volumetric trucks and into local asphalt markets by the use of mobile asphalt plants.

6.193 We first considered whether potential suppliers of RMX and asphalt may encounter barriers which would adversely affect the timeliness, likelihood and sufficiency of their ability to enter (or expand in) the relevant markets. The evidence we received and analysis we carried out are set out in Appendix J. We then examined the history of de novo entry and expansion¹⁴⁷ in each of the relevant markets and the likelihood, sufficiency and timeliness of plans for entry and/or expansion that we were aware of in each of the relevant markets. Finally, we considered whether entry or expansion through the use of volumetric trucks or mobile plants could mitigate the competition effects we have provisionally found.

- *Barriers to entry*

6.194 We identified the following possible barriers to entry and expansion in local markets for RMX and asphalt:

- (a) the availability of aggregates of the appropriate quality;
- (b) the need to obtain planning permission to set up a new site;
- (c) the capital costs of a new plant; and

¹⁴⁷ This concerns only organic entry and expansion and excludes the acquisition of operating sites or companies.

(d) access to bitumen for asphalt operations.

6.195 We provisionally concluded that:

- (a) For RMX, barriers to potential entry were low. Access to aggregates of the appropriate quality was the most important barrier as RMX producers require specific high-quality grades of aggregate and nearly all producers own their own quarry. We did not find that the need for planning permission or the initial costs of setting up a new plant would constitute a barrier that would stop new entry in the right location.
- (b) For asphalt, capital costs were substantially higher than for RMX and obtaining planning permission was substantially more difficult. In addition, we found that the need for access to bitumen could be a barrier for a new entrant. As with RMX, asphalt producers require specific high-quality grades of aggregate and nearly all producers own their own quarry.

6.196 Given the need for a new entrant into either RMX or asphalt to have access to a supply of aggregates of the appropriate quality, we considered that the most likely new entrants would be existing producers of aggregates which had quarries in the right location. We note that in the North of Scotland nearly all existing producers of RMX and asphalt also own a quarry from which they are able to source aggregates (even if the quarry is not co-located with the RMX or asphalt plant).

6.197 In addition, we received evidence that in the Aberdeen area specifically, suppliers of RMX or asphalt which had sites both on the north and south side of Aberdeen benefited from a significant competitive advantage, because congestion in Aberdeen could lengthen delivery times:

(a) [✂]

(b) Leiths told us that it opened an asphalt plant at its Lochhills Quarry in August 2009 to improve its service to the asphalt contractors by offering supplies to the north of Aberdeen, thereby eliminating the difficulty of traversing the city. Much of the volume secured by the new plant had been at the expense of its asphalt plant at Blackhills (located south of Aberdeen). [REDACTED]

(c) A customer, [REDACTED], told us that all three major suppliers (Breedon, the acquired operations, Leiths) had plants that surrounded Aberdeen and all of them supplied into all parts of the city competitively. The reason all three could compete was because of their spread of sites around Aberdeen.

- *Entry and expansion and future plans in the Aberdeen area*
 - *RMX*

6.198 To our knowledge, there has not been any de novo entry or expansion in the Aberdeen area since 2010, although we noted that Leiths had invested in an RMX plant in Dufftown in Moray in 2013.

6.199 Leiths does not currently have any plans to expand its RMX capacity. In any event, if it were to do so, this would not mitigate the competition concerns we have found as the reduction in the number of major suppliers from three (Breedon, the acquired operations and Leiths) to two (Breedon and Leiths) was a key element of the competition concerns we found in the RMX market in the Aberdeen area.

6.200 Next, we considered whether suppliers other than Leiths or Breedon are likely to enter or expand the production of RMX and/or asphalt. Given the evidence received from the councils (see Appendix J, paragraph 31), we considered that the most likely entrants were existing quarry operators.

6.201 There are five producers of primary aggregates¹⁴⁸ within 20 miles of Aberdeen which could in principle enter or expand RMX production (either themselves or in partnership with a third party locating a plant on their site): Bruce Plant, Aberdeenshire Council, Chap Quarries, James Jamieson and J&A Herd. We considered how likely each one of these suppliers would be to do so in practice. We were also made aware of entry plans by a supplier from outside the local area and obtained more details on these plans (see paragraph 6.207).¹⁴⁹

6.202 As discussed in paragraphs 6.101 and 6.137, the evidence we have received suggests that Aberdeenshire Council is a relatively weak competitor due to its policies and therefore we do not consider that any expansion by this supplier would be likely to constrain Breedon.

6.203 [REDACTED]

6.204 We noted that [REDACTED].

6.205 [REDACTED] told us that it wanted to install an RMX plant at its [REDACTED] Quarry (located [REDACTED] radial miles north of Aberdeen and [REDACTED] radial miles from Tom's Forest). It would use primary aggregates [REDACTED] did not believe that getting planning permission would be problematic [REDACTED] plans had, however, been put on hold for a year, due to additional capital expenditure having to be made in the short term.

6.206 We received no evidence from either [REDACTED] or [REDACTED] to suggest that they were either able or willing to enter into the production of RMX. We noted that both suppliers owned small quarries (Appendix G, Table 5) and therefore considered that even if

¹⁴⁸ We do not consider producers of recycled aggregates, as they are not generally able to produce RMX from recycled aggregates.

¹⁴⁹ [REDACTED]

they (or a third party) started producing RMX on these sites, they would be unlikely to produce sufficient quantities to mitigate the effect of the transaction. [REDACTED]

6.207 We were also made aware of the interest that another supplier had [REDACTED].

6.208 The evidence showed that there were three suppliers with plans to enter or expand in the RMX market in the Aberdeen area. Two of the suppliers had firm plans, which they were progressing, while the plans of the third one were on hold. We noted that none of the three suppliers raised concerns about their ability to implement their plans and that it would take a matter of months rather than years to do so, provided for two of them that a suitable site had been secured. We also noted that the Aberdeen area is generally considered attractive by suppliers because of the combination of high ongoing demand generated by the oil and gas industry and the upcoming AWPR project. We therefore considered it likely that the plans of at least one the three suppliers would come to fruition and considered that the AWPR project gave them a strong incentive to act quickly. We therefore provisionally concluded that, in the Aberdeen area, entry into RMX was likely to occur within a timely manner and would be of sufficient scale to mitigate the effects of the transaction in the Aberdeen area.

◦ *Asphalt*

6.209 To our knowledge, there has not been any de novo entry or expansion in the Aberdeen area since 2010. However, as noted in paragraph 6.197(b), Leiths had opened an asphalt plant at its Lochhills quarry in 2009, [REDACTED].

6.210 [REDACTED] told us that it [REDACTED]¹⁵⁰. We considered that this would not mitigate the competition concerns we have found because [REDACTED].

6.211 There are another nine producers of primary aggregates¹⁵¹ within 35 miles of Aberdeen which could in principle enter into or expand asphalt production: [REDACTED], and [REDACTED]. We considered how likely each one of these suppliers would be to do so in practice.

6.212 [REDACTED]

6.213 [REDACTED] told us that it had no plan to produce asphalt in the future as it did not have its own supply of suitable aggregate and it considered that the market was already saturated. It told us that an increase in the price of asphalt would not alter this position.

6.214 We have seen no evidence to suggest that [REDACTED] are intending to expand into the production of asphalt in the Aberdeen area.

6.215 We have seen no evidence to suggest that [REDACTED] is able or willing to enter into the production of asphalt. We noted that this supplier owned a small quarry (Appendix G, Table 5) and therefore considered that even if it (or a third party) started producing asphalt on this site, it would be unlikely to produce sufficient quantities to mitigate the effect of the transaction.

6.216 [REDACTED]

¹⁵⁰ [REDACTED]

¹⁵¹ We do not consider producers of recycled aggregates, as they are not generally able to produce asphalt from recycled aggregates.

6.217 We have seen no evidence to suggest that either [REDACTED] is able or willing to enter into the production of asphalt. We noted that both suppliers operated small quarries (Appendix G, Table 5) and therefore considered that even if they started producing asphalt on these sites, they would be unlikely to produce sufficient quantities to mitigate the effect of the transaction.

6.218 We therefore provisionally found that the only plans for entry or expansion for asphalt in the Aberdeen area were by [REDACTED]. However, for the reasons set out in paragraph 6.210, we did not consider that such expansion would mitigate the concerns we had identified in relation to asphalt in the Aberdeen area.

- *History of entry and expansion and future plans in the Inverness area*

6.219 We are not aware of any de novo entry or expansion in the supply of asphalt in the Inverness area since 2010.

6.220 However, two suppliers, Leiths and Pat Munro, have taken steps towards the installation of new asphalt plants:

- (a) As explained in paragraph 5.17, in 2012, Leiths obtained planning permission to install an asphalt plant at its Mid Lairgs quarry. [REDACTED]
- (b) Breedon made us aware of a planning application made by Pat Munro for a quarry and asphalt plant at Dalmagarry, close to the A9 between Aviemore and Inverness. Pat Munro, however, told us that it had submitted a scoping works application to [REDACTED]. This was a speculative enquiry [REDACTED] Pat Munro would not proceed with a planning application as it considered that [REDACTED]. It therefore had no immediate plans and no estimates for the costs, capacity or production level for the proposed development.

6.221 We were not made aware of any other expansion or entry plans and noted that there had been no entry or expansion since 2010 and there was a significant amount of spare capacity in the local asphalt market.

6.222 We provisionally found that one supplier had a planning permission for an asphalt plant and another one had filed a speculative application for a asphalt plant in the Inverness area. Given the evidence we received from both suppliers, we were not satisfied that one of these plans would come to fruition in a timely manner and therefore provisionally concluded that entry or expansion was unlikely to mitigate the competition concerns we identified. In addition, we noted that Leiths was already a supplier of asphalt in the local area and that expansion by this competitor would not address the competition concern we had identified (see paragraph 6.189).

- *History of entry and expansion and future plans in the Peterhead area*

6.223 We are not aware of any de novo entry or expansion in the supply of RMX in the Peterhead area since 2010.

6.224 We considered that to be capable of mitigating the effect of the transaction, entry or expansion would need to take place in the close proximity of Breedon's Peterhead site and the Stirlinghill site (see paragraph 6.161). There were two quarries that would fall within this category: Alexander Duthie & Sons' Thunderton quarry and Savoch Quarry.

6.225 We have seen no evidence to suggest that [X] is able or willing to enter into the production of RMX. We noted that this supplier owned a [X] (Appendix G, Table 5) and therefore considered that even if it (or a third party) started producing RMX on this site, it would be unlikely to produce sufficient quantities to mitigate the effect of the transaction.

6.226 [REDACTED]

6.227 We also considered whether [REDACTED] plan to open an RMX plant in its [REDACTED] quarry (see paragraph 6.205) could mitigate the competition concerns we identified in the market for RMX in the Peterhead area. We noted that this plan was on hold [REDACTED]. We also noted that [REDACTED] was [REDACTED] miles away from Peterhead, which would give its RMX plant a significant cost disadvantage compared with Breedon's two plants in the Peterhead area (which are both close to the centre of Peterhead).

6.228 Given these issues and the fact that [REDACTED] plan to install an RMX plant at its [REDACTED] quarry was the only potential entry into the RMX market in the Peterhead area that we were aware of, we considered that even if [REDACTED] were to supply RMX into the Peterhead area in a timely manner, such entry was unlikely to be sufficient to mitigate the effects of the transaction in this area.

- *Entry or expansion through the use of volumetric trucks or mobile plants*

6.229 With regard to the use of volumetric trucks to enter RMX local markets, as discussed in paragraph 4.26(b), we received evidence from customers and suppliers that there were quality issues associated with the use of volumetric trucks, which were therefore not appropriate for certain projects. We therefore did not consider that entry or expansion through the use of volumetric trucks would be sufficient to mitigate the effect of the transaction. Similarly we were told that the use of mobile plants (whether for the production of RMX or asphalt) was suitable only for large projects and therefore did not consider that entry or expansion through the use of mobile plants would be sufficient to mitigate the effect of the transaction.

- *Provisional conclusions*

6.230 We therefore provisionally concluded that it was unlikely that the competition concerns relating to the following markets would be mitigated by sufficient and timely entry or expansion:

- (a) asphalt in the Aberdeen area, extending to the north of Aberdeen (see paragraphs 6.138);
- (b) RMX in the Peterhead area (paragraphs 6.161 to 6.162); and
- (c) asphalt in the Inverness area (paragraphs 6.187 to 6.189).

6.231 In relation to RMX in the Aberdeen area, we therefore provisionally concluded that on balance the competition concerns we have identified in this market are likely to be mitigated by sufficient and timely entry and/or expansion.

Buyer power

6.232 Our Guidance states¹⁵² that buyer power can be generated by different factors. An individual customer's negotiating position will be stronger if it can easily switch its demand away from the supplier, or where it can otherwise constrain the behaviour of the supplier. Typically the ability to switch away from a supplier will be stronger if there are several alternative suppliers to which the customer can credibly switch, or the customer has the ability to sponsor new entry or enter the supplier's market itself by vertical integration. Where customers have no choice but to take a supplier's products, they may nonetheless be able to constrain prices by imposing costs on the supplier. Where a supplier is engaged in bilateral negotiations with each of its customers, the relative bargaining strength of the supplier and each of its customers is determined by their mutual dependency. In such situations, it may be easier for large customers to threaten to sponsor new entry or vertically integrate than it would be for

¹⁵² CC2, [paragraphs 5.9.2–5.9.3](#).

smaller customers who could not commit a sufficiently large volume of purchases to make either viable.

6.233 Breedon argued that all customers were able to negotiate prices particularly through the use of tender processes or negotiation and particularly in light of the availability of excess capacity, both at Breedon's sites and at those of its competitors. The fact that prices are negotiated (through tenders or through more informal quotations processes—see paragraphs 6.2 to 6.8) and that customers obtain better prices by playing competitors against each other is taken into account in our competitive assessment in paragraphs 6.71 to 6.189: as we set out in paragraphs 6.31 and 6.32, we examined how the merger would impact on the outside options of aggregates, RMX and asphalt customers.

6.234 We also analysed concentration in the customer base of Breedon in order to examine whether there may be some large customers who may have a particularly strong bargaining position. Our calculations show that Breedon sold building materials (aggregates, RMX, asphalt and other materials) to [X] customers in 2012, that no one customer accounted for more than [X] per cent of building materials sales and that its ten largest customers of building materials [X] per cent of sales. These statistics suggest that no individual customer has a strong bargaining position.

6.235 We noted that the fact that typically prices are individually negotiated means that the suppliers will have some ability to price discriminate, offering better terms to larger customers and those with more competitive options available to them. However the ability of large customers to negotiate favourable terms will not result in price

protection for smaller customers.¹⁵³ [✂] It did not, however, support this view with any analysis and we did not see any evidence that would support this assertion.

6.236 Our provisional conclusion is that no customer buying materials from Breedon is likely to have significant buyer power in the absence of a greater selection of alternative suppliers. Currently, the majority of customers do not purchase materials from the parties in sufficient amounts to achieve a strong bargaining position. In addition, the ability of large customers to negotiate favourable terms will not result in price protection for smaller customers because prices are individually negotiated allowing suppliers to price discriminate.

Conclusions on the competitive effects of the merger in the markets for aggregates, RMX and asphalt in the relevant local areas

6.237 We therefore provisionally concluded that the transaction has resulted in an SLC in the following product markets and local areas:

- (a) asphalt in the Aberdeen area, extending to the north of Aberdeen;
- (b) RMX in the Peterhead area; and
- (c) asphalt in the Inverness area.

Analysis of competitive effects for contract surfacing services and decorative aggregates

Contract surfacing services

6.238 Breedon acquired Aggregate Industries' contract surfacing services gangs based at Beaully and Tom's Forest sites in north-east Scotland and at Marybank on the Hebrides. Breedon itself has contract surfacing services businesses based at its Craigenlow, Netherglen and Clatchard sites in north-east Scotland.

¹⁵³ CC2, [paragraph 5.9.6](#): 'Where individual negotiations are prevalent, the buyer power possessed by any one customer will not typically protect other customers from any adverse effect that might arise from the merger'.

6.239 Breedon considered that the transaction would not lead to competition concerns in relation to contract surfacing services for the following reasons:

- (a) There was very limited overlap between the parties.
- (b) There was strong competition reflecting the broader geographic market and strong incentives on competitors to use contract surfacing services as a route to market for construction materials, such as asphalt and RMX.
- (c) There were a variety of competitors, ranging from large integrated suppliers of construction materials, large civil engineering firms and many small contractors.
- (d) It estimated that it had a share of supply of [X] per cent in the Highlands region and [X] per cent in Grampian.
- (e) Barriers to entry were low, as a capital investment of only £[X] to £[X] was required.

6.240 Breedon supplied a list of competitors with operations in north Scotland. This included 45 companies, based throughout north Scotland. It also told us that [X] had recently left to establish itself as a small independent contractor.

6.241 Aberdeen City Council said that when it put surfacing contracts out to tender it tended to go to six contractors, the three with quarries because they were the most competitive and then an additional three. In the Aberdeenshire area there were seven or eight contractors which were capable of doing carriageway resurfacing as they had the equipment and the squads to undertake the work. Very occasionally one of the non-quarry owners would win the contract, but it was extremely rare. Aberdeen City Council believed that owning a quarry was a significant advantage to a company wanting to undertake surfacing contracts and it presumed that the companies that

were vertically integrated would provide better rates to their own surfacing division than to external rivals.¹⁵⁴

6.242 Fife Council, RJ McLeod and Transport Scotland told us that they did not take into consideration whether the asphalt (road) surfacing contractor produced the asphalt themselves when making a decision of which supplier to use. Balfour Beatty told us that it would not be a defining reason in choice of supplier.

6.243 Both Balfour Beatty and RJ McLeod told us that they took on surfacing services contracts on a supply-and-lay basis. Balfour Beatty said that it generally preferred a 'one stop shop' for surfacing, ie supply and lay, but did point out that for smaller projects it did employ small local subcontractors to lay only.

6.244 RJ McLeod told us that contractors almost exclusively provided their own materials, and were contracted by RJ McLeod for supply-and-lay services. It said that surfacing services were mainly subcontracted to local companies in Scotland, except in the case of very large contracts. If it had a contract with a total value in excess of £15–£20 million, it would approach national suppliers, and of this it would expect about £5 million to be for the supply of surfacing services.¹⁵⁵

6.245 We also spoke to [a company] that both competed with Breedon, Leiths and Aggregate Industries for asphalt surfacing contracts and used them as sub-contractors. This company told us that it could compete with both Breedon and Leiths even though it was not vertically integrated and it was told by both suppliers that it paid the same price for materials as their in-house contracting divisions.¹⁵⁶

¹⁵⁴ [Hearing summary](#), paragraph 14.

¹⁵⁵ [Hearing summary](#), paragraphs 8 & 9.

¹⁵⁶ [Hearing summary](#), paragraphs 19 & 21.

6.246 In relation to contracts issued by Transport Scotland, as explained in paragraph 6.7(a), below a certain threshold, the operating companies are not required to put the contract out to tender and can award it 'as of right'. [X] contended that contracts between BEAR Scotland and Breedon were often split to below that level, so as to avoid such a tender process. Breedon was able to time the BEAR jobs to suit the capacity at its plants so that it could supply other contracts and hence delay the work on the trunk roads until it had free capacity. [X] believed that it had therefore lost out in its sales of asphalt and asphalt surfacing services as a result of Breedon's strength within BEAR Scotland. Another supplier of contract surfacing services ([X]) commented that because Breedon obtained certain contracts as a matter of course through the BEAR Scotland consortium, it was able to allocate lower overheads to the contracts that were put out to tender in competition with others, and thus enabled it to win a larger share of the contracting and supply market. In addition, this company was concerned that Breedon charged less for materials supplied to its internal operation than to external customers.

6.247 Our examination of Breedon's Monthly Board Reports provides evidence that Breedon's contracting division faced strong competition prior to the transaction. The contracting division reported [X]. The evidence suggested that competitors that did not have internal supplies of asphalt were able to compete with no apparent difficulty. In regard to competitors with own supplies of materials, [X] was said to be [X]. Aggregate Industries was only cited on a couple of occasions. A range of competitors (including local vertically integrated companies, large suppliers and small independent firms) were regularly identified in relation to specific bids and comments made suggested that both large and small companies were capable of winning the contracts, even when they did not have their own source of supply.

6.248 We obtained data on tenders for contract surfacing services from Breedon and a number of its customers. This evidence is set out in Appendix E. These pieces of evidence, considered together, showed that Breedon faced significant competition and that Aggregate Industries was one competitor among many others. In particular:

- (a) Of the [redacted] contract surfacing tenders registered by Breedon in the North and North-East of Scotland register,¹⁵⁷ it won approximately [redacted]. Although the winner of the tender was often not recorded, we noted that on [redacted] occasions either Leiths or Aggregate Industries was the winner. Where recorded, contracts lost by its [redacted] unit were to [redacted]. By contrast, losses by its [redacted] unit were almost exclusively to [redacted].¹⁵⁸
- (b) Data provided by Transport Scotland on competitive tenders in relation to trunk road maintenance in north Scotland suggested that Breedon and Aggregate Industries bid for many of the same contracts and that their bid prices were closer to each other than the average bid was from the winning bid. Breedon had won [redacted] per cent of the contracts it had bid for, while Aggregate Industries had won [redacted] per cent. Leiths also frequently competed with them and there were on average five bidders in a tender. We found that in general bidders who could supply their own materials tended to win more contracts than those that could not.¹⁵⁹
- (c) Data provided by other customers (Angus Council, RJ McLeod, I & H Brown and Fife Council) showed that Breedon and Aggregate Industries competed with each other to various degrees. In particular, Breedon competed against companies other than Aggregate Industries for bids put out by Angus Council¹⁶⁰ and Fife Council.¹⁶¹ The results of the bids put out by Fife Council showed that winning asphalt surfacing contracts was not necessarily linked to the ability to supply the

¹⁵⁷ Regions as defined by Breedon. See Appendix [E], paragraph 3, for the definition.

¹⁵⁸ See Appendix E, paragraph 4.

¹⁵⁹ See Appendix E, paragraphs 22 & 23.

¹⁶⁰ See Appendix E, paragraph 24.

¹⁶¹ See Appendix E, paragraphs 31 & 32.

asphalt: for instance, in [REDACTED] of the [REDACTED] resurfacing and surface-dressing contracts that Breedon bid for, it was still able to supply materials having lost the tender, and in a further [REDACTED] occasions it supplied resurfacing materials as a sub-contractor having not bid for the contract directly.

6.249 Based on the evidence set out above, we provisionally concluded that the transaction was unlikely to result in competition concerns in relation to the provision of contract surfacing services: although Breedon and Aggregate Industries competed against each other for certain contracts in the areas where they overlapped, the evidence did not suggest that they were particularly close competitors; in all relevant parts of north Scotland there appeared to be a number of alternative suppliers of contract surfacing services; although we accepted that for certain contracts, being vertically integrated may provide a competitive advantage, this did not appear to preclude other types of suppliers from being able to successfully bid for contracts; and the tender data received from Breedon and a range of customers suggested that following the transaction there would remain sufficient competition for all types of contracts. We noted [REDACTED] comments on the nature of the commercial advantages that Breedon derived from its share of the BEAR consortium but did not think that the transaction was likely to have a material effect on this relationship and any consequences of this relationship for the ability of other suppliers to win the Transport Scotland contracts that were managed by BEAR Scotland, since the competitive tenders attracted a number of bidders, many of which were similarly or more successful if compared with Aggregate Industries in winning the contracts.

Decorative aggregates

6.250 We estimated that Breedon produced [REDACTED] tonnes of decorative aggregates across nine sites (Balmullo, Capo, Clatchard, Craigenlow, Ethiebeaton, Morefields, Orrock, Shierglas and Stirlinghill). The acquired site at Marybank (located in the Hebrides)

produced [X] tonnes. The acquired site at Corrennie also produced decorative aggregates but data on the volumes produced was not available.

6.251 Aggregate Industries told us that decorative aggregates tended to be marketed more to the end-user than other types of aggregates. It was often the case that the end-user or architect responsible for designing a project would choose a particular decorative aggregate based upon its suitability relative to the overall aesthetic design of a project (eg its colour, shape, finish etc). The Corrennie product was typically used for making coloured asphalt and as a decorative chipping for driveways and pathways. There were several suppliers of decorative aggregates in North Scotland but the products produced at each quarry varied, which was why competition tended to take place in the marketing of the various decorative materials direct to end-users and architects, where there was room to influence the initial aesthetic decision. Consequently there were a high number of competitors despite the fact that the specific products offered by each competitor may vary.

6.252 Leiths told us that it produced decorative aggregates at its Skye and Mid Lairgs quarries and distributed them through merchants to pebble-dashing contractors and horticultural customers. It told us that its decorative aggregates were white and were not in competition with the red granite produced by Breedon and the acquired operations, which was mostly used for highway works.¹⁶² Laird Brothers commented that the red granite produced at Craigenlow and Corrennie was both unique and popular and that the transaction would have a significant impact on this particular segment of the market. Breedon told us that the colour of the decorative aggregates produced could vary significantly from bright pink to rust-coloured reds. For example, Balmullo quarry produced a bright pink aggregate which did not compete with the more 'browny' red produced at Corrennie.

¹⁶² [Hearing summary](#), paragraph 15.

- 6.253 In response to the survey question relating to what they would do if the site from which they purchased aggregates closed, most of the customers who purchased decorative aggregates (of which there were 67 in the sample) said that they would switch their purchase to another competitor (ie neither Breedon nor Aggregate Industries) and some to a builders' merchant, although four of the seven who said they purchased from Craigenlow told us that they would switch their purchase to Tom's Forest (see Appendix I).
- 6.254 We received some evidence from customers that the colour and size of products offered at Craigenlow and Corrennie were particularly close, and a number of customers expressing concerns about the effect of the merger in general noted that there would be no alternative source for this particular type of product following the transaction (see Appendix I, paragraphs 14 to 16).
- 6.255 We provisionally concluded that the transaction was unlikely to lead to competition concerns in the supply of decorative aggregates overall as the evidence suggested that there would remain enough choice in the availability of such products in Scotland. We noted that the products extracted at Craigenlow and Corrennie were very similar, but to the extent that the transaction may result in a reduction in choice for customers who required a specific colour of aggregate for their building project, this would be likely to be small, given the nature of the competition in the decorative market overall.

Provisional conclusions on the SLC test

- 6.256 We have provisionally found an SLC leading to prices that would be higher than might otherwise be the case in the product markets and local areas identified in paragraph 6.237.