

**AGGREGATES, CEMENT AND READY-MIX CONCRETE
MARKET INVESTIGATION**

**Notice of possible remedies under Rule 11 of the
*Competition Commission Rules of Procedure***

Introduction

1. On 18 January 2012 the Office of Fair Trading (OFT), in exercise of its powers under sections 131 and 133 of the Enterprise Act 2002 (the Act), made a reference to the Competition Commission (CC) for an investigation into the supply or acquisition of aggregates, cement and ready-mix concrete (RMX).
2. In its provisional findings, a summary of which was published on 21 May 2013, the CC has provisionally found adverse effects on competition (AECs) within the meaning of section 134(2) of the Act. Section 12 of the provisional findings identifies those features that give rise to the AECs and the resulting detrimental effects on customers.
3. Where the CC finds that there is an AEC, it has a duty, under section 134(4) of the Act, to decide whether it should take action and/or whether it should recommend others to take action to remedy, mitigate or prevent the AEC or any resulting detrimental effects on customers. If the CC decides that such action is appropriate, it must also decide what action should be taken and what is to be remedied, mitigated or prevented. In deciding these questions the CC has a duty to achieve as comprehensive a solution as is reasonable and practicable to the AEC and any resulting detrimental effects on customers, as set out in section 134(6) of the Act.
4. This Notice of possible remedies (the Notice) sets out and invites comments on possible actions which the CC might take in order to remedy, mitigate or prevent the AECs or any resulting detrimental effects on customers. Prior to deciding what, if any, action should be taken and by whom, the CC will take into account all comments received in response to this Notice and consult further. The parties to this investigation and any other interested persons are requested to provide any views in writing, including any suggestions for additional or alternative remedies that they wish the CC to consider, by 12 June 2013.

Description of parties used in this Notice

5. For the purposes of this Notice, the term ‘GB cement producers’ shall refer to the four companies with cement production facilities in Great Britain (GB), namely Lafarge Tarmac Limited (Lafarge Tarmac); the UK heavy building materials operations of HeidelbergCement AG (Hanson); Cemex UK Operations Limited (Cemex); and Hope Cement Limited and Hope Ready Mixed Concrete Limited (together, Hope Construction Materials). The term ‘Top 3 cement producers’ shall refer only to Lafarge Tarmac, Hanson and Cemex.
6. The term ‘independent’ shall, unless stated otherwise, refer to any business entity or group that is not owned (wholly or partly) by any of the five largest heavy building materials producers in GB (the Majors), namely the four GB cement producers and Aggregate Industries UK Limited (Aggregate Industries).

Provisional findings on the AECs and resulting detrimental effects

7. In this section we set out a summary of our provisional findings on the features giving rise to the two AECs we found in the GB bulk and bagged cement markets and the resulting detrimental effects. The features which give rise to an AEC through coordination are set out in paragraph 9 below, and the features which give rise to an AEC in relation to the production of ground granulated blast furnace slag (GGBS) and its primary input, granulated blast furnace slag (GBS), are set out in paragraph 10 below.
8. In relation to the markets for aggregates and RMX, we did not find evidence indicating widespread competition problems across multiple local markets (whether as a result of unilateral market power or coordination), and therefore we made no provisional finding with regard to any features giving rise to one or more AECs in any market in GB for the supply of construction aggregates or RMX. Consequently we are not considering any remedies to address any AEC in these markets.

Features which give rise to an AEC in the cement markets through coordination

9. As set out in Section 12 of the provisional findings, we identified structural and conduct features that combine together to give rise to an overarching feature in the GB cement markets, namely coordination among Cemex, Hanson and Lafarge.¹ These structural and conduct features are as follows:

Structural features

- high market concentration;
- transparency of sales and production shares, wins and losses and customer-supplier relationships;
- high barriers to entry (including limits to the constraint imposed by imported cement);
- homogeneity of product;
- customer characteristics and behaviour (in particular, regularity of purchases, purchases at fixed locations, concentration of customer base and single sourcing for a particular job site); and
- vertical integration from cement into downstream operations.

Conduct features²

- a strategic focus on maintaining market stability between the members of the coordinating group, frequently manifested in a focus on maintaining existing (or returning to pre-existing) relative shares of sales;
- price announcement behaviour (which facilitates price leadership and price following, and softens customer resistance to price increases);

¹ Prior to the formation of Lafarge Tarmac on 7 January 2013, Lafarge comprised both Lafarge Cement UK Limited and Lafarge Aggregates Limited.

² The individual significance of each conduct feature varies over time.

- tit for tat behaviour used to balance shares and for retaliation;
- use of cement cross-sales as a mechanism for transparency, signalling and, on occasion share balancing and retaliation; and
- attempts to target cement importers beyond normal competition on price and service.

Features which give rise to an AEC in the cement markets in relation to GGBS/ GBS production

10. In relation to the supply of GGBS in GB, we provisionally found that Lafarge Tarmac's exclusive agreements with the GB steel producers for the production of GBS, and Hanson's exclusive long-term contract with Lafarge Tarmac for the production of GGBS, in combination with Lafarge Tarmac's and Hanson's participation in the GB cement markets, were features that gave rise to an AEC in the GB cement markets.³

Detrimental effects

11. Detrimental effects can arise where the AECs result in higher costs to the UK economy in general and to customers in particular. Where remedies are effective in generating competition, this is likely to facilitate economic growth and increase consumer choice by driving down costs and prices and increasing innovation and productivity.⁴
12. For each of the two AECs we have provisionally found in relation to the markets for cement, the likely detrimental effects are higher prices of cement in GB than would otherwise be the case for all GB users, whether this cement is ultimately sold through independent RMX and concrete producers, independent merchants or through the downstream businesses of the Majors. Our preliminary findings are that there is a material customer detriment arising from the high cement prices which resulted from these two AECs. Using one of several possible approaches to quantifying this detriment indicated that this detriment was of the order of £180 million over the period from 2007 to 2011. However, there are several reasons that we considered this figure likely to be an underestimate of the actual detriment arising.⁵ We expect to refine our estimate of the detriment in the context of our assessment of the proportionality of the remedy options contained in this Notice.

Criteria for consideration of remedies

13. When deciding whether any remedial action should be taken and, if so, what that action should be, the CC will consider how comprehensively possible remedy options—whether individually or as a package—address the AEC and/or its resulting detrimental effects on customers, and whether they are effective and proportionate.⁶ The CC will assess the extent to which different remedy options are likely to be effective

³ Because both Lafarge Tarmac and Hanson are active in the GB cement, aggregates and RMX markets, their conduct in relation to GGBS may, under section 131(2) of the Act, be taken to be a feature of the cement markets.

⁴ *CC Guidelines for market investigations (CC3 Revised)*, April 2013 (the Guidelines), [paragraph 331](#).

⁵ These reasons include the short-term impact on profitability arising from the GB cement producers' adjustment to the recent large reduction in cement demand and the possibility that detriment may manifest itself through the ongoing inefficiency of some suppliers rather than through high profitability. In addition, if a profitability approach is adopted for estimating customer detriment, then our profitability analysis indicates that customer detriment has been increasing year on year over the period from 2008 to 2011.

⁶ The Guidelines, [paragraph 329](#).

in achieving their aims, including whether they are practicable and the timescale over which they are likely to take effect.⁷ The CC will be guided by the principle of proportionality in ensuring that it acts reasonably in making decisions about remedies, and will consider whether a remedy option:

- (a) is effective in achieving its legitimate aim;
- (b) is no more onerous than needed to achieve its aim;
- (c) is the least onerous if there is a choice between several effective measures; and
- (d) does not produce disadvantages which are disproportionate to the aim.⁸

14. The CC may also have regard to the effects of any remedial action on any relevant customer benefits (RCBs), as defined in section 134 of the Act, arising from a feature or features of the markets giving rise to the AECs (see also paragraphs 114 and 115 below).

Implementation

15. As noted in paragraph 3 above, where the CC reaches an AEC finding it will need to decide whether action should be taken by itself, or recommended to be taken by others. Where the CC decides to take action itself, its choice of whether to implement remedies by means of accepting undertakings or making an order will be determined on a case-by-case basis, primarily by practical issues including the number of parties concerned, and their willingness to negotiate and agree undertakings.⁹ The OFT will be responsible for monitoring any such undertakings or order under the Act.¹⁰ The CC may consider making recommendations where an aspect of regulation or government behaviour is itself giving rise to an AEC or where it would be more practicable (or otherwise preferable) for the CC to implement a remedy by means of a recommendation rather than taking action itself.¹¹

Possible remedies on which views are sought

16. We are seeking views on the remedies set out in this Notice and any other remedies which parties to this investigation or other interested persons consider would effectively and proportionately address the AECs and/or resulting detrimental effects identified in the provisional findings.
17. In order to focus our analysis during the remedies phase of our investigation, we have distinguished in this Notice between those remedies which we consider could be effective and those which we believe are unlikely to be effective. At this stage we are only minded to consider further those remedies in the first category but we will consider further the remedies in the second category and other proposals if parties are able to provide relevant evidence and reasoning as to why these alternatives would be appropriate.
18. We first set out, in paragraphs 19 to 97 below, those remedy options which we are minded to explore further. We invite views on how to specify and implement these

⁷ The Guidelines, [paragraphs 334–337](#).

⁸ The Guidelines, [paragraphs 342–344](#).

⁹ The Guidelines, [paragraph 92](#).

¹⁰ [Section 162](#) of the Act.

¹¹ The Guidelines, [paragraph 390](#).

remedy options and their effectiveness and proportionality. We then set out in paragraphs 99 to 111 below our current thinking regarding those remedies which we believe are not likely to be effective and which, therefore, we are not currently minded to consider further.

Overview of remedy options we are exploring

Remedy options to address the AEC in the cement markets through coordination

19. We are considering the following remedy options to address the AEC we provisionally found in the GB markets for bulk and bagged cement through coordination.

Divestiture remedies

- C1. *Market structure and concentration:* divestiture of cement production capacity by one or more of the Top 3 cement producers.
- C2. *Vertical integration:* divestiture of RMX plants by one or more of the Top 3 cement producers.

Measures to enhance countervailing power of cement purchasers

- C3. *Buyer-side issues:* the creation of a cement buying group or groups.

Restrictions on supplier conduct that have the effect of facilitating coordination

- C4. *Price announcement behaviour:* prohibition on GB cement producers sending generalized cement price announcement letters to their customers.

Restrictions on publication of information by Government and other bodies

- C5. *Transparency of sales and production shares:* restrictions on the disclosure of cement market data by the UK Government and by GB cement producers to private sector organizations.
- C6. *Transparency of sales and production shares:* recommendations to the UK Government/European Commission on the publication of GB cement producers' verified emissions data under the EU ETS.¹²

Remedy options to address the AEC in the cement markets in relation to GGBS and GBS production

20. We are considering the following remedy option to address the AEC we provisionally found in the GB markets for bulk and bagged cement in relation to the production of GGBS and its primary input, GBS.

Divestiture remedy

- C7. *GGBS supply:* structural measures to address the AEC in relation to GGBS/GBS production in GB.

¹² The European Union Emissions Trading System.

Discussion of remedy options to address the AEC in the cement markets through coordination

Divestiture remedies

21. As an introduction to our consideration of possible divestiture remedies, we set out some general considerations regarding divestiture.

General considerations regarding divestiture remedy options

22. The aim of divestiture in market investigations will generally be to address competition problems arising from structural features of a market. This may be done either by creating a new source of competition through disposal of a business or assets to a new market participant, or by strengthening an existing source of competition through disposal of a business or assets to an existing market participant that is independent of the divesting party (or parties).¹³
23. Where a structural measure, such as divestiture, is appropriate, it is likely to have some advantages over behavioural measures as it will address at source the lack of rivalry resulting from structural features of a market and will generally not require detailed ongoing monitoring beyond the completion of the disposal of the business or assets in question.¹⁴
24. To be effective, a divestiture needs to dispose of an appropriate divestiture package to a suitable purchaser through an effective divestiture process. An effective divestiture remedy is therefore based on three critical elements:
 - (a) *Appropriate divestiture package.* In general, a divestiture remedy is more likely to be effective if the business to be divested comprises a stand-alone competitive business unit rather than a package of assets as this is likely to reduce the risk of inadequate scope of the divestiture and enables the divestiture to be completed with greater speed.
 - (b) *Suitable purchasers.* Suitable purchasers should be independent of the divesting party or parties and any related party, and should have appropriate expertise, commitment and financial resources to operate and develop the divestiture business as an effective competitor. In addition, acquisition of a divestiture package by a suitable purchaser should not itself create further competition or regulatory concerns.
 - (c) *Effective divestiture process.* An effective divestiture process should ensure that divestiture of an appropriate divestiture business to a suitable purchaser takes place within a reasonable time period. It should also ensure that the divestiture business does not degrade prior to divestiture.¹⁵

Remedy C1: Divestiture of cement production capacity by one or more of the Top 3 cement producers

25. We provisionally found that the GB markets for cement were characterized by high levels of market concentration, where all ten cement plants in GB are owned by four

¹³ The Guidelines, [paragraph 372](#).

¹⁴ The Guidelines, [paragraph 373](#).

¹⁵ Further information about the CC's approach to the design and implementation of divestiture remedies in market investigations may be found in the Guidelines ([Annex B](#), paragraphs 3–30).

companies, namely Lafarge Tarmac, Hanson, Cemex and Hope Construction Materials. We also provisionally found that Lafarge Tarmac (four cement works), Hanson (three) and Cemex (two) form a group that is engaged in maintaining a co-ordinated outcome in the markets for cement, where:

- (a) Prior to January 2013, there was evidence that Lafarge had a leadership role in the cement markets, thereby facilitating coordination. The fact that Lafarge benefited most from coordination (as the largest GB cement producer), as well as being likely to bear the highest risks in case of deviation (as the least vertically integrated producer), gave Lafarge an incentive to take a leadership role in the coordination (such as leadership in price announcements, as well as in close monitoring and punishment of any deviations). It also gave Lafarge an incentive to take a greater proportion of any costs of coordination, such as the costs of accommodating the growth of the competitive fringe (in terms of market share loss). On the basis of the evidence to date, we expect Lafarge Tarmac to follow broadly similar competitive strategies to those pursued by Lafarge prior to 2013 in cement at least in terms of all the key factors that contribute to coordination.
 - (b) Hanson and Cemex are likely to have strong incentives to adhere to the coordination: they benefit strongly from coordination due to their size; they can be punished in the event of a deviation because of their relatively large external sales of cement; and can punish others due to the fact that they hold excess cement capacity.
26. The divestiture of cement production capacity by one or more of the Top 3 cement producers would address directly the high level of concentration in the markets for cement. It could also reduce the ability and incentive of Lafarge Tarmac to play a leadership role in the cement markets. In this way, this remedy option could be effective in addressing the AEC by creating a fifth GB cement producer through a divestiture of cement production capacity. We are therefore considering possible divestitures primarily from Lafarge Tarmac, which currently has the largest number of cement plants and the greatest production capacity, and also from Hanson and/or Cemex.

Scope of possible divestiture package

27. In considering potential divestiture(s), we will have regard to the implications of any divestiture of cement production capacity both on the structure of the cement markets as it currently stands and the market structure that might prevail if 'latent' capacity (ie mothballed production capacity or the permitted development of new production capacity) were employed. Consideration of latent capacity may be relevant to the specification of this remedy option since its availability could determine future market structure and competition in the medium to long term if:
- (a) market conditions change sufficiently to justify bringing latent capacity into operation (eg in the event of a market upturn); or
 - (b) a GB cement producer required to implement a divestiture sought to re-establish its market position by bringing its latent capacity into operation to replace any production capacity forgone through divestitures.
28. In considering how much weight should be placed on latent capacity when determining possible divestitures, we would have regard to both the cost and likelihood of converting latent capacity into operational capacity, which could vary depending on the nature of the latent capacity as well as prevailing market conditions, and expect-

tations about future conditions. In [Appendix A](#) of this Notice, we set out details of the Top 3 cement producers' operational and latent cement production facilities.

29. The following are likely to be relevant considerations in relation to the scope of any divestiture package:
- (a) the production capacity of the facilities to be divested and hence the potential market position available to any purchaser;
 - (b) the geographical reach of a cement plant or stand-alone grinding station based on the quality and availability of its transport infrastructure, eg whether it has access to rail-linked depots;
 - (c) a cement plant's raw material reserves, and its economic access to such reserves, and the time period for which permitted reserves are available;
 - (d) a cement plant's financial and production key performance indicators compared with other GB cement plants;
 - (e) a cement plant's annual allocation of free carbon allowances (EUAs) during ETS Phase III (ie until the end of 2020), and its equivalence in terms of clinker production volumes based on its carbon emissions efficiency; and
 - (f) the viability of potential divestiture packages on a stand-alone basis, as well as their attractiveness to potential purchasers.

Issues for comment C1

30. **The CC invites views on the specification, effectiveness and proportionality of this remedy option, in particular on the following:**
- (a) How many new independent cement producers would it be necessary to create through divestiture in order to achieve an effective remedy?**
 - (b) Should this remedy involve divestiture of cement production capacity from Lafarge Tarmac only, or should divestitures from Cemex and/or Hanson also be considered?**
 - (c) Should this remedy only focus on divestiture of current production capacity, or should divestiture of latent production capacity also be considered? What weight should be placed on latent production capacity when considering the extent of divestitures that is necessary?**
 - (d) What selection criteria should be used when identifying a suitable divestiture package? For each of Lafarge Tarmac, Hanson and Cemex, which cement plant(s) and/or latent production capacity are most likely to form the basis of an effective divestiture package?**
 - (e) What other operations would need to be included in a divestiture package alongside any cement plant in order for the purchaser to be able to compete independently—for example, would it be necessary to include rail-linked depots or a cluster of RMX plants, and if the latter, how many?**
 - (f) What criteria should be applied to the consideration of purchaser suitability? For example, would acquisition of divested capacity by Aggregate**

Industries, Hope Construction Materials or a current importer of cement be effective in remedying this aspect of the AEC?

(g) What safeguards should be put in place to ensure a timely disposal and an effective divestiture process, in particular:

- (i) What timescale should be allowed for the implementation of any divestiture the CC may require?**
- (ii) What arrangements should be put in place for holding separate the operations to be divested from those that will be retained and for monitoring any such provisions?**
- (iii) Under what circumstances should the CC appoint a divestiture trustee?**

(h) What costs and benefits would arise as a result of this remedy?

(i) Whether there are any other relevant considerations to be taken into account in evaluating and implementing this remedy.

Remedy C2: Divestiture of RMX plants by one or more of the Top 3 cement producers

31. We are considering a structural measure to require one or more of the Top 3 cement producers to divest some of their downstream RMX plants¹⁶ to independents.¹⁷ This measure could be effective in addressing the AEC by:
- (a) increasing the size of the 'addressable market'¹⁸ and thereby reducing barriers to entry and expansion;
 - (b) reducing the scope for the Top 3 cement producers to undertake cross-sales of cement with each other, thereby reducing transparency between the Top 3 cement producers and reducing the scope for cross-sales to be used to re-balance shares of sales and/or signal that deviations from coordination have been detected;
 - (c) increasing the size of the cement volumes purchased by independent RMX operators, thereby helping to increase countervailing buyer power; and
 - (d) potentially increasing the focus of the Top 3 cement producers on supplying the 'addressable market' and seeking to win and retain external customers.
32. We are considering how to determine the extent of any RMX plant divestitures that may be required. One possible approach would be to require each of the Top 3 cement producers to reduce the extent of the vertical integration between its cement and downstream operations by divesting a sufficient number of RMX plants to reach

¹⁶ At this stage, our consideration of this remedy option is mainly focused on divestiture of RMX plants. However, we will consider whether the scope of any divestitures should also include other downstream concrete plants, eg plants that produce precast concrete or concrete blocks.

¹⁷ On 7 January 2013, ownership of the Hope cement plant along with a portfolio of aggregates and RMX sites were transferred to Hope Construction Materials, which is ultimately owned by Mittal Investments Sarl, a new entrant that is not part of any group of coordinating firms. On this basis, this remedy does not apply to Hope Construction Materials, either as a seller or a potential purchaser of any potential divestitures.

¹⁸ The 'addressable market' refers to cement sales to independent customers, ie excluding all internal cement sales made by the GB cement producers and cement cross-sales between any of the GB cement producers.

a target ratio of cement consumption to cement production (the 'target VI ratio'). In considering an appropriate target VI ratio, we would expect to have regard to:

- (a) the size of the 'addressable market' implied by different ratios;
- (b) the implications on the incentives of the Top 3 cement producers to compete; and
- (c) any efficiency benefits of retaining some level of vertical integration between the Top 3 cement producers' cement and downstream operations.

33. We have not at this stage formed a view as to what an appropriate target VI ratio would be.
34. In order to ensure that the remedy is effective in achieving its aim, we would expect to restrict the ability of any divesting company to reacquire any RMX plants it had divested. We are also considering whether to prevent the acquisition of other RMX plants by the Top 3 cement producers for a specified time period (eg three to five years) following implementation of this remedy.

Issues for comment C2

35. **The CC invites views on the specification, effectiveness and proportionality of this remedy option, in particular on the following:**
- (a) How should the extent of any divestitures required by each the Top 3 cement producers be determined? For example, should we use a target VI ratio or some other methodology?**
 - (b) How should any target VI ratio be calculated? For example, which year should be used as a baseline and should the same target VI ratio apply to all of the Top 3 cement producers or a different target VI ratio for each?**
 - (c) What criteria should be applied to the consideration of purchaser suitability? For example, would the purchaser of any cement plant divested under remedy C1 be a suitable purchaser for any RMX plants to be divested under this remedy?**
 - (d) Should there be a restriction on the Top 3 cement producers acquiring RMX plants following implementation of this remedy and if so for how long?**
 - (e) What safeguards should be put in place to ensure a timely disposal and an effective divestiture process, in particular:**
 - (i) What timescale should be allowed for the implementation of any divestiture the CC may require?**
 - (ii) What approach should be taken to the sequencing of this remedy and remedy C1, should both be required? For example, should the divestiture of any cement plant precede any RMX plant divestitures, or vice versa?**
 - (iii) What arrangements should be put in place for holding separate the operations to be divested from those that will be retained and for monitoring any such provisions?**
 - (iv) Under what circumstances should the CC appoint a divestiture trustee?**

(f) What costs and benefits would arise as a result of this remedy?

(g) Whether there are any other relevant considerations to be taken into account in evaluating and implementing this remedy.

Measures to enhance countervailing power of cement purchasers

Remedy C3: The creation of a cement buying group or groups

65. We are considering ways of increasing the ability of cement purchasers to exert competitive pressure on GB cement providers.
66. In particular, we are considering the establishment of regional or national cement buying group(s) (CBG) representing independent concrete producers. Whilst there are numerous CBGs that represent independent builders' merchants, we are not aware of any similar procurement arrangements for independent concrete producers.
67. This remedy option could be effective in addressing the AEC by enabling independent cement customers to increase their purchasing and negotiating power to achieve lower prices from GB cement producers, increase the threat of switching and thereby reduce the internal and external stability of coordination.
68. The remit of any CBG might include the following functions:
 - (a) designing and implementing an effective competitive process for purchasing cement: for example through a periodic tendering process covering each region, in which GB cement producers and importers would be invited to participate;
 - (b) working with GB cement producers, importers and customers to devise a flexible and transparent pricing approach, which would enable a CBG to provide its members with prompt price quotations. For example, each GB cement producer might be asked to provide a CBG with a competitive quote for a 'base' ex-works price, as well as separate quotes for haulage costs based on different radial delivery distances and any other necessary adjustments, eg volume discounts;
 - (c) negotiating prices on behalf of members along with other aspects of the offer such as standards for the quality of customer service;
 - (d) offering its members security of supply through multi-sourcing cement from a number of different producers;
 - (e) ensuring that all centrally negotiated terms and conditions are honoured by the GB cement producer or cement importer concerned; and
 - (f) implementing an appropriate credit scoring and payment system for its members.
69. In order for the creation of a CBG to be effective in addressing the AEC, it would need to achieve critical mass in terms of membership participation in order to increase its purchasing power and geographical reach. Critical mass might be achieved by:
 - (a) making membership of a CBG mandatory for customers that purchase significant volumes of cement, and voluntary for customers that purchase below a de minimis threshold; and/or

(b) requiring GB cement producers to sell a significant proportion of their total cement production to one or more CBGs, thereby effectively developing a 'cement sales pool' which is available to CBG members.

70. We would envisage that the costs of administering any CBG would be funded by membership fees.

Issues for comment C3

71. **The CC invites views on the specification, effectiveness and proportionality of this remedy option, in particular, on the following:**

(a) Would the creation of one or more CBGs be effective in increasing the ability of cement purchasers to exert competitive pressure on GB cement producers? Are there other measures we could pursue that would be as effective in achieving this aim?

(b) What are the relative merits of establishing a single CBG covering the whole of GB or separate regional CBGs?

(c) What responsibilities and/or powers should be given to a CBG in order to enable it to be effective in exerting competitive pressure on GB cement producers?

(d) What considerations should govern CBG membership? For example:

(i) Should CBG membership be restricted to independent concrete producers, or should it be expanded to include other types of cement customers, eg intermediaries such as independent builders' merchants?

(ii) Should membership of a CBG be mandatory for independent concrete producers whose cement purchases exceed a certain threshold? If so, how might such a threshold be determined?

(iii) What other measures might promote membership participation?

(e) What should be the relationship between any CBG and its members? For example, should CBG members also be able to negotiate prices bilaterally with GB cement producers?

(f) What enforcement options should be available to a CBG, eg if a cement supplier (ie a GB cement producer or importer) reneges on a negotiated price?

(g) What costs and benefits would arise as a result of this remedy?

(h) Whether there are any other relevant considerations to be taken into account in evaluating and implementing this remedy.

Restrictions on supplier conduct that have the effect of facilitating coordination

Remedy C4: Prohibition on GB cement producers sending generalized cement price announcement letters to their customers

72. We provisionally found that the industry practice of sending generalized cement price announcement letters to customers contributed to coordination in the GB cement markets by facilitating price leadership and price following and softening customer resistance to price increases.
73. We are therefore considering a remedy to prohibit all GB cement producers from sending generalized price announcement letters to their cement customers. We considered that a broadly-based prohibition was necessary to maximize the effectiveness and durability of this remedy option, and our current view is that this remedy should apply to all GB cement producers.
74. Since price announcement letters can cover other cementitious materials (eg GGBS) as well as cement, our current view is that this remedy should apply to all cementitious materials. This will maximize the effectiveness of the remedy and prevent circumvention (eg by the use of cementitious material price increase letters as a proxy for announcements of cement price changes).

Issues for comment C4

75. **The CC invites views on the specification, effectiveness and proportionality of this remedy option, in particular on the following:**
- (a) What should be the scope of this remedy option? In particular, should the prohibition apply to all GB cement producers and to all cementitious materials?**
 - (b) Under what circumstances could customer-specific cement price announcement letters serve a useful purpose to customers without giving rise to AECs?**
 - (c) Should this remedy seek to develop a template that could be used for customer-specific price announcement letters, or simply specify what forms of communication are to be prohibited?**
 - (d) What costs and benefits would arise as a result of this remedy?**
 - (e) Whether there are any other relevant considerations to be taken into account in evaluating and implementing this remedy.**

Restrictions on publication of information by Government and other bodies

76. We have provisionally found that the transparency of sales and production shares contributes to the AEC by enabling the Top 3 cement producers to reach an understanding and monitor the terms of coordination and increasing the internal sustainability of coordination by making it easier to detect deviations from coordinated outcomes. We are therefore considering remedy options that would make it more difficult for the Top 3 cement producers to form an accurate picture of their own sales and production shares and of their rivals' activities.

77. In evaluating these options we anticipate working closely with the relevant UK or EU government bodies and agencies, who would ultimately determine whether to act on any CC recommendations.

Remedy C5: Restrictions on the disclosure of cement market data by the UK Government and by GB cement producers to private sector organizations

78. This remedy aims to reduce transparency between GB cement producers by restricting the publication of data showing monthly and quarterly total GB cement sales and production volumes, which currently enables GB cement producers to calculate their own monthly shares of GB production and monthly shares of sales by GB cement producers.

79. We have identified two main primary sources where monthly and quarterly GB cement sales and production volume data is currently published, where in both cases, monthly data is published around one month in arrears and quarterly data is published around three months in arrears:

(a) in a document titled 'Monthly Statistics of Building Materials and Components' which is published each month by the Department for Business Innovation and Skills (BIS) on its website. This document also contains a monthly cement price index as well as monthly cement sales and production volumes. We noted that within BIS's data, data for Northern Ireland has been excluded due to statistical disclosure rules; and

(b) on the website of the trade association, the Mineral Products Association (MPA).¹⁹ The data published by the MPA also includes monthly cement sales data by region and sales channel, eg to RMX producers or builders' merchants, as well as quarterly GB sales data for cement and cementitious materials.

80. In relation to the publication of cement market data by BIS, we acknowledge that given the importance of cement as a building material, overall information on the GB cement market, including sales and production volumes, may be valuable to government departments and regulatory bodies for planning purposes, and to achieve the Government's wider policy objectives, including environmental, developmental and other policy goals. Some public disclosure of information about cement sales or production volumes may also be of value to the private sector.

81. However, given our concerns about the use to which cement sales and production volume data may be put, we are considering whether more limited public disclosure of this information may be required. We are therefore considering making a recommendation to BIS and any other UK public bodies which collect and/or publish monthly cement market data that:

(a) monthly data should only be published after a sufficient time lag has passed that it would no longer be of use to GB cement producers in monitoring their own shares of sales and production and those of their rivals; and

(b) where disclosure of aggregated cement market data which has yet to pass its permitted time lag for disclosure is judged to be essential, an appropriate process should be put in place to permit exceptions in limited cases. For example, an

¹⁹ Prior to the formation of Lafarge Tarmac and Hope Construction Materials in January 2013, the four GB cement producers, namely Lafarge, Tarmac, Hanson and Cemex were members of the MPA. Currently, Lafarge Tarmac, Hanson and Cemex are members of the MPA.

application could be made to the relevant government body holding the market data, which would consider the potential for competitive harm to arise from disclosure and ensure that safeguards were put in place to prevent any such adverse effects on competition (eg ensuring that appropriate non-disclosure agreements are signed).

82. Increasing the time lag for publication of aggregated cement market data by public sector bodies would be one way of implementing this remedy, which would enable the UK Government to retain some of the wider benefits of collecting and publishing such data.
83. In order to restrict circumvention of this remedy option by publication of monthly cement market data by private sector organizations, we are also considering prohibiting GB cement producers from submitting, or selling, commercially sensitive cement sales and production volume data to trade associations or any other private sector organization, including, but not limited to, the MPA, CEMBUREAU (the European Cement Association based in Brussels) and market research or consulting firms. Our current view is that exceptions to such a prohibition should only apply where such disclosure is required by law or for regulatory reasons.

Issues for comment C5

84. **The CC invites views on the specification, effectiveness and proportionality of this remedy option, in particular on the following:**
 - (a) What would be an appropriate time lag for the publication of any monthly sales or production volume data, eg three months, six months, a year?**
 - (b) Under what circumstances, if any, should disclosure of aggregated cement market data be permitted before such a time lag has expired? What safeguards should be put in place to ensure that any such disclosure did not result in an adverse effect on competition?**
 - (c) Under what circumstance, if any, should confidential sales and production volume data be permitted to be provided by GB cement producers to trade associations or to other private sector organizations?**
 - (d) What costs and benefits would arise as a result of this remedy?**
 - (e) Whether there are any other relevant considerations to be taken into account in evaluating and implementing this remedy.**

Remedy C6: Recommendations to the UK Government/European Commission on the publication of GB cement producers' verified emissions data under the EU ETS

85. This remedy option aims to reduce the ability of the Top 3 cement producers to use actual annual verified carbon emissions data published under the ETS, to infer each cement plant's individual production and market shares on an annual basis.
86. In April each year, the European Commission publishes each ETS installation's annual verified carbon emissions for the previous calendar year on its website.²⁰ Based on this data, we found that GB cement producers are able to infer and

²⁰ http://ec.europa.eu/clima/policies/ets/registry/documentation_en.htm.

estimate to a reasonable degree of accuracy each cement plant's annual production and sales volumes and therefore its annual production and market shares.

87. This remedy option would require a change in how the European Commission reports and presents its published data for GB and we expect to work closely with the UK Department of Energy & Climate Change and with the Directorate-General for Climate Change of the European Commission on the potential specification of this remedy. Implementation of this remedy option would take the form of recommendations to the European Commission and the UK Government and may include one or more of the following measures:
- (a) an increased delay in the publication of annual verified emissions data (the current time lag for publication of verified carbon emissions data is around three months);
 - (b) the exclusion of GB cement plants from published verified carbon emissions data;
 - (c) the aggregation of all GB cement plants' verified carbon emissions data; and/or
 - (d) further aggregation of verified carbon emissions data for GB cement plants with those of other GB ETS sectors.

Issues for comment C6

88. **The CC invites views on the specification, effectiveness and proportionality of this remedy option, in particular on the following:**
- (a) What would be an appropriate time lag for the publication of annual verified carbon emissions data, eg six months, one year?**
 - (b) Which of the options for more limited disclosure of annual verified carbon emissions data is most likely to be effective in addressing this aspect of the AEC, while enabling the ETS to achieve its objectives?**
 - (c) What costs and benefits would arise as a result of this remedy?**
 - (d) Whether there are any other relevant considerations to be taken into account in evaluating and implementing this remedy.**

Discussion of remedy options to address the AEC in the cement markets in relation to GGBS/GBS production

Divestiture remedy

Remedy C7: Structural measures to address the AEC in relation to GGBS/GBS production in GB

89. We have provisionally found that arrangements relating to the production of GGBS in GB give rise to an AEC in the GB cement markets. In particular, there are long-term exclusive arrangements at both the upstream and downstream stages of production for GGBS, to which two of the GB cement producers are party, which contribute to our AEC finding:

- (a) upstream, Lafarge Tarmac (formerly Tarmac²¹) has exclusive agreements with all three GB steel plants (Scunthorpe and Port Talbot owned by TATA Steel, and Teesside owned by SSI) to purchase all of their blast furnace slag by-product, nearly all of which is then processed to produce GBS, the primary input into GGBS production. Lafarge Tarmac owns the equipment required to water-cool the slag (GBS plant) so as to transform it into a cementitious granulate material (ie GBS), where one GBS plant is co-located at each steel plant based on production process necessity; and
- (b) downstream, Hanson has an exclusive long-term contract with Lafarge Tarmac to purchase its GBS, which it then grinds to produce GGBS out of its five grinding plants (GGBS plants).
90. The result of these arrangements is that there is common and sole ownership of all GBS production facilities in GB by Lafarge Tarmac and of all GGBS production facilities in GB by Hanson. Both of these companies are Top 3 cement producers whose conduct also contributes to the AEC that we have provisionally found in GB markets for cement.
91. This divestiture remedy option could be effective in addressing the AEC by increasing competition within the GGBS supply chain and consequently increasing competitive pressures within GB markets for cement.
92. The remedies that we are considering in respect of each of the upstream and downstream levels of the GGBS supply chain are set out below.
93. In relation to the *production and supply of GBS at the upstream level*, we are considering the divestiture of one or more of Lafarge Tarmac's three GBS plants.
94. Given that blast furnace slag needs to be specially treated instantaneously and at source, ie at the steel plant, to produce GBS with cementitious properties, our current thinking is that it may be necessary for each GBS plant to retain its exclusive arrangement with the steel plant at which it is co-located. We note also that there may be concerns about continuity of supply of blast furnace slag from each of the individual steel plants, which might create some risks for an operator of a single GBS plant. One possible way of addressing these risks might be to require Lafarge Tarmac to divest all three GBS plants in GB to an independent operator (see paragraph 6). This would not result in a less concentrated supply of GBS in GB, but could address concerns arising from the common ownership of GBS facilities and substantial cement production facilities.
95. In relation to the *production and supply of GGBS at the downstream level*, we are considering the following remedy options:
- (a) the divestment of one or more of Hanson's five GGBS plants (two of which are currently mothballed) to an independent operator(s) with each GGBS plant negotiating its own supply contract in relation to GBS; and/or
- (b) a prohibition on exclusivity arrangements between operators of GBS plants and of GGBS plants.
96. The implementation of the divestiture elements of this remedy option could result in a structure of supply containing between one and three GBS producers, and between

²¹ Prior to the formation of Lafarge Tarmac on 7 January 2013, Tarmac was the wholly-owned UK construction materials operation of Anglo American plc.

two and five GGBS producers in GB. The removal of exclusivity agreements could also lower barriers to any future entry in the production of GGBS.

Issues for comment C7

97. **The CC invites views on the specification, effectiveness and proportionality of this remedy option, in particular on the following:**
- (a) Is it necessary to intervene at both the upstream and downstream levels in order to achieve an effective remedy to this AEC?**
 - (b) At the upstream level, how many GBS plants would it be necessary to divest in order to achieve an effective remedy to this aspect of the AEC? How might potential concerns in relation to the continuity of supply of blast furnace slag be mitigated if GBS plants were sold separately?**
 - (c) At the downstream level, how many GGBS plants would it be necessary to divest in order to achieve an effective remedy?**
 - (d) If we chose to require divestitures at both upstream and downstream levels, should the same operator be permitted to purchase both a GBS and GGBS plant?**
 - (e) What criteria should be applied to the consideration of purchaser suitability for: (i) GBS plants; and (ii) GGBS plants? For example, should only independent operators be considered as potential purchasers of any divested operations?**
 - (f) What safeguards should be put in place to ensure a timely disposal and an effective divestiture process, in particular:**
 - (i) What timescale should be allowed for the implementation of any divestiture the CC may require?**
 - (ii) What arrangements should be put in place for holding separate the operations to be divested from those that will be retained and for monitoring any such provisions?**
 - (g) Under what circumstances should the CC appoint a divestiture trustee? What costs and benefits would arise as a result of this remedy?**
 - (h) Whether there are any other relevant considerations to be taken into account in evaluating and implementing this remedy.**

Other possible remedies

98. The CC is willing to consider any practical alternatives to the possible remedies outlined above that the parties to the investigation or other persons would like to propose, which they consider would appropriately address the AECs or resulting detrimental effects identified in Section 12 of the provisional findings.
99. In this section we set out a number of remedies that we currently consider are unlikely to be effective in addressing our provisional AECs and which, accordingly, we are not currently minded to consider further unless evidence and reasoning to the contrary are put to us. We invite views on these remedies, including whether some or all of them should be given further consideration.

100. These potential remedies are:

X1. Market-opening measures in relation to cement imports.

X2. Restrictions on cross-sales between the Top 3 cement producers.

X3. Codes of conduct governing the behaviour of GB cement producers.

Remedy X1: Market-opening measures in relation to cement imports

101. We have considered possible remedy options to intensify the competitive constraint provided by cement imports on GB cement producers. For example, we considered whether the Top 3 cement producers should be required to divest one or more of their import terminals. However, given our provisional finding that the capital cost of setting up a new import terminal did not represent a significant barrier to entry, we did not pursue this further.

102. In our provisional findings, we found that that the strength of the competitive constraint from imported cement was limited because:

(a) the GB cement producers had a substantial cost advantage over cement importers in competing for customers at the margins;

(b) the higher costs faced by cement importers created incentives for them to price their cement just below the price of GB-produced cement; and

(c) the GB cement producers considered, and in some cases took, specific steps to undermine the viability of imported cement, such as applying pressure to restrict cement supplies to independent importers, purchasing of import terminals and/or importers; leveraging of contacts with importers in other markets and targeting lower-priced cement selectively at customers of cement importers.

103. In our view, it would not be feasible to address the relative cost issue, which appears to be an intrinsic competitive disadvantage faced by cement importers. We also took the view that it would be very difficult to specify, monitor and enforce an effective behavioural remedy that would constrain abnormal forms of strategic behaviour in relation to imports without also running the risk of chilling legitimate competitive interactions. Attempts to constrain some aspects of this strategic behaviour, eg actions taken by the coordinating firms against firms outside the UK, could also be beyond our jurisdiction. For these reasons, we have not identified a specific measure aimed at increasing the constraint posed by imports, though we would particularly welcome views of cement importers and their GB customers on whether there are remedy options that would be effective in achieving this aim.

Remedy X2: Restrictions on cross-sales between the Top 3 cement producers

104. We considered a remedy to restrict cement cross-sales made between the Top 3 cement producers and their downstream operations.

105. We note that cross-sales between GB cement producers may be made for efficiency and logistical reasons, and therefore a restriction on cross-sales may result in increased costs for the affected producers and ultimately their customers. It may also be necessary for GB cement producers to be able to conduct cross-sales for other practical reasons, eg in times of plant outages. Therefore any remedy would have to focus on a partial, not full, prohibition of cross-sales.

106. Our current view is that it would be very difficult to specify, monitor and enforce an effective partial prohibition of cross-sales. In our view, concerns arising from cross-sales, and vertical integration more generally, could be addressed more effectively by means of a structural remedy (see remedy option C2). On this basis, we are not minded to consider this remedy option further.

Remedy X3: Codes of conduct governing the behaviour of GB cement producers

107. We considered a remedy option requiring the Top 3 cement producers to adhere to a code of conduct that prevents market conduct and behaviour that we have provisionally found give rise to coordination.
108. We noted that each of the Top 3 cement producers already has a code of conduct,²² which covers compliance with national competition laws, albeit these codes are voluntary and not subject to independent monitoring and enforcement. We note that whilst the Top 3 cement producers each have these codes, they relate to compliance with national competition laws, and these pre-existing codes have not prevented the conduct of concern to us in relation to coordination in the GB cement markets.
109. We considered whether existing codes of conduct could be revised to address our concerns, for example by means of making them mandatory rather than voluntary; by prescribing particular forms of behaviour that we have identified as giving rise to the AEC (eg the sharing or discussion of commercially sensitive information between GB cement producers); and/or by the introduction of independent monitoring and enforcement.
110. However, given the variety and extent of conduct contributing to the AEC, our current view is that it would be very difficult to specify, monitor and enforce an effective code of conduct, without intrusive ongoing surveillance and supervision of the internal activities of the Top 3 cement producers. On this basis, we are not minded to pursue this option further.

Issues for comment on other possible remedies

111. **The CC invites comments on:**
- (a) the remedy options above that it is not minded to pursue; and**
 - (b) whether there are other remedy options that are not set out in this Notice that would be effective in addressing the AECs and/or resulting detrimental effects.**

Package of remedies

112. As part of our assessment, we will consider implementation of remedial measures as a package of remedies, and the possible interaction of measures in such a package.

²² We found the following relevant documents for the Top 3 cement producers:

(a) Lafarge Tarmac: (i) www.lafarge.com/lafarge/PUBLICATION/20041028/102804-Publication_group-Code_of_business_conduct-uk.pdf; (ii) www.lafarge.com/04062009-group-competition_compliance_programm-uk.pdf; and (iii) www.tarmac.co.uk/sustainability/tarmac-sustainability/governance-business-ethics/business-conduct.html#rules-of-business;

(b) Hanson: www.heidelbergcement.com/NR/rdonlyres/9D49B7D8-90F4-41C9-BE98-D45B38D4773A/0/Business_Code_of_Conduct.pdf; and

(c) Cemex: www.cemex.co.uk/Userfiles/datasheets/code-of-ethics.pdf.

We seek to implement packages of remedies that are mutually reinforcing in their effect and facilitate a comprehensive solution to the AECs.

Issues for comment on possible packages of remedies

113. **The CC invites comments on the extent to which the various measures in this Notice are likely to be mutually reinforcing and what combination of measures would constitute a suitably comprehensive response to the AECs.**

Relevant customer benefits

114. The CC may also have regard to the effects of any remedial action on any RCBs within the meaning of section 134(8) of the Act arising from a feature or features of the market giving rise to the AEC. RCBs must comprise one or more of: lower prices, higher quality or greater choice of goods or services or greater innovation in relation to such goods or services. RCBs must also clearly result from one or more features and be unlikely to have come about absent the feature or features concerned.
115. If the CC is satisfied that there are RCBs deriving from a market feature that also gives rise to an AEC, the CC will consider whether to modify, or not take forward, a remedy option that it might otherwise have imposed or recommended. When deciding how to respond to any RCB finding, the CC will consider a number of factors including the size and nature of the expected benefit and how long the benefit is to be sustained. The CC may also consider the different impacts of the features on different customers.

Issues for comment on relevant customer benefits

116. **Views are invited on the nature, scale and likelihood of any relevant customer benefits within the meaning of the Act and on the impact of any possible remedies on any such benefits.**

Next steps

117. A copy of this notice will be posted on the CC website. The parties to this investigation and any other interested persons are requested to provide any views in writing, including any additional or alternative remedies they wish the CC to consider, by 12 June 2013 either by email to aggregates@cc.gsi.gov.uk or by writing to:

David Fowles
Inquiry Manager
Aggregates, Cement and RMX investigation
Competition Commission
Victoria House
Southampton Row
LONDON WC1B 4AD

If necessary, the CC may publish a supplementary notice requesting views on particular issues on remedies that emerge from consultation (see also Note below).

(signed) PROF MARTIN CAVE OBE
Group Chairman
21 May 2013

Note: This Notice of possible actions to remedy, mitigate or prevent the AECs and any resulting detrimental effects is given having regard to the CC's provisional findings, a summary of which was published on 21 May 2013. The parties to the investigation or other interested persons have until 12 June 2013 to respond to those provisional findings. In the light of any responses by the parties or by other interested persons, the CC's findings may change and the CC may consider other possible remedies, if appropriate.

Operational and latent cement production facilities of the Top 3 cement producers

For each of the Top 3 cement producers, we set out below details of its operational and latent cement production facilities. Individual production capacity figures are commercially sensitive and therefore have not been disclosed.

	<i>Location</i>	<i>Type of facility</i>	<i>Active production facilities</i>	<i>Latent production facilities</i>
Lafarge Tarmac				
(1)	Aberthaw works South Glamorgan, Wales	Cement plant—1 kiln	1 kiln active	N/A
(2)	Cauldon works Stoke-on-Trent, Staffordshire	Cement plant—1 kiln	1 kiln active	N/A
(3)	Dunbar works East Lothian, Scotland	Cement plant—1 kiln	1 kiln active	N/A
(4)	Tunstead works Buxton, Derbyshire	Cement plant—1 kiln	1 kiln active	Planning permission for a second kiln (1 Mt)
(5)	Barnstone grinding station Nottingham, Nottinghamshire	Grinding plant	Active	N/A
(6)	Westbury grinding station Westbury, Wiltshire	Grinding plant	N/A	Mothballed
(7)	Medway works Medway, Kent	Planning permission for a new cement plant	N/A	Potential capacity of up to 1.4 Mt
Hanson				
(1)	Ketton works Stamford, Lincolnshire	Cement plant—2 kilns	1 kiln active	1 kiln mothballed. Some grinding mills mothballed
(2)	Padeswood works Mold, Flintshire	Cement plant—1 kiln	1 kiln active	Some grinding mills mothballed
(3)	Ribblesdale works Clitheroe, Lancashire	Cement plant—1 kiln	1 kiln active	Some grinding mills mothballed
Cemex				
(1)	Rugby works Rugby, Warwickshire	Cement plant—1 kiln	1 kiln active	N/A
(2)	South Ferriby works Barton-upon-Humber, Lincolnshire	Cement plant—2 kilns	1 kiln active	1 kiln mothballed
(3)	Tilbury grinding station Tilbury, Essex	Grinding plant	Opened in Q3 2009	N/A