

LAFARGE TARMAC

**RESPONSE BY LAFARGE TARMAC TO THE COMPETITION COMMISSION'S
PROVISIONAL DECISION ON REMEDIES IN CONNECTION WITH ITS
MARKET INVESTIGATION INTO THE SUPPLY OF AGGREGATES, CEMENT
AND READY-MIX CONCRETE**

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1. This Response is submitted by Lafarge Tarmac (“**LT**”) in response to the Competition Commission’s (“**CC**”) Provisional Decision on Remedies (“**PDR**”) published on 10 October 2013 in connection with its market investigation into the supply in GB of aggregates, cement and ready-mix concrete (the “**MIR**”).
2. The remedies by which that the CC proposes to address the adverse effect on competition (“**AEC**”) the CC has identified are extreme on any view and would be unusual for an antitrust enforcement authority to impose in any jurisdiction globally:
 - (a) For the first time in its history, the CC is proposing to mandate structural divestments to remedy alleged coordination “concerns” and in circumstances where there is no evidence of any infringement of competition law on the part of LT (or any other market player).
 - (b) The CC is proposing a structural divestment, even though the market has already undergone a recent and significant structural change, in the creation of Hope Construction Materials (“**HCM**”). Despite this fundamental change in the market, the CC has undertaken no analysis, nor collected any evidence available in 2013, to assess its impact. Instead, the CC relies on evidence pre-dating HCM, to conclude that a further divestment is needed.
 - (c) In doing so, the CC fails to have proper regard to the limitations on its decision-making that necessarily result both from its Final Report only months earlier approving the creation of LT (the “**Merger Review**”), and from the existence of a parallel antitrust investigation by the European Commission whose scope similarly includes conduct in the supply of cementitious products in GB.
 - (d) The only prior case in which the CC has ordered a structural divestment to address an alleged market failure was in the Airports Investigation, in which BAA was ultimately required to divest its airports at Gatwick, Stansted and Edinburgh. By contrast with that investigation, which concerned the operation of essential facilities by a formerly State-owned monopoly, the current MIR seeks to impose forced sale obligations on companies none of which is alleged to occupy a position of dominance and whose market positions and efficiencies are the result of market outcomes and hard-won competition, along with mergers or acquisitions which were approved by the relevant competition authorities at the time. They are sought to be imposed in circumstances where the overwhelming evidence from customers is that the market is competitive.

- (e) Moreover, unlike Airports, in which there were multiple ready buyers for essential infrastructural assets, the present investigation seeks to severely limit the identity of the potential buyers of the divested assets, by excluding all of the existing competitors currently active in the market for cement production in GB and to order the forced sale of industrial assets during a period of recession in which the industry has experienced volume declines of more than 30% and for which recovery to pre-recession levels is not forecast before 2017. The imposition of a cement and/or RMX divestment at this time (when there is no expectation of realising fair market value, if it is even possible to find a purchaser satisfying the CC's criteria) would, therefore, place a disproportionate burden on LT. A fire-sale of this kind would amount to an expropriation of property, infringing LT's rights under the First Protocol to the European Convention on Human Rights, which are protected under the Human Rights Act 1998.
 - (f) Further, imposing a divestment of this kind amounts to a punitive measure (despite there being no suggestion of wrong-doing). Under Article 6 of the ECHR, no penalty can be imposed on LT unless it has the right to a fair trial before an independent tribunal with the power to examine the facts of the case.¹ The more limited right to judicial review under section 179, Enterprise Act 2002, is insufficient to satisfy this requirement.
3. If it were ever appropriate to impose remedies of this nature, scale and consequence, they could only ever be justified by the strongest and most cogent evidence; and would have demonstrably to be the only available means of addressing significant market failures to relieve clear customer harm. Indeed, it is well established that for the CC to take such a seriously intrusive step as to order LT to make a cement and/or RMX divestment, the CC should have exercised particular care in its analysis of the alleged problem affecting the public interest and of the remedy it assesses is required. The CC's investigation, however, has failed on all counts:
- (a) The CC has received and reviewed from LT and its competitors thousands of internal documents and emails. Although it has repeatedly refused to disclose to LT or its advisers many documents collected from other industry participants - despite noting that many of these documents support the existence of dynamic competition - the CC has failed to identify documents that properly evidence that LT understood market share to be a focal point for coordination.
 - (b) An objective analysis of the changes in market shares between the three alleged coordinating firms over a reasonable time-frame is also inconsistent with any coordination (or, at least, any successful coordination) on market shares: those market shares have been far from stable and LT, in particular, has suffered a marked decline in market share over recent years. In order to seek to render its theory of coordination consistent with the market share data, the CC has sought to suggest that LT alone (but not Cemex or Hanson) has purposefully lost market share in order to accommodate fringe competitors such as importers. However, (a) there is no documentary evidence whatsoever

¹ *Menarini Diagnostics v. Italy*, ECtHR Case 43509/08, judgment of 27 September 2007.

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to support an understanding to this effect; and (b) it makes no economic or commercial sense.

- (c) The choice of which cement plant is apparently pre-ordained: the CC has relied on avoidable and basic factual errors (*e.g.*, the CC identifies Hanson's Ribblesdale plant as having less capacity than South Ferriby and Aberthaw, whereas in fact it has greater capacity). As a consequence, the CC incorrectly applies its own model for determining which cement plant should be divested.
- (d) The CC has not carried out a proper and detailed balancing exercise as to the need to require, and the proportionality of requiring, the divestment of RMX plants solely from LT, rather adopting a mix-and-match approach. Instead, the CC has asserted, without having conducted even the most superficial of inquiries, that this is more preferable as regards divestiture risks and prospects of disruption to the plants to be divested. The CC must balance such "concerns" against the fact that the CC is choosing to impose the entire costs of all remedies on LT, even though LT is not the largest competitor in the supply of RMX in GB.
- (e) The CC has addressed each remedy option in binary terms and should instead have been assessed the cumulative effect of each additional remedy, starting with the least intrusive option. LT considers that the cumulative effect of measures designed to reduce market transparency (*i.e.*, reducing frequency of publication of data by the MPA); measures designed to reduce price transparency (ceasing standard price announcement letters); and a remedy designed to introduce greater competition in the supply of GGBS would remove the entire consumer detriment figure estimated (albeit wrongly) by the CC (of £3.20 per tonne) without needing to resort to the most intrusive remedy (the divestment of a cement plant).
- (f) The CC has attempted to assess customer detriment using the upper bound produced by its model as the "*competitive price*". This is misconceived. Taking the results of the CC's model at face value, and correcting for an error, the CC's model predicts a lower bound for the "*competitive price*" that is above 2011 prevailing price levels. This implies no customer detriment whatsoever. Even if the CC's error is ignored, the model is not robust to extremely small changes in the assumptions – it predicts a very wide range for the "*competitive price*", most of which are well in excess of 2011 prices. A reasonable conclusion from the CC's model is therefore that actual prices in 2011 were below the hypothetical "*competitive level*," indicating no consumer detriment.
- (g) The CC's findings on profitability are not robust to small but entirely reasonable changes in the underlying assumptions. For example, each of the following leads to industry profits that are within or below the CC's range for the WACC:
 - (i) revising asset lives to reflect the reality of asset values as reflected in recent transactions;

- (ii) sensitivity testing revenues to the inclusion or exclusion of carbon credits as a windfall item (or at least revenues that were plainly *not* the result of any putative coordinated behaviour); or
 - (iii) adding back a reasonable estimate for the value of intangibles leads to industry profits being within or below the CC's range for the WACC.
- 4. The CC's failure to take account of these sensitivities in its analysis, notwithstanding its acknowledgement of the uncertainty associated with its approach to assessing profits, represents a manifest error of assessment and leads to the inevitable conclusion that the CC's decision to identify an AEC in grey cement and to impose a structural divestment remedy is the culmination of a pre-ordained process that, throughout, has been devoid of objectivity; it has been reverse-engineered to support its conclusions rather than based on a fair analysis of the data and received evidence.
- 5. Indeed, as LT made clear in its response to the CC's Provisional Findings and Remedies Notice, the imposition of a cement and/or RMX divestment would not remedy the AEC identified by the CC; the CC cannot merely assert that having five GB cement producers would prevent coordination. Rather, the behavioural remedies proposed by LT would remedy each cumulative condition for coordination under the *Airtours Test*, especially when combined with a GGBS remedy. A cement and/or RMX divestment would, therefore, be manifestly disproportionate, and would not satisfy the criteria set out by the CAT in *Tesco v Competition Commission* and *BAA v Competition Commission*.
- 6. Finally, LT considers that the CC's conclusions will have a devastating impact on the attractiveness of the UK to foreign and local investment. The CC's proposal to order a forced divestment of a large-scale cement works, based on highly contestable economic speculation and assumptions, is very likely to discourage investment in capital-intensive industries in the UK. This, coupled with the very unusual nature of the market investigation regime in the European Union places an additional burden on the CC to ensure that its analyses and conclusions are robust, and that its powers are exercised responsibly, cautiously and consistently with principles of fairness and in line with European competition principles.
- 7. The comments set out in this Response seek to identify the most serious and grievous errors that LT has identified in the CC's PDR given the limited time available. Accordingly, while the Response seeks to identify the most fundamental mistakes on which the CC bases its analysis, LT reserves its rights to highlight further inaccuracies in due course.

Structure of this response

- 8. LT addresses in **Part 1** the significant defects in the CC's processes and procedures to date that have restricted and continue to restrict LT's ability to respond fully in exercise of its full rights of defence to the substantive case mounted by the CC.
- 9. LT addresses in **Part 2** the previous submissions made by LT to the CC indicating the inaccuracies, errors in its reasoning, the CC's failures to give appropriate consideration or weight to key facts or evidence and deep-seated inconsistencies that undermine the CC's reasoning and conclusions in this MIR.

10. LT addresses in **Part 3** the CC's failure to give proper consideration to alternative and more proportionate remedies; its failures to articulate with sufficient precision how a cement plant divestment would achieve the CC's objectives; and the CC's failure to properly justify why the burden of divesting a cement plant should fall to LT alone.
11. The CC's conclusion that there should be a substantial and considerable remedy package, including the divestment by LT of either its Tunstead or Cauldon cement works, coupled with a package of RMX assets (depending on the identity of the purchaser) is disproportionate. The analyses that the CC relies on to justify its decision that such a considerable remedies package is required – namely, the profitability assessment and the consumer detriment calculations – do not bear even the most superficial scrutiny and, when properly considered, these calculations do not produce results that allow the CC to conclude that in this industry such a remedy package is appropriate or proportionate. These matters are addressed in more detail in **Part 4** of this response document, and in an independent report produced by RBB Economics, annexed to this response. The report by RBB Economics is supplemented by a further expert report written by Professor Chris Higson, Professor of Accounting at the London Business School.

PART 1 - FAILURES IN THE CC'S PROCEDURES TO DATE

12. By letter dated 11 October 2013, responding to LT's letters of 4 and 10 October 2013 concerning the judgment of the Competition Appeal Tribunal (the "CAT") in *BMI Healthcare v Competition Commission* [2013] CAT 24 (the "BMI judgment"), the CC emphatically rejected LT's complaint "*that there have been any failures ... in the procedures adopted in the investigation*". LT disagrees and considers that, on the contrary, there have been failures of a most serious nature.
13. As the CC has acknowledged², Chapters 7 and 8 of the provisional AEC findings were "*the key chapters underlying [the CC's] provisional AEC findings*" (the "PFs"). Chapter 8, in particular, contains the key provisional finding that the main cement producers in the UK 'coordinated' in the form of some type of alleged 'understanding' in relation to market shares. Those key chapters containing those charges cross refer to, and depend upon, a number of lengthy appendices. The chapters themselves contain only heavily redacted and highly selective extracts from the relevant documents. It is the appendices which contain almost all of the CC's detailed analysis of the documents and other evidence upon which the provisional finding of 'coordination' and an 'understanding' are said to rest.
14. Contrary to repeated entreaties at the time, the CC (a) refused all access to the crucial appendices (or the evidence contained in them) to LT; and (b) gave access on wholly inadequate and unfair terms even to LT's external advisers.
15. As regards LT's access, it was only entitled to receive "*in general terms the gist*" of a report (of not longer than 40 pages) compiled by those external advisers from the underlying appendices and related documents. In practice, this was no access at all and certainly insufficient access to understand the gist of the full evidence against them.
 - (a) First, the report itself could only be, at best, a very short extract or summary from the appendices and related documents which ran to well over 1,000 pages.
 - (b) Second, the CC made clear that the "*gist*" of the report "*in general terms*" had to be construed narrowly – particularly in its letter dated 13 June 2013. In that letter, the CC expressly warned that the disclosure of any information in the report not in accordance with the undertakings was a "*criminal offence*", that it was looking for compliance not just with the letter but also with the "*spirit*" of the undertakings, and that LT's advisers must apply "*careful and appropriate judgment*" to ensure such compliance. LT's external advisers were specifically warned in the same letter that whilst it might be appropriate to convey the gist of the report to LT, it would not always be appropriate to convey the gist of each Relevant Document.

² See the CC's letter dated 11 October 2013.

16. Against the background of these warnings, LT's external advisers were unable to convey the content even of the report to LT itself other than in the most summary terms. As a result, it was not possible for the external advisers to have meaningful communications or take proper instructions from LT on the specific allegations contained in the appendices (even insofar as reflected in the report). The CC was informed at the outset of LT's response to the PFs on the AEC (at paragraph 6(a)) that this was the case. LT noted in terms that its advisers were "*unable to discuss the material included within the data room, and hence large parts of the PFs, with LT*" and noted that "*LT has been excluded from the opportunity to understand the content of third party documents relied upon by the CC, to comment on the circumstances or events described in that correspondence, or otherwise to challenge the CC's interpretation of individual third party documents, or the conclusions drawn by the CC from those documents*". Moreover, given that it had been impossible to take instructions from LT on the key factual (as opposed to technical) allegations underlying the CC's provisional finding of coordination, LT made no submissions on these factual allegations in its response – indeed, it would have been wholly improper for its external advisers to do so without being able to take informed instructions from LT.
17. Even if it were possible or appropriate for an external adviser to comment meaningfully on the factual allegations in the appendices without being able to discuss these with his client, the procedure established by the CC was unreasonably restrictive even to be adequate to this task.
- (a) **First**, some of the most important evidence was redacted even from external advisers working within the data room. For example, the entirety of appendix 7.15 was redacted: this contained potentially critical evidence regarding HCM's future plans.
 - (b) **Second**, LT's advisers were unable freely to discuss the documents whilst in the data room (both because of the presence of others, including CC representatives, and also due to the express data room rules that prohibited extensive conversation) and, accordingly, unable fully to consult between themselves with the documents in front of them.
 - (c) **Third**, LT's advisers were unable to have access to any other materials whilst in the data room, whether necessary to cross-check or for other legitimate purposes.
 - (d) **Fourth**, the advisers were only able to take away a very short report relative to the length of the material (despite requests to be released from this arbitrary length requirement) from the data room.
 - (e) **Fifth**, they were only able to take the report away at the end of the period (despite requests to be permitted to take away a report earlier).
 - (f) **Sixth**, LT's advisers were required to give access to their report to representatives of the CC to read in its entirety – which obviously inhibited them from including in the report any analysis or privileged advice.
 - (g) **Seventh**, parts of the report were then further redacted by the CC.

- (h) **Finally**, and by no means least, the external economic advisers were restricted to ‘read only’ versions of the CC’s results, without access to the models used in the PFs. This meant that they were unable to run the CC’s models independently, sensitivity test them or fully understand their operation. The CC made clear in subsequent correspondence that this was its precise intention.
18. Against this background, and given the law as correctly set out in the BMI judgment, LT submits that it is quite obvious that the CC has breached its statutory duty to consult and violated basic principles of natural justice. This is the case even before one turns to consider the withholding from LT of potentially exculpatory documents.
19. With regard to the latter issue, LT has noted the CC’s repeated suggestion that it is sufficient that LT can comment on “*its own*” exculpatory documents. However, this is a case that relates to alleged multi-party ‘coordination’ and an alleged multi-party ‘understanding’. If, for example, there are documents derived from Hanson or Cemex that evidence vigorous competition on the part of Lafarge Tarmac or its predecessor companies, LT is entitled to see such documents which are directly relevant to its defence of the CC’s preliminary findings and PDR. Moreover, given the multi-party nature of the allegation, even if there are documents purely related to vigorous competition by or between Hanson and Cemex they, too, are relevant to LT’s defence – LT cannot simply be expected to rely upon other companies (whose interests are not necessarily aligned particularly given that the CC’s proposed remedies fall disproportionately on LT) to make the appropriate submissions in relation to such material. It follows that LT must be entitled to see such material.
20. LT’s advisers drew the CC’s attention repeatedly to all of the above failings of consultation and natural justice both in correspondence and in response to the provisional findings on AEC. In light of the BMI judgment, the CC was offered one further opportunity to cure these defects before the proceedings reached a stage where they became irremediable. In particular, by letter dated 3 October 2013, LT’s advisers drew the CC’s attention to the BMI judgment, identified the key defects in the procedure to date and invited the CC to cure them and, in the meantime, invited the CC to suspend publication of the provisional decision on remedies.
21. The CC declined to do so. Instead, the CC decided not merely to push ahead and publish the PDR, but accompanied it with a press release showing the CC has pre-judged the issues in the investigation in a manner that is wholly inappropriate in an ongoing investigation and demonstrates that the CC’s deliberations cannot, on any reasonable view, still be said to be at a ‘*formative stage*’.
22. The logical consequence of this is that, even if it wished to seek to do so, it is now too late for the CC to remedy its failures to consult. Any final decision is therefore now bound, in LT’s view, to be irremediably vitiated by procedural impropriety.
23. In light of this situation, LT took the view that it would be wrong for it to await the CC’s final report before bringing these matters to the attention of the CAT as to do so would only serve to waste further resources and delay matters further and would be contrary to the sentiment expressed by the CAT in the BMI judgment that such applications should be brought sooner rather than later. Accordingly, LT has applied to challenge the CC’s decision, following LT’s letter dated 3 October 2013, to refuse

to remedy the procedural defects and failures to consult in the investigation up to that date and to delay publication of the PDR in advance of such consultation and the decision to publish the accompanying press release of 8 October 2013. LT has also written to the CAT, stressing the urgency of this matter, and requesting that its Application be heard as soon as possible.

24. Furthermore, LT notes that the CC engaged two external third parties to comment on its approach to the cost of a new cement plant (CCI) and on its approach to profitability (Professor Whittington). LT considers that the decision to use such parties was entirely superfluous. The manner in which the CC consulted on using these third parties was also deficient.
- (a) As to the use of CCI, the CC chose to alert interested parties as to the CC's proposal to engage CCI, not through a clear and open invitation to comment, but simply by updating the CC's list of "*declarations of interest*". LT considers that this was inappropriate and even underhanded. In fact, the experts appointed have little relevant experience. Moreover, LT disagrees with the CC's decision to place weight on CCI's report over evidence of firms actually currently active in the industry and recent market transactions (including the sale in the last twelve months of the Hope cement plant to Mittal Investments).
 - (b) The CC never consulted on the need to use an additional independent expert to opine on the CC's approach to calculating profitability. Given the almost indecipherable content of Professor Whittington's input (as disclosed in the data room) and the very general, high level comments provided (as disclosed by the CC on its website), LT queries the value of much of his input. Indeed, it appears that this was done with great haste, as an afterthought, by the CC, and LT therefore queries the procedures (and motivations) of the CC in using Professor Whittington. LT would have been happy to initiate a dialogue between the CC and Professor Higson if the CC required the input of an independent expert accountant. The CC made no request to engage with Professor Higson and instead has chosen to largely ignore his comments.
 - (c) Finally, LT notes that the CC has refused to make available to LT the comments produced by Professor Whittington (except through the data room to its external advisers) even though these contain very limited confidential information and could therefore very easily be redacted and shared with LT. The same must be said for the submission by the OFT to the CC which appears to contain no or very limited confidential information and could have been made available to LT other than disclosed to its external advisers through the data room. Despite requests to do so, the CC has also refused to provide or disclose its correspondence with CCI and Professor Whittington (except a very formal letter of instruction to CCI) which LT considers would likely provide further insight into the CC's full instructions to those parties and the scope of their mandate (which are essential to evaluate their evidence).
25. The remainder of this Response is submitted (a) without prejudice to the arguments put forward in this pending application before the CAT; and (b) should the substantive issues in that application be adjourned to be heard after or in respect of the CC's final decision, without prejudice to the same (and any additional) contentions

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regarding the CC's lack of consultation and failures to respect natural justice with regard to the process leading to the CC's final decision.

PART 2 - INACCURACIES, INCONSISTENCIES AND FAILURE TO TAKE INTO ACCOUNT RELEVANT FACTS

A. FAILURE TO TAKE INTO ACCOUNT RELEVANT FACTS

26. In this section, LT sets out the relevant factual evidence submitted by LT that the CC has failed to take into account to reach its conclusion that a cement plant divestment is required.
27. **Observed market outcomes are not consistent with coordination.**
- (a) In its PFs, the CC identified a number of market outcomes that it considered demonstrated that competition in the GB cement markets is not working effectively.
 - (b) In its submission responding to the PFs, LT adduced evidence to show that the actual market outcomes were inconsistent with a coordinated outcome. Please see in particular Part 2 of LT's response to the PFs.
28. **Significant and recent market changes to the competitive landscape in the GB cement market render any divestiture remedy premature.**
- (a) The CC has failed to give proper consideration to changes in the GB market for cement brought about by three recent events.
 - (b) The first concerns the creation of Lafarge Tarmac. This evidence was set out in paragraph 145 to 150 of LT's Response to the PFs.
 - (c) The second concerns the entry of HCM. These effects were set out by LT in considerable detail in paragraphs 151 to 166 of LT's Response to the PFs.
 - (d) The third concerns the acquisition by CRH of Dudman's Cement Import Assets and the expectation of growth in share by importers from Ireland (as the CC is aware, CRH is a large manufacturer of cement in Ireland, with substantial spare capacity and numerous import terminals in the UK). This was clearly explained by LT in paragraphs 167-175 of its response to the PFs.
 - (e) In sum, the CC has wrongly dismissed the importance of the change brought about by these events.
 - (f) The CC has not fully considered this evidence. It has not undertaken any analysis or collected any evidence available in 2013 to assess whether the impact of these changes has sufficiently altered the competitive dynamics in the industry. Given the seriousness and scope of the remedies it now proposes, it is entirely unreasonable for the CC not to conduct a forensic and meticulous analysis of the evidence available to it in 2013 about the effect of HCM on the GB market for the supply of cement.

29. **The CC has incorrectly cast the differences between Tarmac and HCM. The differences between the two entities are profound, such that it is not appropriate for the CC to dismiss the substantial change that HCM brings to the GB construction materials market.**

- (a) In paragraph 6.20 of the PDR, the CC says that a further cement plant divestiture is different from the entry by HCM because its proposal “*will affect the number of GB cement producers, rather than (in effect) replacing Tarmac with HCM, which resulted in no change to the number of GB cement producers*”. But the CC places an unreasonable emphasis on the “number” of producers, rather than focusing on the qualitative differences between them, particularly, between HCM and Tarmac.
- (b) LT has made numerous submissions outlining the differences between Tarmac and HCM. The CC has chosen to ignore these. See for example LT’s submissions at paragraphs 151-166 of the response to the PFs and Remedies Notice, 25 June 2013.
- (i) Previously, Tarmac’s behaviour was governed by its position as a net purchaser of cement. Tarmac effectively operated on the external market only to make speculative gains. Tarmac essentially produced to supply itself. Its internal cement demand exceeded the amount that it could produce (and it operated at full capacity in recent years).³ Accordingly, selling a kilo tonne of cement on the external market meant purchasing the same amount from a major or an importer, thereby creating a large opportunity cost. Tarmac would therefore sell only where it received a sufficiently high margin to compensate for having to purchase more cement. Tarmac’s structure and levels of vertical integration therefore meant that it was not positioned to be a disruptive force on the external market. This is crystallised by Tarmac’s market share: even with 1MT of capacity, Tarmac’s share of sales to independents (whether bulk or bagged) was below [0-10]% over the period 2007 to 2011.
- (ii) In contrast, HCM is a net seller of cement and consequently behaves differently. HCM pursues a proactive and competitive strategy, competing more aggressively than Tarmac. Consequently, HCM has a far greater share of the market in cement production and capacity than did Tarmac. HCM’s internal requirements are expected to be approximately 1mtpa (including the West Thurrock supply agreement) compared to its capacity of 1.5mtpa (much larger than the capacity of Tarmac), with a potential for increased cement capacity subject to HCM’s choice of blending. LT expects that HCM’s capacity for external sales will increase to [X]kt per annum (an increase of [X]kt relative to Tarmac) once the West Thurrock supply agreement expires in [X] (and we note that the CC does not expect that its remedies will

³ Provisional Findings in the Merger Inquiry, Appendix K, paragraph 57(b): “*Since 2009, capacity utilisation has generally reduced. Lafarge, Hanson and Cemex are currently operating with substantial excess capacity. Tarmac is still operating close to full capacity at present.*”

become effective until [REDACTED]).⁴ Furthermore, LT understands that HCM is selling more cement on the external market than would be expected based on LT's own production figures for the RMX plants sold to HCM.

- (c) Despite the CC's conclusion that there has been no change in the "number" of GB cement producers, the effect of these qualitative differences is borne out by recent market evidence. LT submitted evidence in paragraph 43 of its response to the PFs showing the effect of increased competition from HCM, in particular substantial levels of switching in 2013 since HCM entered the market. The CC has not considered this information at all. LT explained that in 2011, an assessment of Lafarge's wins and losses of bulk independent customers demonstrated that Tarmac accounted for just [REDACTED]% of Lafarge's losses. In contrast, the data available for HCM in 2013 already shows that LT and HCM compete much more than Lafarge ever did with Tarmac. Over the first five months of 2013, LT lost [REDACTED]kt of bulk independent business (compared with [REDACTED]kt in the entirety of 2011), with [REDACTED]% of such losses being to HCM. The CC has unreasonably overlooked the extensive evidence of the competitive interaction between HCM and LT.
- (d) If there are differences between HCM and LT (which the CC apparently accepts at PDR, paragraphs 3.10 to 3.14), it must follow that there is a real possibility that HCM is liable to undermine the alleged coordination in the GB cement market (or would be when combined with other remedies to undermine transparency and free up GGBS). However, the CC has not considered or evaluated any evidence from the period since HCM's creation (2013) to consider how the market is evolving. Rather, the CC comes first to its conclusion that the creation of one further cement producer would reduce market transparency and "increase strategic uncertainty" and thereby undermine any tacit co-ordination (PDR, paragraphs 3.24 to 3.33). Only later does the CC consider whether this may already have been achieved by HCM – but without considering any actual evidence as to the state of the market in the first eight months of 2013. The CC's only consideration of this critical point appears to be in paragraph 6.57 where it simply states that it has "paid close attention to the most recent market developments" and concludes that "HCM's entry into the GB cement markets...is insufficient by itself, or in combination with other recent developments, to disrupt long-established patterns of behaviour in the market". This is simply a statement of conclusion – it is not an analysis.
- (e) The CC assumes that the GB cement market is "structurally susceptible to coordination". However, market shares have been far from stable and there have been significant developments in the market (including the creation of HCM) that have already undermined had a significant impact on the market structure. To a large degree the relative concentration in the industry is simply a reflection of the nature of the scale economies and investments required to operate in this industry. Market forces (and the recent divestment of Hope) have led to a great degree of variation in market shares in recent years – an

⁴ PDR, paragraph 6.34.

ongoing trend that is inconsistent with the CC's theory of coordination and, in any event, would be liable to exclude persistent coordination in the future (even it had existed in the past).

30. The CC has ignored LT's submissions on the substantial cost increases that it experienced during 2009. It therefore reaches irrational conclusions as to the incentives for LT to pass on cost savings in the form of price reductions.

- (a) The CC asserts that "*cost savings have [not] been passed on to customers in the form of lower prices*". The only evidence for this appears to have been obtained from the CC's reading of the data during the downturn (PDR, paragraphs 5.13 to 5.16). However, this is very limited (and evidence for which there are entirely reasonable explanations) and seems to ignore LT's previous responses on this issue – in particular, the marked downturn in profitability in 2008 and the fact that prices did, in fact, fall in real terms following their peak in Q1 2009, when LT's costs also peaked (see LT's response to the PFs and Remedies Notice, paragraph 21). Moreover, the CC's conclusions in this regard are contrary to textbook economic theory that predicts that, even in a monopolistic market (*i.e.*, even if there were perfect coordination), marginal cost savings (and marginal cost increases) would be passed on to customers in significant part.
- (b) In any event, the CC's conclusion on pass-on is inconsistent with its own analysis in the PFs where the CC found that Lafarge's net revenue per tonne and variable cost per tonne moved in line over 2007-2011 (Figure 14 of Appendix 6.5), demonstrating that variable cost movements have been passed-on in the past (see also LT's response to the PFs, paragraph 33 where this point was made to the CC).

B. INCONSISTENCIES IN THE CC'S DECISION-MAKING AND REASONING

31. LT notes the following clear inconsistencies within the CC's reasoning, both internally within the MIR process and between the Merger Inquiry and the MIR process.

32. Requirement for LT to maintain exposure to the external market.

- (a) In its response to the PFs, LT explained that LT's low share of internal demand for cement was a critical requirement of the CC's conditional clearance decision in the Merger Inquiry. The CC's Final Report in the Merger Inquiry was published in May 2012 and the JV was closed in January 2013. In the Merger Inquiry, the CC required LT to divest a number of RMX plants in order to increase the JV's exposure to the external market, to ensure that the JV's levels of vertical integration were similar to Lafarge's pre-merger levels. The CC said: "*by increasing the similarities in the extent of vertical integration of the JV entity and Cemex and Hanson, the proposed JV would grant the JV entity greater flexibility and option in its punishment actions than Lafarge has at present*"⁵ and that "*this increase in vertical integration of the*

⁵ Merger Inquiry Final Report, paragraph 6.238.

JV entity compared with Lafarge would have a number of effects which were likely to increase the internal sustainability of coordination".⁶ Consequently, the CC required the divestment of Hope, together with a rump of RMX plants and concluded that "*following the proposed divestiture, the JV entity would have a similar level of vertical integration to Lafarge today, such that these effects of the JV were unlikely to arise to any material extent post-divestiture.*"⁷ Central to this requirement was the CC's belief that asymmetry between the GB cement producers in terms of their internal use of cement was a critical factor in protecting the susceptibility of the market to coordination. In the MIR, the CC has adopted an entirely contradictory approach to that taken in the Merger Inquiry by asserting that Lafarge's (and now LT's) high exposure to the external market is a feature that makes coordination more likely (*i.e.*, that a market feature created through the CC's own remedy proposal from the Merger Inquiry is now a potential cause of coordination). This is an inconsistency in the approach taken by the same institution.

- (b) The CC's provisional decision to order a divestment by LT of a cement plant will reduce LT's level of vertical integration and its exposure to the external market. The CC cannot fairly, on the one hand, require a divestment remedy (to permit the creation of a JV) that ensures that LT has exposure to the external sector and then, on the other hand, require a further divestment remedy to reverse that position less than a year later.

33. **CC's justification for not requiring a cement plant divestment by Cemex and Hanson is not applied consistently to RMX.**

- (a) The CC states that it would take into account "*the impact of a divestiture on the divesting party and its ability to compete effectively in the GB cement markets post-divestiture*".⁸ On this basis, the CC ruled out identifying cement plants owned by Cemex and Hanson as candidates for divestment.
- (b) But, in relation to RMX divestments, the CC raised no such concerns, despite the fact that LT has the smallest RMX network of the "Top 3". The CC gives a number of reasons as to why it would be more desirable that the RMX plants to be subject to the disposal order should come from LT. However, it ignores the fact that this requirement is in addition to the divestment of a cement plant: LT is not merely being ordered to divest itself of 30% of its cement capacity and 2 out of 3 of its GBS plants but also 7-20 out of its 84 RMX plants. Crucially, the CC gives no weight to the consideration of fairness to LT – *i.e.*, to the fact that LT is being forced to bear the burden for the entire industry and that as a consequence of these divestments its position in RMX will be further diminished.

⁶ Merger Inquiry, Final Report, paragraph 8.123.

⁷ Merger Inquiry, Final Report, paragraph 8.124.

⁸ PDR, at paragraph 3.144.

- (c) The CC has conducted very limited analysis of the effects of divesting RMX plants, whether from LT directly or through mix-and-match, and has not properly weighed the need for RMX to be divested by LT against any detriment caused by LT in any meaningful sense.

34. Importance of cement plant technology.

- (a) When it comes to evaluating suitable plants for divestiture, the CC states that *“we considered it likely that production technology would take precedence over the age of the kiln or plant, and that a purchaser would express a strong preference for a dry-process plant over a wet- or semi-dry process plant, in particular given its implications on costs”* (PDR, paragraph 3.75). Yet, when it comes to evaluating the asset value for its profitability assessment, the CC apparently makes no adjustment for the technology used at the plant – and instead bases asset value on capacity and age (depreciation over 50 years regardless of technology), with the effect that it undervalues very substantially the asset base of the cement industry.

35. Ability to introduce efficiency enhancements within a cement plant.

- (a) The CC dismisses LT’s arguments that the efficiency improvements that it drives, develops and maintains at its cement plants are personal to its ownership and management, result only from Lafarge’s long history of involvement in the cement industry and ability to benchmark the performance of its cement plants both in GB and globally, and could not be replicated by a third party purchaser.
- (b) In response, the CC says that any purchaser (notwithstanding that it will have had no prior experience of producing cement in GB) will be able to introduce these efficiencies and cost savings and operate the plants in the same way that LT does. This entirely ignores the entire process of how competitive markets evolve – with more efficient and experienced firms competing more successfully than others and hence growing to become larger and more profitable.
- (c) Moreover, the CC’s approach is inconsistent with the evidence. The CC itself identifies plant efficiency KPIs and performance as one of the grounds for identifying Cauldon and Tunstead as candidates for divestiture. Anglo American owned the Tunstead plant (in its current form) for 10 years prior to it being contributed to the LT joint venture. If the CC’s position is correct, and any owner could have introduced such efficiency measures, why did Anglo American not bring about those efficiency savings during the 10 year period when it owned Tunstead?

C. FACTUAL INACCURACIES

36. The CC’s report contains numerous factual inaccuracies.

Incorrect characterisation of Hanson’s Ribblesdale cement plant

37. The CC identifies Hanson’s Ribblesdale as a plant with less capacity than both Cemex’s South Ferriby and LT’s Aberthaw cement plants (PDR, paragraph 3.120). This is not correct. LT estimates that Hanson’s Ribblesdale plant has capacity of 1MT, and is therefore larger than both of these plants.⁹ Hanson has two rail-connected plants (Ketton and Ribblesdale) each with 1MT or more of cement capacity, and importantly each of these is operated with substantial spare cement capacity, such that a divestment of these plants has the possibility of increasing cement output – in contrast to LT’s Tunstead or Cauldon plants. While LT also has two rail-connected plants (Tunstead and Dunbar), Dunbar’s capacity to serve England and Wales is less than 1 MT (as per the CC’s own analyses). Consequently, the CC’s reasoning that the divestment of Ketton (PDR, paragraph 3.121) “*might potentially represent an effective cement plant divestiture*” but that its divestiture would result “*in a significant reduction in Hanson’s total capacity... and that this would leave it with one of the smallest plants in GB (Ribblesdale plant)*” that would “*put at risk Hanson’s ability to operate as an effective competitor in the future*” is entirely incorrect. The divestment of Ketton, a rail-linked cement plant with cement capacity of [X]MT and spare capacity of [X]MT (see Appendix 7.2 to the PFs), would still leave Hanson with Ribblesdale, one of the largest rail-linked cement plants in GB, and Padeswood, with combined spare cement capacity of [X]MT (see Appendix 7.2 to the PFs).

The CC incorrectly identifies the depots that should accompany a cement plant divestment

38. The CC concludes that the divestment of either Cauldon or Tunstead should be accompanied with depots that serve each of those plants. The CC justifies this on the basis that “*it would be essential for any cement plant divestiture package to include the cement depots (rail-linked and non-rail-linked) currently used by the cement plant being divested in order to extend its geographic reach and access to a wide customer catchment area*” (PDR, paragraph 3.62).
39. Specifically, the CC concludes that:
- (a) A divestiture package involving the Cauldon plant should include at least the four non-rail-linked depots currently used by the Cauldon plant, or at least four suitable and acceptable alternatives. The Cauldon plant does not currently have a rail connection, and therefore relies on road transport to fulfil its delivered sales.
 - (b) A divestiture involving the Tunstead plant should include, as a minimum, all of its three rail-linked depots and the one non-rail-linked depot (or a suitable and acceptable alternative) currently used by the Tunstead plant.
40. **First**, the CC continues to identify the Dewsbury, Theale and Walsall depots as part of LT’s depot network (see for example PDR, Table 1 of Appendix 4-22). LT divested the Theale, Dewsbury and Walsall depots to Hope Construction Materials based on the CC’s decision in the Merger Inquiry. LT no longer owns these depots and therefore they cannot be considered as potential divestments to accompany any

⁹ Appendix 7.2 to the PFs shows that Ribblesdale’s cement capacity in 2011 was [X]kt, and that its spare cement capacity was [X]kt.

cement plant. The CC should be well aware of this, and its failure to correct properly for this highlights the serious deficiencies in its attention to the most basic details.

41. **Second**, the CC appears to identify different combinations of “*depots*” currently served by either Tunstead or Cauldon. LT does not recognise the depot named “*Northenden (Manchester)*”. This is not a depot that LT owns nor is it supplied by Tunstead. But Willesden is a depot operated by LT. This appears to have been overlooked by the CC in its analyses. West Thurrock is not linked to Cauldon. Cauldon is currently linked to Exning and Coleshill. Tunstead is linked to Westbury, Willesden and West Thurrock.
42. **Third**, Barnstone should not be characterised as a depot. Barnstone is a specialist production facility that produces only packed value-added cement products such as quick-setting cements, mastercrete, postcrete and slab layer. Barnstone receives cement used in the manufacture of these products and then they are despatched for onward sale from Barnstone.
43. **Finally**, the CC suggests that West Thurrock is a depot that is connected with Cauldon. West Thurrock is in fact a rail-linked depot used primarily by LT as part of its packed cement business. In the event that that this depot were to accompany a divestment of Cauldon, the divestment of this depot would disproportionately impact LT’s retained business, particularly its packed cement business. Moreover, the data relied upon by the CC to identify that West Thurrock serves Cauldon is an anomaly: the volumes transported from Cauldon through West Thurrock occurred as a “*one-off*” when Cauldon was being used as a back-up plant. In 2011, West Thurrock handled [⌘] tonnes from Cauldon, out of more than [⌘] tonnes handled by West Thurrock in total. In 2012, West Thurrock handled [⌘] tonnes of packed product from Cauldon, out of total despatched volumes of [⌘] tonnes.

D. CONCLUSION

44. These inaccuracies, inconsistencies and failures in the CC’s decision-making highlight the lack of rigour in the CC’s reasoning and, ultimately, the fallibility of CC’s conclusions.

**PART 3 - FAILURE TO PROVIDE REASONS TO
JUSTIFY A CEMENT PLANT DIVESTITURE**

45. In this Part, LT sets out the errors in the CC's reasons for concluding that a cement plant divestment by LT will be an appropriate, proportionate and effective remedy. The submissions set out this Part are made without prejudice to LT's position that the CC's provisional AEC finding is wrong and should be reversed.

A. LEGAL FRAMEWORK

46. Section 138 of the Enterprise Act 2002 provides that, where the CC has identified an AEC, it should take such action "*as it considers to be reasonable and practicable*" and "*shall, in particular, have regard to the need to achieve as comprehensive a solution as is reasonable and practicable to the adverse effect on competition concerned and any detrimental effects on customers.*"

47. In determining what is reasonable and practicable, and in light of the protection of property rights enshrined in the Human Rights Act 1998, the Competition Appeal Tribunal (the "CAT") has made clear that any remedies:

"(1) must be effective to achieve the legitimate aim in question (appropriate),

(2) must be no more onerous than is required to achieve that aim (necessary),

(3) must be the least onerous, if there is a choice of equally effective measures, and

*(4) in any event must not produce adverse effects which are disproportionate to the aim pursued."*¹⁰

48. The CC Guidelines themselves recognise this, and also note that the CC will consider "*remedy options both relative to other effective measures as well as relative to taking no action*" and will "*apply these principles to the evaluation of individual measures within a package of remedies as well as to the package taken as a whole.*"¹¹

49. The CAT has repeatedly made clear that, in making this assessment, the depth of the CC's investigation and the strength of its evidence must increase with the intrusiveness of the proposed remedy:

"...the more important a particular factor seems likely to be in the overall proportionality assessment, or the more intrusive, uncertain in its effect, or

¹⁰ *Tesco v Competition Commission* [2009] CAT 6, at paragraph 137. See also *BAA Limited v Competition Commission and Ryanair Limited* [2009] CAT 35, at paragraph 246.

¹¹ CC's Revised Guidelines for Market Investigations of April 2013, at paragraphs 342-346.

*wide-reaching a proposed remedy is likely to prove, the more detailed or deeper the investigation of the factor in question may need to be.*¹²

*“...the depth and sophistication of analysis called for in relation to any particular relevant aspect of the inquiry needs to be tailored to the importance or gravity of the issue within the general context of the Commission’s task.”*¹³

*“...where the CC has taken such a seriously intrusive step as to order a company to divest itself of a major business asset like Stansted airport, the Tribunal will naturally expect the CC to have exercised particular care in its analysis of the problem affecting the public interest and of the remedy it assesses is required.”*¹⁴

50. This is reflected in the CC’s Market Investigation Guidelines which state that *“the level of detail in which the CC investigates particular effects of a remedy will be influenced by their importance to the CC’s overall assessment. For example, if it is clear that the costs of a particular remedy are likely to be very small – both in absolute terms and relative to its likely benefits – the CC may not seek to establish these costs with greater precision.”*¹⁵
51. Even before the CC can impose a divestment remedy (the most intrusive of any option), it must have conducted a detailed and sophisticated assessment of all relevant information, and in particular concluded that a divestment will be effective, the least onerous remedy that addresses the AEC, and does not produce adverse effects that are disproportionate to the CC’s aim. Having not provided full disclosure of all evidence and data such that LT can exercise properly its rights of defence, and make submissions to the CC on that evidence, it is not possible that the CC has considered all the facts and evidence.
52. The CC has acknowledged in its Press Release announcing publication of the PFs, that it *“has not found that a breach of either the Chapter I prohibition of the Competition Act 1998 or of Article 101 TFEU has taken place. Those jurisdictions are not within the CC’s remit.”*¹⁶ Without suggesting that there has been any breach, to the extent that any agreement or practice potentially fell within the scope of Article 101, the CC’s powers would necessarily be subject to Article 3 of Council Regulation 1/2003. More generally, in considering the need for any remedies arising from this MIR, including the proportionality of any such remedies, the CC will be cognisant of the on-going investigation by the European Commission. This was set out in paragraphs 182-185 of LT’s response to the PFs.

¹² *Tesco v Competition Commission* [2009] CAT 6, at paragraph 139.

¹³ *Barclays PLC v Competition Commission* [2009] CAT 27, at paragraph 21.

¹⁴ *BAA Limited v Competition Commission and Ryanair Limited* [2012] CAT 3, at paragraph 20(7).

¹⁵ CC Guidelines, at paragraph 349.

¹⁶ Notes for Editors, at paragraph 3.

53. In LT’s response to the PFs, LT stated that, bearing in mind the ***discretion*** afforded to the CC under Section 138 of the Act (*i.e.*, it is only obliged to take action that it ***“considers to be reasonable and practicable”***), the CC should take the following considerations into account in this case:
- (a) **The CC should not penalise one undertaking more than its rivals.** A cement divestment remedy targeted at LT would have a disproportionate impact on LT compared with its rivals. Since the CC identifies that the AEC is an industry-wide AEC, it is inappropriate that the CC’s remedies should affect LT only. In addition, the CC should not interfere in markets by penalising one undertaking more than its rivals. LT’s position in the cement markets is the result of hard-won competition and greater efficiency, and the CC should not intervene lightly. However, the CC’s cement plant divestiture does exactly this: by choosing the most efficient, largest, best-placed and well-connected plants, the CC is penalising LT for its superior management and strategic decision-making. In doing so, the CC imposes disproportionately on LT alone the remedies for an AEC that it believes are caused by industry-wide practices.
 - (b) **The CC should not impose a divestment.** The focus of the CC’s concerns appears to be the conduct of the majors (in particular in the last decade), rather than the structure of the market, albeit without any suggestion of unlawful conduct. In such circumstances, the CC should not seek to impose a a remedy that would be even more onerous than would be possible in cases where there is a finding of unlawful conduct.
 - (c) **The CC has recently imposed another divestment on LT.** Just last year, the CC required an extensive set of divestment remedies from Lafarge S.A. and Anglo American Plc as a condition of the CC’s approval for the creation of LT. In doing so, the CC found that the remedies were sufficient to remove all competition concerns that it concluded would otherwise have resulted from the transaction. To impose a further divestment on LT now would be disproportionate, unfair, and would breach the legitimate expectations of LT’s shareholders, Anglo American and Lafarge. This consideration applies all the more in light of the CC’s failure properly to take into consideration the role now being played by HCM, the result of that previous divestment.
54. The remainder of this section addresses the following failures in the CC’s reasoning to order a cement plant divestment by Lafarge Tarmac. Together, these points show that the CC’s proposed cement plant and RMX plant divestiture remedy is neither effective nor proportionate:
- the CC has no basis for requiring that Lafarge Tarmac divest a cement plant, as opposed to other GB cement producers (**Section B**);
 - the CC’s methodology for choosing a plant results in a disproportionate remedy (**Section C**);
 - the CC has not provided evidence that a divestiture of either Tunstead or Cauldon will be effective (**Section D**);

- the CC ignores the substantial costs associated with divestment (**Section E**);
- the CC has not provided any analyses or adduced sufficient evidence that a more proportionate remedy, such as GGBS remedies, would alone be sufficient and effective in addressing the AEC identified (**Section F**); and
- there is no need for the CC to require that LT divest RMX plants with the cement plant divestment at the option of the purchaser (**Section G**).

55. Each of these is addressed in turn below.

B. NO BASIS FOR REQUIRING THAT LAFARGE TARMAC DIVEST A CEMENT PLANT

56. The CC has relied on an argument that LT should bear the cost of a cement plant divestment because Lafarge (which owned part of the business now forming LT) (**a**) was the leader of the coordination; and (**b**) benefited from coordination as the largest GB cement producer, and that this, together with its relatively low extent of vertical integration, gave it an incentive to take a greater proportion of any costs of coordination, *e.g.*, the costs of any deviation and accommodating the growth of the competitive fringe (PDR, paragraph 3.30).

57. As to (**b**), as is outlined in **Part 4** of this Response, the profitability analysis demonstrates that LT has not achieved ROCE significantly above WACC and that, in line with LT's own internal estimates and estimates of independent third parties (including Professor Chris Higson and a plethora of researchers employed by investment banks), its ROCE is below its WACC. The profitability analysis does not provide support for the CC's conclusions that LT has "benefited" from any purported coordination.

58. Connected to this, one of the main reasons the PDR assumes that a cement plant divestiture would be effective is because it would "*reduce the size of [LT's] cement operations*" and would thereby reduce LT's "*ability and incentive to bear the costs of any coordination*" (PDR, paragraph 3.31(b)). However, the PDR fails to consider that the same reasoning must mean that the effect of the dramatic reduction in market share of Lafarge – from [50-60]% in 2001 to [40-50]% in 2007 to (for LT) approximately [30-40]% in 2013 – must have equally had the same effect and propensity. The CC makes no proper attempt to evaluate this important change in the market (particularly the change since 2013). The CC's position appears to be that (i) the recent fall in market share on the part of LT is not enough to '*tip the balance*' or even reduce the extent of the alleged coordination, but that (ii) a further market share fall will make the critical difference – and bring about a complete transformation. However, the CC provides no evidential basis either for its belief that (a) the critical tipping point has not yet been reached; or (b) the further divestment will lead to the tipping point.

59. As to (**a**), LT's supposed leadership role, the CC has failed to address the factual evidence supplied by LT in its response to the PFs that LT is simply not a "leader" of the alleged coordination:

- (a) Lafarge has lost share consistently since 2001; so even if Lafarge were seeking to lose share in the short term to stabilise share in the long term, there is no evidence to suggest that this policy has worked, or would work in the future.
- (b) The CC asserts that where a supplier has relatively high external sales, it is more exposed to losing external sales and thus hurt more by a punishment strategy. The CC goes on to claim that such a firm would not have a strong incentive to deviate from coordination since that would drive down the price on the external market (where it is heavily exposed). However, the CC's claims are inconsistent with its theory of deviation and retaliation. The CC's theory of retaliation is small scale tit-for-tat rebalancing of market shares and not a large scale price war on the external segment. For example, if a deviant wins 10kt of cement and subsequently loses 10kt as a result of a tit-for-tat retaliation, there is no reason to expect that a larger firm is hurt more than a smaller firm in terms of profit.¹⁷
- (c) Moreover, and in any event, the market position that Lafarge might have had previously does not apply to LT. The estimated market share in the cement market of the business now forming LT has declined to approximately [REDACTED]%. Even if it were the case that Lafarge had operated a "leadership role" in the past (which is not accepted) it is unrealistic to suppose that it could continue to do so – particularly given the consistent downward trend of its market share in recent years. In this regard (as in others) it is important to bear in mind that the CC, in evaluating the necessity and proportionality of prospective remedies, must seek to extrapolate to the likely state of the market at such time in the future when such remedies may be expected to take effect. In the case of divestiture, any such remedy could not realistically take effect before 2016.
- (d) We also note that at the beginning of 2013 LT was created by combining the Tarmac and Lafarge UK businesses, as an entity jointly controlled by both Lafarge S.A. and Anglo American Plc, and with an independent board. Given the radical changes to its make-up and governance following the transaction, the CC cannot simply assume that LT and Lafarge UK are the same company. LT continues to introduce a range of strategic and organisational changes throughout its business, including the following:
 - (i) LT has already changed the way in which it communicates with its bulk and packed cement customers changes to agreed prices. These take the form as set out by the CC in its PDR.
 - (ii) LT unilaterally decided, and informed the MPA in July 2013, that with effect from September 2013 its cement data¹⁸ will only be submitted to the MPA on an annual basis and that this data will only be published three months after the end of the year.

¹⁷ The issue of whether the larger firm has more or less internal sales impacts on the share of total profit generated from the external sector; however the relevant question is whether *absolute* profit is increased by coordinating as opposed to competing and not whether that profit is generated disproportionately from internal or external sales.

¹⁸ [REDACTED].

- (iii) Management changes have been introduced throughout LT’s cement business.
60. Specifically, the CC has asserted that the loss in Lafarge’s market share over the 2007-2011 period was not due to the breakdown of coordination, but due to Lafarge’s role in the coordinating group as the largest player with an incentive to concede its share to importers and Tarmac so as to ensure that coordination with Cemex and Hanson would not break down.¹⁹ However, it is inconsistent to assert, on the one hand, that the terms of coordination are to maintain market shares, and on the other that volatility in Lafarge’s share was due to Lafarge not pursuing a strategy of maintaining share but instead an entirely different strategy of *losing* share to sustain coordination.
61. Moreover, the CC simply “asserts” this theory without a scintilla of documentary evidence to support it. Despite the volumes of internal documents painstakingly collected, produced and submitted by LT to the CC, the CC has failed to adduce any documentary evidence showing that LT intended to lose market share in order to “accommodate” importers or other new entrants. On the contrary, LT’s internal documents show LT’s intention to increase market share (in growing markets) or at the very minimum to maintain market share (in the face of economic downturn). Both strategies required that LT fight for customers. This was borne out in switching data. Had the CC made available or even sought to summarise the exculpatory documents available to the CC during this process, this would be evident. The CC’s failure to do so renders its ability to give consideration and appropriate weight to such documents impossible.
62. The CC has also asserted that for the “Top 3”, “*their respective cement operations made the largest contribution to their consolidated EBITDA*”. This is simply not correct for LT. Since the creation of the JV, aggregates generates the biggest contribution to LT’s consolidated EBITDA (approximately [X]%).²⁰ Accordingly, the CC’s statement that because of this “*the significant size of the cement operations of each of the Top 3 cement producers gave them strong incentives to coordinate*” is not true – or at least is no longer true – for LT. Again, this important point is overlooked by the CC because it has simply not turned itself to examining properly and sufficiently rigorously (or at all) the effects of recent changes to the GB cement market brought about by (1) the creation of LT; (2) the creation of HCM; and (3) the increasing competitive constraint posed by importers of cement as a result of CRH’s acquisition of import terminals.
63. Finally, LT wishes to advise the CC of a correction to the data submitted by LT which relates to the profitability assessment of the legacy Tarmac business. The transfer price used by the Tarmac business meant that Tarmac’s profit was overstated, which in turn means that industry ROCE was also overstated. Once an adjustment is made for this inflated transfer price, and industry profitability is recalculated, industry profitability is brought to the edge of the CC’s range for the WACC. See **Annex 1** for more details.

¹⁹ PFs, at paragraph 8.247.

²⁰ Approximately [X]% is accounted for by LT’s aggregates business, compared with [X]% for cement.

64. Together, each of these failures in the CC’s reasoning suffice fatally to undermine the CC’s conclusion that LT should bear the burden of divesting a cement plant.

C. CC’S METHODOLOGY FOR SELECTING A CEMENT PLANT RESULTS IN A DISPROPORTIONATE REMEDY

Not the “minimum required” to remedy the AEC

65. In paragraph 3.104 of the PDR, the CC sets out its conclusions on the key characteristics of a potential cement plant divestiture, outlining the “ideal” cement divestiture package. The cement plant would feature the following (in brackets LT indicates which GB plants would fit each element of the CC’s criteria):

- (a) a modern dry-process cement plant with two active kilns (Hanson’s Ketton and HCM’s Hope plant);
- (b) clinker production and grinding capacity to produce at least 1 Mt of cement each year (LT’s Cauldon, Dunbar and Tunstead plants; Hanson’s Ketton and Ribblesdale plants; Cemex’s Rugby plant; and HCM’s Hope);
- (c) rail-linked (with depots) (LT’s Dunbar and Tunstead plants; Hanson’s Ketton and Ribblesdale plants);
- (d) located on or close to its own natural source of limestone (all GB plants, except possibly Cemex’s Rugby plant); and
- (e) permitted limestone reserves to allow at least 30 years of cement production (all GB plants).²¹

66. The starting point should not be what would form an “ideal” cement package, but should be the minimum that is required to produce the CC’s supposed objectives of addressing the AEC. As the OFT stated in its submissions, the CC should consider the minimum plant size required for a sustainable operation as part of an assessment in determining the level of cement plant divestitures that might be required (PDR, paragraph 3.46). LT agrees with this position and submits that for the divestiture to be *proportionate*, it must be the bare minimum required to address the AEC identified. Instead, the criteria proposed by the CC results in significant “*gold plating*” and goes far beyond what is required to achieve the CC’s objectives.

Alternative plants to those owned by LT would be more suitable

67. There are alternative plants to those owned by LT that would be more suitable for divestment and better candidates to create a new entrant. In paragraph 3.36 of the PDR, the CC concedes that the divestment of a cement plant that is not currently at capacity would have a more profound destabilising effect than the divestment of a cement plant that is currently at capacity. However, the CC overlooks the cement

²¹ We note that LT’s Cauldon Quarry has been granted in principle approval to extend its limestone quarry operations. [X].

works of Hanson and Cemex, all of which operate at lower levels of cement capacity utilisation than LT's plants which the CC identifies as candidates for divestment.

68. The CC has not adequately explained its reasons for identifying as candidates two cement plants (Tunstead and Cauldon) that are already operated at close to full capacity. The CC concedes that *“a cement plant divestiture by either Hanson or Cemex could have the effect of reducing the amount of excess production capacity it holds, which we stated in our provisional findings provided them with an effective punishment mechanism that supported the internal sustainability of coordination”* (see PDR, paragraph 3.31(c)). The CC identifies this as the effect of a cement plant divestment on incentives of the Top 3 cement producers to coordinate. But, without proper explanation, other considerations are prioritised above this.
69. The CC also concluded that it would be inappropriate for Cemex and/or Hanson to divest a cement plant since if those players divested a cement plant, they would no longer operate as an effective competitor in the future. By *“effective”*, the CC actually means *“sizeable”*. Indeed, the whole premise of the CC's reasoning behind divestment is that a further small (fifth competitor) would introduce effective competition. The CC's commitment to preserving the size of Hanson and Cemex seems to be at odds with its objective of remedying the AEC. By ordering Cemex and/or Hanson to divest a plant the CC would introduce significant levels of asymmetry and place into the hands of a new entrant a cement plant with high levels of excess capacity (and hence the potential to expand output).
70. Nothing in the CC's *“model”* for determining which cement plant should be divested suggests that the maintenance of the position of the *“Top 3”* as GB cement majors should be preserved, particularly when their plants are more suitable to divestment than those operated by LT.
71. On a proper examination, other plants would be more appropriate candidates for divestment. Hanson appears to have sufficient excess cement capacity across its network of cement plants that, contrary to the CC's conclusions that a divestiture would hamper Hanson's ability to remain an effective competitor, Hanson would remain an effective competitor despite the cement plant divestment. Hanson operates all three of its cement plants with significant levels of spare cement capacity ([REDACTED]kt at Padeswood, [REDACTED]kt at Ribblesdale and [REDACTED]kt at Ketton in 2011, based on Appendix 7.2 of the PFs).²² Accordingly, the divestment of a 1MT cement plant would not change Hanson's ability to manufacture the same volumes of cement that it currently produces. Furthermore, Hanson's Ribblesdale plant has the newest technology in GB. It is rail-linked, has two silos, uses dry-process technology and is well supplied by limestone from an onsite quarry which is contiguous with an LT quarry with significant reserves. Ribblesdale is also equipped with a paper packing machine and it also has a newly-installed plastic packing facility. Across its plants, Hanson has the best technology and the newest kilns, but despite this it has not maximised

²² In 2011, Hanson had total spare capacity of [REDACTED]kt and operated at a cement utilisation rate less than [REDACTED]%.

production. If a cement plant divestment is required at all, that divestment should come from Hanson and not from LT.²³

72. By identifying two of LT's plants as candidates for divestment - both of which are operated at very close to full capacity – instead of other plants in GB that are not operated at capacity – the CC penalises LT for:
- (a) simply being the biggest operator in the market (a result of greater efficiency and maximising capacity utilisation);
 - (b) taking difficult commercial decisions in recent years to close its most inefficient plants, thereby reducing its costs;
 - (c) choosing to invest in the right plants and the best technology available; and
 - (d) investing in research, development and prioritising commercial efficiency enhancements and internal benchmarking activities to operate the leanest cement plants in GB.

D. NO EVIDENCE THAT A CEMENT PLANT DIVESTMENT WILL BE EFFECTIVE

73. The CC has not shown that the divestment of either Cauldon or Tunstead will be effective in addressing the AEC identified. It is simply not sufficient for the CC to repeatedly assert that “*there will be one more player*” and that therefore this will have a “*destabilising*” effect without producing factual evidence to show either that (a) the new entrant will have a sufficiently low cost base to price below the level at which LT does at present (despite LT benefiting from greater economies of scale); or (b) the new entrant will be able to introduce additional volumes of cement than LT does at present (despite LT operating Cauldon and Tunstead at around full capacity in recent years) to place downward pressure on the cement price.
74. The CC is in no position, and has made no proper attempt, to determine the optimum number of competitors that would produce the most beneficial outcome for consumers. The CC's whole assumption is that (a) introducing simply one more competitor will entirely break down the alleged coordination; and (b) the alleged coordination is necessarily a greater harm than the reduced economies of scale that the divestment will lead to. That is an analysis that cannot simply be assumed to be correct: it requires rigorous testing. In particular, it requires a realistic assessment of (a) the extent of the harm caused by the coordination; (b) the probability that the divestment actually will eliminate or reduce coordination (and the extent it will do so in light of other remedies); and (c) the extent of inefficiencies caused by divestment undermining economies of scale and thereby increasing costs and prices. The CC has not attempted a rigorous assessment of any of these matters and its limited analysis does not even take all relevant information into account.

²³ The CC has incorrectly characterised the Hanson Ribblesdale plant as one of the smallest plants in GB (PDR, paragraph 3.120, “*In relation to the Ribblesdale plant... its clinker production capacity of [] Mt makes the Ribblesdale plant one of smallest plants in GB (behind the South Ferriby and Aberthaw plants) and below the GB average of 0.8 Mt (see Appendix 4, Annex B).*” This is incorrect. Ribblesdale is larger than both Cemex South Ferriby and LT Aberthaw.

75. In order to meet the requirement of proportionality, the CC must satisfy itself that divestiture of a plant or plants would itself be effective to remedy the alleged AEC and would do so in a manner that would not pertain absent such divestiture. However, in this regard, it is entirely unclear why the CC considers that it would do so. It is insufficient to consider that, merely because a particular remedy would serve to reduce a particular measure of industry concentration, it will therefore be effective.
76. Further, the CC hypothesises that it is critical to create a fifth GB cement producer. However, the CC must first seek fairly to assess whether the significantly enhanced fourth GB producer (HCM) offers (or will in the medium term be likely to offer) a sufficiently enhanced competitive constraint, whether alone or in combination with the strengthening importers (in particular from Ireland) to substantially remedy the alleged AEC. LT has submitted previously that this is highly likely to be the case. The CC has never addressed the questions that LT raised in paragraph 230 of its Response to the PFs about the sufficiency of the remedy in the Merger Inquiry, which were as follows:
- (a) if the CC considers that LT is the same as Lafarge pre-2013 (despite the evidence in this Response that it is not), and if the CC believes that a fifth player is required to create market disruption so as to undermine the “accepted share of sales” that LT, Cemex and Hanson would allegedly seek to attain, then why would HCM not have the same disruptive effect?
 - (b) to the extent that the CC considers HCM does not have sufficient spare capacity to compete aggressively on the external market, that is due to the CC’s own requirement in the Anglo American-Lafarge JV (an alternative might be to require them to return a number of RMX sites back to LT so as to increase HCM’s exposure to the external market and reduce that of LT, thereby removing its asserted incentive to be a leader) and, in any event, any such constraint will be removed at the expiry of the West Thurrock supply contract with LT (*i.e.*, before any divestment remedy could realistically take effect).²⁴
 - (c) if, despite HCM’s proven aggressive competitive behaviour since its formation, it is presumed that HCM will somehow align itself with LT, Cemex and Hanson, then why should the fifth player (presumably with a smaller plant) not do the same?

²⁴ LT also notes that, based on HCM’s aggregate purchases and public announcements, HCM appears to be producing substantially less RMX than those plants have produced historically and therefore have even more cement to sell on the external market. *See*, Press Release, HCM, 29 July 2013 in which HCM provides “The firm, which recently celebrated the production and delivery of its first 1,000,000 cubic metres of concrete, is currently developing a range of innovative concretes for the construction industry.” Based on LT’s knowledge of the RMX plants sold to HCM, the RMX plants sold to LT had produced [redacted]m m3 in 2012. HCM’s own production volume did not reach [redacted]m m3 until past mid-year in 2013, implying that HCM’s annual production of RMX may be down [redacted]% year-on-year, suggesting that an additional volume of more than [redacted]kt of cement sales were made in 2013 to the external market (this press release is available at <http://www.hopeconstructionmaterials.com/~media/Files/H/Hope-Construction-V2/press-release/Hope%20Construction%20Materials%20recognised%20by%20World%20Economic%20Forum.pdf>).

- (d) if, following the divestment, there is one GB cement producer more exposed to the external market than another, why (if one follows the CC's MIR logic) would that player not become the price leader? Whereas if, on the other hand, GB producers are relatively symmetric as regards their proportionate internal and external requirements, then why would that not facilitate coordination?
 - (e) if a fifth producer wins volumes from LT, Cemex or Hanson, what prevents them from winning the same amount back in a tit-for-tat strategy?
77. The CC appears to concede (PDR, paragraph 3.36) that no increase in output will be occasioned by divestment of one of LT's cement plants, but believes that gains will come from undermining the conditions necessary for coordination and the competitive constraint which will cause prices to fall. But there is no reason to conclude the new entrant will destabilise prevailing market conditions (at least, no greater ability than would HCM and CRH, which in contrast to the new entrant, resulted in increases in the volume placed on the external market):
- (a) the transfer of a cement plant at capacity will not result in any increases in the volume of cement supplied to the market. On the contrary, without LT's expertise in running the plant efficiently with the lowest number of days out of service, if anything, volumes produced by the divested plant may very well be expected to fall. Additionally, the new, stand-alone producer is liable to be less efficient (*e.g.* it will not have the benefits of being able to coordinate kiln closures within a network of plants). This will place an upward pressure on the price of cement.
 - (b) the new entrant will have a higher cost base than that currently enjoyed by the plant as a member of the LT network. This is simply as a result of the efficiencies of scale that will be removed. The new entrant will, for example, need to employ additional overheads to cover costs such as research and development, administration, human resources, in-house legal, health and safety etc. Accordingly, the new entrant will, from the outset, have a significantly higher cost base than the plant enjoys today.
 - (c) added to this, the new entrant will immediately lose access to much of the management expertise, experience and technical know-how that it had as a result of being part of LT and its network of GB plants. As a result of the conditions imposed by the CC prohibiting divestment to any of Cemex, Hanson or HCM, the new plant will become part of a company that has had no previous experience of producing cement in GB. This, too, will lead to higher costs.
78. There can be no *a priori* assumption that any gains from "greater competition" (apparently resulting from reducing industry concentration) will outweigh these certain higher costs (which will tend to place upward pressure on prices). In contrast to the creation of HCM (which gave rise to a genuine increase in capacity outside the alleged coordinating group) and, the very substantial degree of spare capacity that CRH has available, there is no reason to believe that creating a *higher cost* new entrant that will likely lead to a *fall* in output will achieve this objective.

79. The CC is under an obligation to articulate with sufficient accuracy what the divestment of either Caudon or Tunstead is expected to achieve. The CAT has said that “*it is necessary to know what the measure is expected to be able to achieve in terms of an aim, before one can sensibly assess whether that aim is proportionate to any adverse effects of the measure. The proportionality of a measure cannot be assessed by reference to an aim which the measure is not able to achieve.*”²⁵
80. As is clear from the explanation above, the CC has not adduced any evidence or shown with sufficient precision how the divestiture remedy will be effective. Simply asserting that the package of remedies will “in the round” address the AEC does not discharge the CC’s obligation to show why the cement plant divestiture is crucial to achieving the desired outcome. The CC has therefore failed to discharge its burden in this regard.

E. CC IGNORES SUBSTANTIAL COSTS OF DIVESTMENT

81. The CC rejects LT’s arguments that LT will incur significant costs if required to divest either Tunstead or Caudon.
82. The CC states that it “*saw no reason why Lafarge Tarmac would not be able to secure a fair value for any operations it was required to divest*” (PDR, paragraph 6.93).
83. This is wholly unrealistic to the extent of being irrational. The conditions are a forced sale in a circumscribed period of time where: (a) the asset in question requires a very considerable investment; (b) all of the other major operators in the market (Hanson, Cemex and HCM) are prohibited from purchasing the asset – and hence any purchaser will not be able to rely on local economies of scale and will almost certainly be without any experience in the manufacture of cement in GB; and (c) we are “*at the bottom of the economic cycle*” (PDR, paragraph 6.93). To see “no reason” that a fair market value will not be achieved in such circumstances is the CC shutting its eyes to the obvious.
84. The CC concludes that there is a “significant” number and range of potential bidders for a divested cement plant (PDR, paragraph 3.164) and that this will ensure that LT receives a fair price. [REDACTED].
85. The CC cites the arguments of Cemex and LT that a substantial period for any divestiture would be required to ensure the divesting party achieved a fair market value (PDR, paragraph 3.171). However, the CC shows no sign of taking this factor into account when actually setting the relevant period (PDR, paragraphs 3.177-3.183). The fact that the divestment is mandated would itself distort the process of commercial negotiation in a way that would deprive LT of the ability to achieve full market value. Moreover, the CC appears to rely on a serious misunderstanding of the time taken by Anglo American plc and Lafarge S.A. to complete the divestment of the Hope cement plant to Mittal Investments in order to justify its conclusion that a divestment period of [REDACTED] should be sufficient. LT categorically disputes that the sale process for the Hope cement plant in any way supports this timeframe.

²⁵ *Tesco Plc v Competition Commission* [2009] CAT 6, at paragraph 143.

86. In order to agree and implement the merger of their respective UK construction materials businesses to create LT, Anglo American and Lafarge each instructed legal and investment banking advisors: Goldman Sachs and UBS in the case of Anglo American, and Evercore in the case of Lafarge. These advisors had been working on the JV proposal for some months ahead of announcement of the proposed JV in February 2011 and continued to advise throughout the duration of the Merger Review. The parties had each been advised by their respective legal advisers that approval of the JV would likely require divestment of a cement plant, and that the Hope cement plant was the most likely divestment asset. The investment advisors therefore began preparation of an Information Memorandum for the possible sale of the Hope plant in or about March 2011, *i.e.*, immediately following announcement of the JV transaction. Indeed, during the course of the OFT review, the finalised Information Memorandum was distributed to potential purchasers in order to demonstrate to the OFT that the Hope plant was saleable and that there would be available buyers.
87. Following the referral of the JV to the Competition Commission, the banks remained in contact with those potential buyers that had indicated an interest in acquiring the plant. By the time of the CC's Final Report, the banks had therefore been working on the sale for around 18 months and had been able to identify Mittal Investments as the most interested potential purchaser. (In the event, Mittal Investments was the only potential purchaser to make a final, binding offer.)
88. Anglo American and Lafarge were willing, in the context of the creation of LT, to accept the sale of the Hope cement works at a significant undervalue because, on balance, the scale of synergies anticipated through the JV was sufficient, over time, to outweigh the loss of value on the sale. No such synergies are available here, and the implications of a sale at an undervalue are therefore far more injurious to the retained business.
89. In the event that the CC were to maintain the position set out in the PDR and require a cement plant divestment (whether from LT or from any other industry player), LT considers it impossible that a sale at fair market value could be achieved within the very restricted time scale proposed by the CC: by contrast with the JV situation, no bankers are instructed on any sale, no sale memorandum has been prepared, no buyers have been identified (and having divested the Hope cement works to the one new entrant that was ultimately willing to make a final and binding offer, LT does not believe that there are ready buyers for a second plant), and no due diligence has been conducted. There is therefore no basis for the CC's apparent confidence that a sale could be achieved within [X].
90. The CC denies that the divested plant will lose any existing efficiency savings. It states blithely that "the technical and management expertise needed to identify and implement efficiency improvements are available to other parties, either in-house or brought in from outside". But this ignores the facts that:
- (a) the technical and management expertise will cost considerable money to buy-in and retain – and that expense must be quantified and factored in as part of the ongoing costs; and
 - (b) since the purchaser cannot itself already be a GB cement producer, even on an ideal scenario (which is unlikely), it will take time for that new entrant to

identify the need for such outside expertise to implement efficiency improvements and, even on the implausible assumption that it accurately identifies all such need, it will take time to purchase such expertise. There will therefore be considerable delays in buying in such expertise (during which time the plant may be expected to be considerably less efficient).

91. The CC challenges LT’s claim that a purchaser of a divested plant would incur a further £[X] million per year in costs, and claims LT “*did not provide any evidence to support these figures*”.²⁶ The CC apparently challenges whether there will be *any* higher SG&A expenses following divestiture (PDR, paragraph 6.96). However, LT draws on its very recent experience directly from the process of extracting HCM from its network and creating a new and independent GB cement producer.
- (a) When the Hope business was separated, an SG&A organisational structure was put in place that consisted of [X] employees at a cost of £[X] million. This is shown on the table below. This information was as presented in the Hope Information Memorandum to prospective purchasers of the Hope business. A support structure was also required for the RMX business and, as such, the estimate of £[X] million of additional cost for the new entrant excludes SG&A costs directly associated with the RMX and Aggregates operations of Hope (£[X] – £[X]k = £[X]k with the addition of CEO this passes the £[X] million assumption).

Table 1: HCM, SG&A (Overhead) Expenses

Category	Total Heads Required (no.)	Estimated Cost (£k)
Strategy / General Management	[X]	[X]
Finance	[X]	[X]
HR (excluding functions in cement / RMX / aggregates businesses)	[X]	[X]
Other central support - SHE, logistics, estates	[X]	[X]
Cement	[X]	[X]
RMX & Aggregates	[X]	[X]
Total	[X]	[X]

Source: Information Memorandum

- (b) These estimates are based on estimated additional costs of a new entrant (as was the case for HCM). If the buyer had an existing GB operation of sufficient scale then there are likely to be areas of synergy, and the additional costs may be smaller. However, since the CC has indicated that no existing GB cement producer may purchase a plant divested as a result of this MIR, it is legitimate to expect that approximately £[X] million of SG&A will be required to sustain and support the new business.

²⁶ The figure of £[X] million is arrived at by the following constituent parts: £[X] million for SG&A; increased logistics and raw material costs (£[X] million); laboratory (£[X] million); increased cost of purchasing other products (£[X] million).

- (c) The CC should note that if an RMX divestment is additionally required as suggested by the CC in its PDRs, then additional supporting SG&A would also be required. Since the CC has suggested that an RMX divestment will be required in the case that the acquisition is by a new entrant without an existing downstream business, then the maximum amount of additional SG&A would be needed (£[X]).
92. In terms of other costs, logistics and raw materials are two of the most significant input costs for cement. In order to effectively separate the Hope business LT renegotiated all or part of the contracts for the supply of these inputs and services to Hope on the buyer's behalf since the identity of the buyer was not known when the new business was being "created". As sellers, Lafarge and Tarmac were incentivised to obtain the best prices for the prospective purchaser in order to support the profitability of the business being divested, and thereby maximise the return due to Lafarge and Tarmac from the divestment. LT estimates that the increase in these costs through the separation of the Hope business to HCM was £[X] million. LT encourages the CC to approach HCM to obtain a detailed comparison of 2013 and 2012 material and other input costs to prove this. LT does not have access to this material.
93. Moreover, for the remaining LT business, the implication was not, as stated in paragraph 38 of Appendix 8 of the PDR that fixed SG&A costs would increase by £[X] million, but rather that LT would not see a significant reduction in SG&A as a result of selling one plant. All of the SG&A head office functions and resources would still be required to perform the same tasks as previously, but rather than spreading these costs across five plants the costs would be spread across four plants, thereby increasing SG&A costs per tonne of cement produced. This will require an apportionment of an additional £[X] million SG&A (fixed costs) across LT's remaining plants. This will consequently affect LT's ability to achieve a return on capital employed.
94. The CC concludes (without conducting any rigorous analyses and dismissing evidence from LT's very recent and relevant experience of divesting a cement plant) that the ongoing costs associated with divesting either the Cauldon or Tunstead plant were unlikely to exceed around £[X] million per year.²⁷ However, the CC has not provided any detail of how it has arrived at this maximum figure (it provides no breakdown). This is apparently just a number picked out of the air – and less than a fifth of LT's estimate. Notwithstanding the fact that the CC claims that it is still investigating the level of ongoing costs, the CC applies no sensitivity tests at all to see what the results to its NPV would be if costs were substantially higher than its estimated £[X] million per annum. The CC should be considering a range of possible costs – and should assume, in particular, that costs exist (such as deprivation of managerial expertise) that cannot be fully anticipated or 'cut and dried' and easily quantified.
95. The costs of divestment are addressed in more detail in the independent economic report supplied by RBB Economics and annexed to this submission.

²⁷ PDR, annex 8-23, paragraph 53.

F. MORE PROPORTIONATE REMEDIES ARE AVAILABLE AND WOULD BE MORE EFFECTIVE THAN A CEMENT PLANT DIVESTMENT

96. Before the CC can impose a divestment remedy, it must have conducted a detailed and sophisticated assessment of all relevant information, and in particular concluded that a divestment will be effective, will be the least onerous remedy that addresses the AEC, and does not produce adverse effects that are disproportionate to the CC's aim. The CC has not done so in this case. As LT explained in its Response to the CC's Remedies Notice, effective but less intrusive remedies are available to the CC.
97. Rather, the CC's report begins with a requirement to divest a cement plant. This structure is indicative of the problems associated with its approach to assessing remedies generally: by opening its analysis with the largest, most intrusive and restrictive remedies, the CC has failed to give proper prior consideration to whether less intrusive and less restrictive remedies would be sufficient to address the AEC identified. In particular, the CC fails to acknowledge that, even on its own analysis, the various behavioural remedies that it identifies must necessarily reduce to some unquantified extent the likelihood that any tacit coordination could be sustained. (Indeed, the behavioural remedies themselves would be disproportionate were this not the case.) The CC must therefore consider the extent to which any additional remedy would further reduce the prospects for tacit coordination. In considering this relative weighting, it must be recognised that the cement plant divestment that the CC proposes does not account for 100% of the AEC remedy that the CC seeks to impose; rather, the likelihood of future tacit coordination must already be reduced to a large extent by the wider package of remedies that the CC proposes. The CC must therefore consider three questions: (i) to what extent does the behavioural remedy package reduce the prospects for coordination? (ii) what incremental certainty does a cement plant divestment provide? (iii) what level of additional certainty would be provided by the alternative options that the CC has rejected, and why would these alternative remedies (whether alone or in combination) not provide an adequate remedy? The CC appears to adopt a binary position, assuming that 100% of the remedial effectiveness is delivered through the cement plant divestment proposal. That is clearly not the case, and the CC must acknowledge and quantify the incremental effectiveness that it believes is provided by a forced divestment that could not be provided by other less intrusive remedies.
98. In particular, the CC has calculated that the AEC in cement results in consumer detriment of £3.20 per tonne. LT disputes these calculations (and has set out in Part 4 and in the expert report provided by RBB Economics annexed to this response its concerns with the CC's approach to calculating consumer detriment). However, even assuming that this is correct, each of the remedies should be taken in turn to consider the incremental effect of each in addressing this alleged £3.20 per tonne detriment.
- (a) The starting point must therefore be with measures designed to address market transparency.
- (i) The CC apparently does consider that its other remedies will undermine features that contribute to the "*Coordination AEC*", namely reduced market transparency from the prohibition on the supply and publication of recent data (PDR, paragraph 3.210) and the prohibitions on price announcement letters (PDR, paragraph 3.250). But, it does

not adequately address why it supposes that these alone would be insufficient to undermine coordination.

- (ii) Nor does it accurately identify what incremental benefit a cement plant divestment would provide. Given that the CC's allegation is coordination on market share on the basis of very high levels of market transparency, the CC must displace the natural presumption that measures which significantly reduce that transparency would not be sufficient alone.
- (b) It is then necessary to consider the effect of a GGBS remedy on consumer detriment.
- (i) Like remedies designed to address market transparency, the CC also considers that the remedies in relation to GGBS (divestment of two GGBS plants by Hanson, divestment of GBS facilities by LT and the end to GBS agreements) will increase competition. The CC acknowledges the effect that the price of GGBS has on the price of cement and that there is a level of competitive interaction between the two products (PDR, paragraph 3.286 (b)). But again, it does not adequately explain why GGBS remedies would be insufficient alone to remedy the AEC identified.
 - (ii) RBB Economics (see the independent report annexed to this submission) has conducted its own analyses to consider the effect of a GGBS remedy on the price of cement, and consequently, the ability to eliminate the consumer detriment of £3.20 calculated by the CC.
 - (A) **As the CC is aware, there is spare capacity in the supply of GGBS.** The proposed GGBS remedy would be expected to increase the supply of cementitious materials in GB by up to 0.8MT based upon LT's submission in Annex H to the PDR.
 - (B) **There will be a greater incentive to lower the price of GGBS to sell the additional capacity.** In order to sell the additional amounts, the price of GGBS will have to fall. As noted by the CC in Appendix D to the PDR, in a situation where GGBS is supplied by a non-cement producer there would be a greater incentive to reduce the price of GGBS because the new operator would not risk cannibalising some of its cement sales.
 - (C) **There is considerable scope for the price of GGBS to fall.** [✂].
 - (D) **As the price of GGBS falls, so will the price of CEM I.** Since GGBS is a substitute for CEM I (the former can replace the latter to a considerable degree, *e.g.*, 40-50% on average), a lower price of GGBS will reduce the price of CEM I [✂], *i.e.*, an amount equal to the estimated overcharge based upon the

CC's revised profitability analysis (which, as explained above, is a gross overestimate).

- (E) **Accordingly, the GGBS remedy would cause a sufficient reduction in the cement price to remove the CC's estimated overcharge in cement.** In the same way that Hanson currently has a limited incentive to reduce the price of GGBS (given that this would cannibalise sales of cement), it also has a weakened incentive to reduce the price of cement (because it would cannibalise sales of GGBS). The latter "*cost of cannibalisation*" is substantially reduced as a result of the GGBS remedy. First, the impact of divesting grinding stations reduces the diversion ratio from Hanson cement to Hanson GGBS. Second, as the price of GGBS falls, the benefit of diverting sales from Hanson cement to Hanson GGBS also falls (since Hanson earns a lower margin on whatever GGBS it sells post divestment). Both factors work to incentivise Hanson to *lower* the price of its cement. Under some assumptions, the incentive to lower price could be sufficient to reduce the cement price by £3 per tonne.

99. Together, the market transparency and GGBS remedies represent an effective and proportionate way to address the alleged consumer detriment of £3.20 per tonne and entirely resolve the CC's concern about tacit co-ordination in the UK cement industry. The PDR fails to recognise this, or the fact that its proposed additional requirement for LT to divest the Cauldon or Tunstead plants would be manifestly disproportionate.
100. In addition to the GGBS remedy, LT made submissions in its response to the PFs and Remedies Notice that other more proportionate and more effective remedies than a cement plant divestment are also available to the CC, if it continues to consider that GGBS and market transparency remedies are insufficient. The CC has not attempted to consider the incremental effect that these remedies could have in reducing the consumer detriment and addressing the AEC identified:
- (a) **Other measures to reduce market transparency: a partial prohibition on cross sales** (Response to PFs, paragraph 263-269). This remedy would directly address the CC's concern that cross-sales provide GB cement producers with a mechanism through which deviation is detected and punished (see the PFs, paragraph 8.221).
 - (b) **Measures to address competitive behaviour and market conduct: industry code of conduct** (Response to PFs, paragraphs 206-207). This could, for example, form the basis of a remedy that would require GB cement producers to cease cross-subsidisation between vertically-integrated cement and RMX business, and could ensure the availability of competitive pricing terms for independent RMX customers (such as through a commitment not to sell to independent customers at prices which are higher on average than those applied to the internal business).
 - (c) **Measures designed to increase the competitive constraint imposed by importers** (Response to PFs, paragraphs 208-213). This could include, for

example, making cement import terminals available to any willing importer on fair, reasonable and non-discriminatory terms. Such a remedy would address coordination in the cement market by increasing the effectiveness of external constraints. This remedy could be used to address the CC's concern that importers have higher transport costs because cement is transported by sea. This alleged cost disadvantage could be addressed through a remedy that grants access to terminals at or close to costs. With a lower cost profile and greater capacity to import increased volumes, importers may find it more profitable than at present to undercut prevailing prices charged by the markets and credible threats to switch to importers would be substantially enhanced.

101. Accordingly, in light of the more proportionate and less intrusive remedies available, a cement plant divestment is neither necessary nor proportionate.
102. As to the CC's proposed remedies in GBS/GGBS, LT offers the following comments:
 - (a) LT considers that a more proportionate remedy is open to the CC that would not involve LT exiting its position in GBS. LT proposes that instead of selling its GBS plants, it would auction all available water-cooled GBS produced from its GBS facilities to any willing purchaser. Since the CC concedes that LT does not exercise market power in the manufacture and supply of GBS, it is not proportionate to require that LT exit this position entirely. Furthermore, LT's GBS activities are part of a wider relationship with steel makers that form part of LT's aggregates business including the removing of air-cooled slag, steel slag and other waste, the supply of limestone fines to the steel works and, in the case of Port Talbot, the operation of a quarry.
 - (b) In event that the CC continues to consider that LT should exit its position in GBS, LT proposes that Teesside (which currently supplies Hanson's Purfleet grinding station) and Scunthorpe should form the basis of any divestment, as LT considers that it is capable of addressing divestiture risks at Teesside.

G. RMX REMEDIES ARE NOT NECESSARY

103. The CC proposes that a buyer of either the Cauldon or Tunstead plant should be permitted to acquire a limited number of fixed RMX plants from Lafarge Tarmac, subject to an upper limit based on a buyer's total annual cementitious requirement (not accounting for more than 15 per cent of the divested cement plant's annual cement production capacity). LT disagrees with the CC's conclusion that to be viable, a new entrant requires mandatory divestment of any downstream operations.
104. **The CC's reasoning in relation to divestiture of RMX plants is illogical.** It concedes that barriers to entry into and expansion of RMX production are low (PDR, paragraph 3.98). However, it nonetheless considers that the mandatory inclusion of RMX assets (in addition to the cement plant) is necessary to ensure that the divestiture package is "*sufficiently attractive*" (PDR, paragraph 3.98) and required to ensure that the purchaser of the cement plant is "*able to compete effectively*" (PDR paragraph 5.32). However, if the purchaser can buy or build RMX plants, as the CC concedes, why is it necessary to mandate their sale by Lafarge? If, as the CC maintains, there is a market for a cement plant sale, the absence of RMX assets should not stymie any interest in purchasing that cement plant (since, given the low barriers to entry, the

buyer can simply buy them from a third party or build them itself). Once the CC mandates divestment of a cement plant by Lafarge then surely the inclusion of RMX assets is something that can be left to the market. Once the divestiture of a cement plant is mandated then, assuming the seller wishes to obtain a reasonable price and the inclusion of RMX plants is (as the CC apparently assumes) needed to achieve that, then Lafarge Tarmac will have a natural incentive to sell other assets including RMX plants. If and insofar as these RMX plants are desirable complements whose sale is required to get full value for the sale of the cement plant, then Lafarge Tarmac will have every incentive to offer to sell them along with the plant. In other words the inclusion of RMX assets is something that can be left to be subject to free negotiation. By mandating the sale of further assets (for which there is a ready open market) the CC is acting disproportionately – and causing further unnecessary loss to Lafarge Tarmac (since any mandatory sale of RMX assets is almost bound to be on disadvantageous terms and attain a price for such assets that is less than their full market value).

105. The CC has not conducted a sufficient assessment of the need to divest RMX plants. The CC’s very superficial reasoning is contained in paragraph 3.139 of the PDR, where it says:

*“We considered that the RMX plants that are currently internally supplied by the cement plant being divested would represent the most practicable and suitable RMX plants for divestiture **on the basis that these RMX plants would face the least disruption in their operations** as a result of the cement plant divestiture. We considered that there are likely to be logistical reasons why these RMX plants were supplied cement from the plant in question, and therefore a divestiture of a cement plant and its internally supplied RMX plants would preserve any such logistical benefits. Furthermore, a requirement that a purchaser should be able to acquire RMX plants from a number of sellers would add significantly to the complexity of any divestiture process and increase the potential risk of achieving an efficient and timely disposal. We therefore concluded that Lafarge Tarmac should also divest the RMX plants to be included in the divestiture package under this remedy, subject to the requirements of the purchaser and the 15 per cent ratio of internal cementitious requirement to total cement production capacity.”*

106. The fact that RMX plants may face the least disruption in their operations is not a sound reason for imposing these costs entirely on LT.
107. The CC’s own conclusions evidence its lackadaisical attitude to evidence-based analyses:

*“We therefore considered that the issue of whether a new entrant should have some level of vertical integration was **largely** to address the composition risks of any divestiture package, and to provide a purchaser with **some degree of comfort** in terms of having an outlet for some of its cement production and hence a “platform” for effective competition.”*

108. However, while the CC rather hastily reaches the conclusion that LT (and not other cement producers) should divest RMX plants, the CC conducts no assessment weighing the need for RMX to be divested against the detriment cause to LT in any

meaningful sense. Indeed, the CC given no consideration to the costs that LT would face:

- (a) **First**, if plants are divested in the immediate vicinity of either Tunstead or Cauldon, this will effectively result in LT exiting that particular geographic region. This will entirely undermine LT’s ability to compete in that area and serve its customers.
- (b) **Second**, LT’s ownership of RMX plants is also important as a route to market for aggregates, in addition to cement. The CC has ignored the effect that the divestment of a quantity of RMX plants will have on the ability of LT to sell aggregates through RMX products.
- (c) **Third**, out of the Top 3 cement producers, LT has the smallest position in RMX and further divestment would serve to reduce this position further. In relation to a cement plant divestment, the CC sought to justify not identifying a Cemex and Hanson plant for divestment since this would reduce their ability to be an effective competitor in GB. The CC applies no such equivalent reasoning to LT’s position vis-à-vis RMX, even though the CC is placing the entire costs and burden of this measure on LT and LT is in fact the smallest RMX producer of the “Top 3”. This is the case for LT in GB and also in terms of its position in the area around both the Tunstead and the Cauldon cement plants (see table below) (radius of 50 miles around Tunstead and Cauldon applied), where both Cemex and Hanson own RMX plants that could readily form part of a divestment package.

Table 2: RMX Market Shares, in a 50 mile radius around Tunstead and Cauldon, 2011

Firm	Market Share (Tunstead) ²⁸	Market Share (Cauldon) ²⁹
Lafarge Tarmac	[REDACTED]	[REDACTED]
Cemex	[REDACTED]	[REDACTED]
Hanson	[REDACTED]	[REDACTED]
Aggregate Industries	[REDACTED]	[REDACTED]
Breedon	[REDACTED]	[REDACTED]
HCM	[REDACTED]	[REDACTED]
Others	[REDACTED]	[REDACTED]
Total	[REDACTED]	[REDACTED]

Source: BDS, including LT actuals

- (d) **Fourth**, given the close proximity of Tunstead and Cauldon, a divestment of RMX plants of the quantity produced by the CC within the catchment area of either plant divestment would leave the retained plant with little or no vertical integration.

²⁸ Market share in RMX in a 50 mile radius around LT’s Tunstead cement works.

²⁹ Market share in RMX in a 50 mile radius around LT’s Cauldon cement works.

- (e) **Finally**, as a more proportionate alternative, LT suggests that it or a third party RMX producer (or concrete products producer for that matter) could enter into a cement off-take agreement for a fixed period during which the new entrant is establishing itself, which would be more appropriate. This would guarantee a route to market for the cement produced by the new entrant, while giving it time to consider whether to establish a downstream business itself (whether in concrete products or RMX).

109. LT also disagrees that any RMX plants divested should be located around the cement plant. If the cement plant divested has national reach, there is no reason why the RMX plants could not be divested further away from the cement plant, or even close to depots.

H. CONCLUSION

110. A cement and/or RMX divestment would not remedy the AEC identified by the CC, less intrusive remedies would be effective, and such a divestment would be wholly disproportionate to the level of consumer harm identified by the CC. The following points that LT made in its response to the PFs and Remedies Notices continue to stand:

- (a) **Divestment is ineffective.** It is arbitrary for the CC to assume that having five GB cement producers would necessarily prevent coordination when in the CC's (unreasoned) view, the entry of HCM has not and will not. Moreover, the assertion that LT's exposure to the external segment facilitates coordination is inconsistent with the CC's reasoning in the Merger Review. The CC cannot simply assume that a divestment remedy would be effective.
- (b) **Less intrusive remedies would be effective.** The CC only needs to remedy one of the three cumulative conditions for coordination it has identified (*i.e.*, monitoring the terms of coordination; internal sustainability; and external sustainability). The behavioural remedies proposed address each of these conditions, and it would be unnecessary for the CC to go further and require a divestment. Further, the GBS/GGBS remedy is sufficient to disrupt coordination. Not only does it free up a substantial amount of capacity to supply a close substitute to grey cement, creating an external constraint on any alleged coordinating group, it also impacts substantially on Hanson's structural position in the cementitious market, thereby potentially undermining internal stability in the alleged coordinating group.
- (c) **Divestment is disproportionate.** The CC can only impose proportionate remedies that satisfy the criteria set out in the CAT's judgment in *Tesco v Competition Commission* and *BAA v Competition Commission* and the CC's own Market Investigation Guidelines. A divestment remedy does not meet these criteria. The above analysis shows that the cement divestment is both ineffective, and entirely beyond what is the minimum necessary to address the AEC identified.

111. While LT strongly disagrees with the CC's provisional AEC finding, it is clear that less intrusive remedies would effectively address the CC's apparent concerns, while allowing the market to continue to develop organically:

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- restrictions on the publication of information by Government and other bodies;
- prohibition on generalized price announcement letters; and/or
- remedies affecting the supply of GGBS in GB (see further discussion in report provided by RBB Economics).

PART 4 - THE CC'S CONSUMER DETRIMENT, PROFITABILITY AND NET PRESENT VALUE ANALYSES DO NOT BEAR SCRUTINY

112. RBB Economics (“**RBB**”) has produced the attached report covering:
- (a) the CC’s assessment of consumer detriment;
 - (b) the CC’s findings on profitability; and
 - (c) the impact of the CC’s proposed divestments.
113. RBB concludes that:
- (a) The CC has no sound basis on which to claim that the behaviour of LT and other members of the alleged coordinating group gave rise to any material consumer detriment over the period 2007-2012.
 - (b) On an objective assessment of the available data, the CC has failed to establish reliable evidence of excess profits.
 - (c) A divestment of Cauldon or Tunstead cement plants cannot be said to be proportionate and would most likely give rise to costs which outweigh benefits.
114. The CC is urged to read RBB’s analysis in detail. It is summarised below for convenience:
- **Section 2** explains that the CC’s assessment of consumer detriment on the basis of estimating a lower bound for the competitive price and an upper bound for consumer detriment in 2011 is misconceived.
- Taking the results of the CC’s model at face value, and correcting for a clear error, the CC’s model predicts *no consumer detriment*. More generally, even if this error is ignored, the CC’s model is based upon a number of highly questionable (and in some cases, unreasonable) assumptions and is not robust to extremely small changes in those assumptions. By relaxing those assumptions, the model itself predicts a very wide range of possible values for the “competitive price” in 2011, most of which are well above the actual price in 2011.
- To the extent that one were to rely on the CC’s model, therefore, one could conclude that actual prices in 2011 were likely to be *below* the competitive level and consumer detriment likely to be absent.
- **Section 3** demonstrates that the CC’s findings on profitability are also based on a number of unrealistic and unjustified assumptions.

Tarmac's submitted revenue figures (which the CC has used) significantly overstate LT's profitability as these are distorted by an above market rate transfer price for internal cement sales. Correcting for this error in the submitted data reduces significantly the CC's estimated consumer detriment figure.

Moreover, the CC's profitability findings are not robust to small but reasonable (and, in certain cases, necessary or appropriate) changes in the underlying assumptions. For example, any one of:

- revising asset lives (and hence asset values) to reflect the reality of asset lives as reflected in recent transactions;
- sensitivity testing revenues to the exclusion of carbon credits as a windfall item³⁰; or
- adding back a reasonable estimate for the value of intangibles (adjusted downwards for the CC's implied value for capitalised market power)

leads to industry profits being *within or below* the CC's range for the WACC. The CC emphasises the uncertainty associated with its approach to assessing profits; it should therefore be willing to place considerable weight on reasonable sensitivity checks (such as the three above) which remove entirely a finding of excess profitability.

RBB disagrees with the view that the CC's approach is conservative due to the recession. In particular, industry profitability (on the CC's measure) does not appear to be high in 2007 (a boom year) when compared to the range of the CC's profitability estimates for 2008-2012, indicating no reason to suspect higher profitability prior to 2007³¹ or in future assumed high growth periods.

- **Section 4** assesses the efficacy of the CC's proposed divestments.

First, the CC's proposed GGBS remedy has considerable scope to lead to lower prices of GGBS, which in turn would be likely to lower the price of grey cement by substantially more than a divestment of Cauldon or Tunstead.

Second, a divestment of either Cauldon or Tunstead would not be likely to increase output, and is in fact likely to reduce output, but would be almost certain to increase unit production costs for both LT and for the acquirer of the divested cement plant (relative to LT's current cost of operation), putting upward pressure on prices.

³⁰ On the basis that this was the CC's approach in the PFs and, moreover, LT's cement production decisions over 2007-2011 were unaffected by the price of CO₂ and hence revenues from sales of carbon allowances cannot indicate a return from coordination.

³¹ Indeed, given the CC's approach to asset valuation and depreciation, if anything, profitability might have expected to have been *lower* if estimated in the years prior to 2007.

In conclusion, a GGBS divestment may reduce the price of cement to such a degree that a cement plant divestment would be unnecessary (and indeed potentially harmful).

- **Section 5** incorporates the preceding points into an assessment of the costs and benefits of a divestment remedy.

There is a considerable body of evidence that refutes the existence of any coordinated behaviour either occurring or having any material effect on prices.

Furthermore, even if coordination were likely to have occurred (which LT strongly refutes), the CC has no sound basis to conclude that any benefits of a divestment remedy outweigh the substantial costs.

Correcting for inconsistencies and conceptual errors in the CC's analysis, including the CC's failure to take into account in its NPV analysis the significant *risks* that the divestiture might be in whole or in part ineffective or unnecessary, RBB concludes that the incremental benefit of a cement plant divestment from LT is most unlikely to exceed the incremental costs associated with such a divestment or, therefore, deliver a positive NPV.

ANNEXES

Tarmac Profitability Assessment - Adjusted to Reflect Transfer of Cement Prices at Market Rates

- As the CC may be aware, profits can be artificially increased or decreased by the choice of the transfer price for internal sales to RMX and other downstream activities. The CC will be aware from Lafarge’s hearing with the CC on Thursday, 6 December 2012, that as part of the process for separating and divesting the assets which formed the business of HCM sold to Mittal, a valuation exercise was conducted in order to appraise the value of the businesses and assets being sold. External accountants, PwC, were appointed to verify this valuation. PwC’s report confirmed, inter alia, that the cement supplied by the legacy Lafarge cement business (LCUK) to the legacy Lafarge downstream RMX business was at market prices.
- Since integration, LT has considered the effect of adjusting the price of cement supplied by the legacy Tarmac cement business to its downstream RMX to a market price. We also note that supply of cement to TBP are now at substantially lower prices as a result of genuine bilateral negotiations between TBP and LT as separate and independent entities.
- LT has calculated that if historically it had set its prices for cement (a) sold internally to Tarmac RMX and (b) sold to TBP at bulk CEM I external prices (as ratified by PwC) then its profitability over 2007-2011 would have been significantly lower than that estimated by the CC.
- In particular, if Tarmac had set its internal RMX and TBP prices at the bulk CEM I external prices ratified by PwC, and accepted by Mittal during the divestment stage of the Anglo American / Lafarge JV, Tarmac’s profitability would have reduced by approximately 3 percentage points.
- The table below summarises LT’s calculations for the change in Tarmac’s ROCE over 2007-2012:

Table 3: Adjusted average ROCE for Tarmac, 2007-2012

Tarmac ROCE	2007	2008	2009	2010	2011	2012	Average	WACC range
Original	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
New	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<i>Difference</i> ³²	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

- Moreover, had Tarmac historically set its internal RMX and TBP prices at the bulk CEM I external prices ratified by PwC, this would also have implications for the CC’s overall GB cement industry profitability calculation. Using the CC’s revised

³² “Original” less “New” may not equate to “Difference” due to rounding.

profitability results contained in the PDR, LT has calculated that this adjustment brings GB industry ROCE down close to the top end of the CC's WACC range.

Table 4: Adjusted Average ROCE for GB Cement Industry, 2007-2012

GB cement industry ROCE	2007	2008	2009	2010	2011	2012	Average	WACC range
Original	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
New	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
<i>Difference</i> ³³	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

- The table below contains the the figures underlying the adjustment to Tarmac's revenue and profit figures)

Table 5: Adjustment to Tarmac's Revenue and Profit Figures, Calculations

	2007	2008	2009	2010	2011	2012
CEMI External price £/t	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Volume of cement sold internally to RMX (t)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Adjustment per tonne (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Reduction to Tunstead profitability £	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Volume sold to TBP (t)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Value sold to TBP (£)	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Revenue / t	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Delta to External price £	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Reduction to Tunstead profitability £	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]
Total reduction to Tunstead profitability £	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]	[REDACTED]

Notes:

- Historically Tarmac RMX sites and TBP paid above the average external prices achieved.
- The CEMI external prices shown above were ratified by PwC, and accepted by Mittal during the Project Shakespeare work.

³³ "Original" less "New" may not equate to "Difference" due to rounding.

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- Therefore in the financial data submitted to the CC, it is estimated that Tunstead's profitability was overstated by the amount shown above in yellow.

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ECONOMIC EXPERT REPORT PRODUCED BY RBB ECONOMICS

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INDEPENDENT EXPERT REPORT BY PROFESSOR CHRIS HIGSON



Consumer detriment and profitability: a response to the Provisional Decision on Remedies

RBB Economics, 11 November 2013

1. Introduction

In response to the Competition Commission's (CC) Provisional Findings (PFs), we explained (on behalf of Lafarge Tarmac (LT)) why we considered that the CC's approach to assessing profitability and consumer detriment fell into error in a number of respects. Since receiving LT's response, the CC has conducted further, revised assessments of both industry profitability and consumer detriment, which are set out in its Provisional Decision on Remedies (PDR). This report is a response to the CC's revised assessments. For the reasons set out below, we conclude that, on an objective assessment of the available data, the PDR has failed to establish reliable evidence of industry excess profits. In particular, we find that the CC has no sound basis to claim that the behaviour of LT and other members of the alleged coordinating group gave rise to any material consumer detriment over the period 2007-2012. In turn, we conclude that a cement plant divestment of Caudon or Tunstead cannot be said to be proportionate and would most likely give rise to *disbenefits* (i.e. costs which outweigh benefits).

The remainder of our report is set out as follows:

- Section 2 explains that the CC's assessment of consumer detriment on the basis of estimating a lower bound for the competitive price and an upper bound for consumer detriment in 2011 is misconceived. Taking the results of the CC's model at face value, and correcting for a clear error, the CC's model predicts *no consumer detriment*. More generally, even if we ignore this error, the CC's model is based upon a number of highly questionable (and in some cases, unreasonable) assumptions and is not robust to extremely small changes in those assumptions. By relaxing those assumptions, the model itself predicts a very wide range of possible values for the "competitive price" in 2011, most of which are well above of the 2011 actual price. To the extent that one were to rely on the CC's model, therefore, one could conclude that actual prices in 2011 were likely to be *below* the competitive level and consumer detriment likely to be absent.
- Section 3 demonstrates that the CC's findings on profitability are also based on a number of unrealistic and unjustified assumptions; again, the findings are not robust to small but reasonable changes in the underlying assumptions. For example, any one of:
 - revising asset lives to reflect the reality of recent transactions;
 - sensitivity testing revenues to the exclusion of carbon credits as a windfall item (on the basis that this was the CC's approach in the PFs and, moreover, LT's cement production decisions over 2007-2011 were unaffected by the price of CO₂ and hence revenues from sales of carbon allowances cannot indicate a return from coordination); or
 - adding back a reasonable estimate for the value of intangibles (adjusted downwards for the CC's implied value for capitalised market power)

leads to industry profits being *within or below* the CC's range for the WACC. The CC emphasises the uncertainty associated with its approach to assessing profits; it should therefore be willing to place considerable weight on reasonable sensitivity checks (such as the three above) which remove entirely a finding of excess profitability.

We also explain that Tarmac's submitted revenue figures substantially overstate its profitability as these are distorted by an above market rate transfer price for internal cement sales. Correcting for this error in the submitted data reduces significantly the CC's estimated consumer detriment figure. To the extent that similar adjustments have not taken place for Cemex and Hanson, their profitability would be overstated in the CC's ROCE estimates.

We also explain why we disagree with the view that the CC's approach is conservative due to the recession. First, the CC has excluded the three key factors discussed in the sensitivity tests above. Second, industry profitability (on the CC's measure) does not appear to be high in 2007 (a boom year) when compared to the range of the CC's

profitability estimates for 2008-2012, indicating no reason to suspect higher profitability prior to 2007¹ or in future assumed high growth periods.

- Section 4 assesses the efficacy of the CC's proposed divestments. First, we explain how the CC's proposed GGBS remedy has considerable scope to lead to lower prices of GGBS, which in turn would be likely to lower the price of grey cement by substantially more than a divestment of Cauldon or Tunstead. Second, we explain that a divestment of either Cauldon or Tunstead would not be likely to increase output, and is in fact likely to reduce output, but would be almost certain to increase unit production costs for both LT and for the acquirer of the divested cement plant (relative to LT's current cost of operation), putting upward pressure on prices. We conclude that the GGBS divestment may reduce the price of cement to such a degree that a cement plant divestment would be unnecessary (and indeed potentially harmful).
- Section 5 incorporates the preceding points into an assessment of the costs and benefits of a divestment remedy. We note a considerable body of evidence that refutes the existence of any coordinated behaviour either occurring or having any material effect on prices. We further demonstrate that even if coordination were likely to have occurred (which LT strongly refutes), the CC has no sound basis to conclude that any benefits of a divestment remedy outweigh the substantial costs. Indeed, correcting for inconsistencies and conceptual errors in the CC's analysis, we find that the incremental benefit of a cement plant divestment from LT is most unlikely to exceed the increment costs associated with such a divestment.

2. Assessment of the CC's approach to estimating consumer detriment on the basis of estimating a competitive price

The CC seeks to estimate consumer detriment in two ways, via its profitability assessment (addressed below) and via a benchmarking exercise in which the CC compares the 2011 actual price of cement with the CC's estimate for the price that would arise in a well-functioning market, a so-called "cost-based" approach (Appendix 2, para. 1b). This section addresses the CC's latter "cost-based" approach.

2.1. Background

The essence of the CC's approach is as follows.

- Cement plants are ranked in order of cost (lowest cost first). Supply is assumed to come from the most efficient plants, such that a higher cost plant will produce only if demand exceeds the cumulative capacity of all lower cost plants.

¹ Indeed, given the CC's approach to asset valuation and depreciation, if anything, we might expect profitability to have been *lower* if estimated in the years prior to 2007.

- Each plant is treated as an independent decision maker that is willing to supply only if the price it receives is sufficient to cover all the: (i) plant specific fixed costs; (ii) variable costs of production at the plant; and (iii) distribution costs to deliver cement from the plant to the plant's customers. We denote these "short term operational costs" or STOCs.
- Demand for CEM I in England is assumed to be very inelastic (i.e. very insensitive to price changes) such that, in effect, it is a fixed amount (equal to GB demand for CEM I in 2011 less CEM I supplied to Scotland and Wales).
- A single market clearing price is assumed to exist and to be established by a hypothetical auctioneer that announces different prices until the amount supplied at that price is sufficient to meet demand (given the requirement for each operational plant to break even).

The CC claims that its cost related, market clearing price (i.e. just sufficient to allow all producing plants to cover their costs of production and still meet demand for CEM I) is £69.50 per tonne compared to a 2011 price of £80.00 per tonne. It estimates consumer detriment as the difference between the two, i.e. £10.50 per tonne.

Even without access to the full model so as to carry out sensitivity tests, LT was able to raise obvious objections to a number of aspects of the CC's rather artificial and superficial approach in its letter dated 12 August 2013.² Those criticisms remain of concern and the CC appears to acknowledge in its PDR that a number of them have considerable force.³

We have now been able to sensitivity test the CC's model in the Data Room and we conclude that the CC's model is not fit for purpose and should be abandoned. The model is demonstrably flawed on a number of grounds as we explain in the rest of this section.

2.2. The CC's model contains a demonstrable error

In this section we explain that taking its model at face value, the CC has erred in its calculation of the competitive price; when corrected for that error, the CC's model predicts the competitive price to be higher than the observed 2011 price, i.e. actual prices were *below* the competitive level, and so no consumer detriment can be inferred. Specifically:

- [×].
- [×].
- [×].

² "Response by Lafarge Tarmac to the CC's Working Paper on 'Estimating the competitive price of cement from cost and demand data' in the aggregates, cement and RMX investigation".

³ For example, the CC's analysis does not capture the reality of the GB cement industry, by taking no account of the difference between internal and external sales, where the practice of selling cement to downstream business alters the economics of the cement industry.

- [REDACTED].⁴
- [REDACTED].⁵
- [REDACTED].
- [REDACTED].
- In sum, even if the CC's model is taken at face value, correcting for a basic oversight in its approach means that the market price must increase to substantially above £80. This removes entirely the finding of consumer detriment and indicates that actual prices were, on the CC's model, *below* the competitive level in 2011 (consistent with LT's view that its profits are below its WACC).

2.3. The CC's model is not robust to very small changes in assumptions

In this section we explain that the CC's model is not robust; its results are extremely sensitive to very small changes in the assumptions. This is particularly significant given that a number of the assumptions are (a) unrealistic in light of the available data or (b) lie in a range with a number of equally plausible alternative assumptions. Specifically, even if we ignore the issue above and take the CC's approach to sales outside England as given, it is straightforward to demonstrate that the estimated competitive price varies very substantially following extremely small changes in the model's assumptions.

First, the CC's results are highly sensitive to the assumption made on the available effective capacity of each plant.

- LT has stated in its evidence that, in its view, the CC has overstated the capacity of its cement plants, noting that "effective capacity" is substantially below "nameplate" capacity. While the CC states that its cement capacity assumptions are below "nameplate" (Appendix 2, Annex A, para. 3), we disagree with this characterisation. The cement capacity figures used by the CC in its analysis are derived from clinker capacity figures submitted in response to the CC's Market Questionnaire Q32. Lafarge's response to Q32 stated that its submitted clinker capacity figures were "Theoretical Clinker Production Capacity" and that the capacity figures would additionally be subject to other constraints. Lafarge's clinker capacity figures submitted to the CC are therefore upper bounds of capacity, and a plant operating at full capacity would in reality not produce clinker to these upper bounds. Since the cement capacity figures the CC uses in its competitive cement price analysis are calculated by multiplying all parties' submitted clinker capacity figures by 1.1 (an assumed conversion factor from clinker to cement), the cement capacity figures (at least for Lafarge) are

⁴ [REDACTED]

⁵ [REDACTED].

therefore ostensibly upper bounds i.e. reflect nameplate capacity rather than actual capacity.⁶

- [x].
- [x].
- [x].
- [x].⁷
- [x].

Second, even if the CC's "effective capacity" assumptions are taken at face value, we can demonstrate the same degree of sensitivity by changing slightly the CC's assumption that blended cement and bagged cement contain on average 70% CEM I.

- [x].
- [x].

Once again, it is clear that very small changes in assumptions can cause the estimated competitive price to increase from £69.50 to [x]. Given that the CC considers that its benchmark price is a lower bound for the competitive price, the CC has no basis to assert the existence of consumer detriment. If anything, and in light of the range for the "competitive price" that may emerge from the CC's model, the above sensitivity testing points towards the actual 2011 GB cement price likely being below the competitive level.

2.4. The CC has ignored important costs from its cost benchmark

As LT, and other cement producers, have pointed out, the CC's model entails apparently contradictory assumptions. Specifically, the CC presumes that each cement plant would behave as if it were a single firm. However, each cement plant is also assumed to benefit from the scale economies that accrue to multi plant firms, namely lower head office and overhead costs per plant and the CC even seems to exclude certain of these costs altogether. The CC cannot have its cake and eat it. If the CC is to model the world in which each cement plant were a single firm, it must also account for the actual costs that such single plant firms would inevitably incur.

The CC's criterion for including costs is that the costs are "site specific". By presuming that each cement plant behaves as if it were a single firm, even those costs which have been included (i.e. site fixed costs, variable costs, and distribution costs) by the CC are

⁶ There are three exceptions: the CC takes submitted cement capacity figures for Lafarge Dunbar, Lafarge Aberthaw and Tarmac Tunstead cement plants. The CC uses "expected" cement capacity for Aberthaw and Dunbar on the basis that their cement capacity is constrained by factors other than clinker, such that applying a multiple of 1.1 to theoretical clinker capacity would be misleading. The CC takes Tunstead's cement capacity figure in the absence of data on its 2011 clinker capacity.

⁷ [x].

underestimates because they are costs which relate to a multi plant operator whereas a single plant operator would not benefit from the central facilities and scale economies enjoyed by a multi plant operator. The CC's cost based estimate of harm is therefore an overstatement. Put another way, it is not appropriate to presume multi plant operations for the purpose of estimating scale economies while presuming single plant operations for the purpose of modelling competitive behaviour.

Furthermore, the CC has excluded *entirely* cost categories which would be site specific were the cement plants operating as a single firm. Specifically, the CC has excluded entirely central costs and the costs of depreciation. These central costs include such costs as HR, legal, health and safety and so forth that a single-plant firm would have to pay for on an on-going basis. Rectifying this inconsistency means that each individual plant must have its site specific costs increased. Central costs (i.e. overheads) that would have been saved by operating on a multi plant basis must therefore be added to the site specific fixed costs in the CC's model (i.e. by definition, any central costs of producing cement must be site specific when an operator has only one plant). [3<].

[3<].

In other words, if the CC had made a proper assessment of costs, then, even if we took at face value all the CC's other assumptions and errors, there would be no consumer detriment predicted at all.

2.5. The CC has adopted an extreme benchmark

The CC acknowledges that its approach to estimating the competitive price provides an upper bound to consumer detriment. The CC indicates that this is because, absent coordination, cement firms may have market power when acting unilaterally. However, it would be extreme to consider the benchmark for well-functioning competition to be the model described by the CC where a hypothetical auctioneer strives to obtain perfect competition among cement plants that care only about short run costs. Pricing above the CC's cost benchmark does not imply market power or the absence of a well-functioning market. In any event, as the sensitivity results set out above make clear, the CC has no basis to consider it likely that the actual price in 2011 exceeded the competitive price predicted by the CC's model. If anything, the actual price was below the competitive level.

2.6. Conclusion

The CC's assessment of consumer detriment on the basis of estimating a lower bound for the competitive price is misconceived. Taking the results of the CC's model at face value, and correcting for a CC error, the CC's model predicts *no consumer detriment*. More generally, even if we ignore the CC's error, the CC's model is not robust to extremely small changes in the assumptions – it predicts a very wide range of values for the “competitive price” most of which are substantially higher than the 2011 price. To the extent that one relied on the CC's model, therefore, one could reasonably conclude that actual prices in 2011 were likely to be *below* the competitive level and consumer detriment likely to be absent.

3. The CC's findings on profitability are unrealistic

In this section we explain that the CC's profitability analysis is not reliable. Its central prediction that GB industry profitability over the 2007-2012 period was above the cost of capital is highly sensitive to small and reasonable changes to the CC's assumptions. Many of LT's concerns remain, as set out in LT's response to the PFs, including Professor Higson's expert report, and are not properly addressed (if addressed at all) by the CC. Rather than repeat those all points here, we focus on the following.⁸

- Tarmac's submitted revenue figures substantially overstate its profitability as these are distorted by an above market rate transfer price for internal cement sales.
- Adopting realistic asset lives (and hence more realistic asset valuations given the CC's chosen depreciation profile⁹);
- Discussing fundamental changes in the CC's approach since the PFs, regarding the treatment of carbon credits and impairment losses; and
- The failure of the CC to include intangibles (which cannot be justified by Professor Whittington's comments on the basis of an *assumption* that none would exist in an industry like cement).

We note that the CC points to the difficulty of measuring profitability properly in Appendix 1 to the PDR – that is to say, its estimate is subject to a wide margin for error. Considering that our sensitivity tests generally bring the ROCE within (or below) the CC's estimated range for the WACC, we consider that the CC has no sound basis to conclude that profitability is above the cost of capital, let alone that profitability is “excess”, or that material consumer detriment exists.

3.1. Tarmac's profitability has been substantially overstated

Historically Tarmac's (as was) downstream sites (i.e. Tarmac RMX and Tarmac Building Products) paid higher prices than the external prices achieved by Lafarge (as was), reflecting Tarmac's strategy of charging a high transfer price for cement. In particular, the price at which Tarmac sold cement internally was above the average external price achieved by the Hope cement plant when operated by Lafarge.¹⁰ Furthermore, the prices charged historically externally by Hope were broadly consistent with the prices charged by Lafarge (as was) to all of its external customers. The above has been ratified by PwC for the period 2007-2011 and accepted by Mittal during the remedies stage of the Anglo American/Lafarge JV, when Hope was being divested to Mittal.

⁸ This is without prejudice to other concerns raised by LT.

⁹ We emphasise that the CC's approach to depreciation, as set out for example in its PFs, is based on the view that older plants are less efficient than newer plants. We reject this premise and note that the CC's claim is inconsistent with evidence provided by LT (see LT's response to the CC's cost-based approach to detriment dated 12 August 2013, paragraph 2.5) [3<].

¹⁰ [3<]

Adjusting Tarmac's historical cement revenues to reflect a transfer price that is instead based upon the level of the average external bulk CEM I price achieved historically by Hope results in a substantial reduction in Tarmac's cement revenues. Therefore, based upon the work produced by PwC during the remedies stage of the Anglo American/Lafarge JV, Tarmac's cement revenues as submitted to the CC are overstated by a significant amount. Consequently, the CC's revised profitability estimates for Tarmac and for the GB industry as a whole are also overstated, and in turn the CC's estimate of consumer detriment is also overstated.

Specifically, the reduction to Tunstead's profits in each year 2007, 2008, 2009, 2010 and 2011 would be as follows: £[<], £[<], £[<], £[<], and £[<] respectively, based upon the work performed by PwC. Using the same methodology employed by PwC, the equivalent 2012 figure would be £[<]. LT requests that the CC incorporates this adjustment to Tarmac's cement revenues and profits into its revised profitability analysis. LT also requests that the CC confirm that Hanson's and Cemex's revenue figures are not similarly distorted, and to the extent that Hanson and/or Cemex historically used an above market rate transfer price, that their cement revenues have been adjusted when the CC has calculated profitability.

Based upon the information provided in the PDR, Table 1 and Table 2 show respectively the adjusted Tarmac and GB cement industry results once Tarmac's revenue and profit lines are adjusted for the internal transfer pricing policy. Table 1 shows that over the 2007-2012 period on average Tarmac's ROCE would have been around [<] percentage points lower and GB industry ROCE would be [<]% compared to 12.4% (after impairment measure).

This has significant implications for the CC's estimate of consumer detriment. Specifically, the adjustment reduces the CC's estimate of "excess" return from 2.4% to [<]% and also reduces the CC's annual detriment estimate from approximately £30m to £[<]m, assuming a WACC of 10%. Moreover, once returns are compared to the top end of the CC's WACC range (i.e. 11.5%) then industry returns compared to WACC would fall from 0.9% to [<]% i.e. an annual reduction from £11m to £[<]m, the equivalent of just £[<]per tonne of cement.

Table 1: Adjusted average ROCE for Tarmac, 2007-2012

Tarmac ROCE	2007	2008	2009	2010	2011	2012	Average	WACC range
Original	[<]	[<]	[<]	[<]	[<]	[<]	[<]	[<]
New	[<]	[<]	[<]	[<]	[<]	[<]	[<]	[<]
Difference	[<]	[<]	[<]	[<]	[<]	[<]	[<]	-

Source: PwC, CC, RBB

Table 2: Adjusted Average ROCE for GB Cement Industry, 2007-2012

Industry ROCE	2007	2008	2009	2010	2011	2012	Average	WACC range
Original	[>]	[>]	[>]	[>]	[>]	[>]	[>]	[>]
New	[>]	[>]	[>]	[>]	[>]	[>]	[>]	[>]
Difference	[>]	[>]	[>]	[>]	[>]	[>]	[>]	-

Source: PwC, CC, RBB

3.2. The CC's results fall away when assets lives are made more realistic

The CC's revised profitability analysis assumes that depreciation is assessed over a 50 year period. No justification is provided by the CC for the 50 year period. However, there is contemporary data which strongly indicates that a 50 year period understates the true longevity of cement plants, and in particular of those plants which are maintained through capital expenditure.

In particular, Lafarge's (as was) Hope cement plant was divested to Mittal at the beginning of 2013, and based upon an assumed 50 year asset life it would now have a longevity of just over 5 years.¹¹ We understand from LT (and it seems to accord with common sense) that the CC's depreciation profile assumption is unrealistic, and that Mittal would not have purchased Hope if the expected useful life of the cement plant was so short. Indeed, as noted in LT's response to the PFs (para 72), without any additional development capital expenditure by HCM (i.e. only normal maintenance expenditure is performed) Hope will be capable of producing cement for at least as long as the life expectancy of consented reserves of limestone at the site, which is [>] years, with potential reserves of around [>] years. [>].

The use of a 50 year depreciation period by the CC's revised profitability model assigns a value of £[>] to the Hope cement works at the end of 2012.

This is an order of magnitude lower than the apparently accepted estimated transaction price for the Hope plant of £[>] at the beginning of 2013, based upon EBITDA multiples.¹²

It is correct to observe that the CC's revised profitability analysis does now include in Lafarge's asset base certain additional investments undertaken by Lafarge (as was) which can be attributed to Hope, following LT's comments to the CC's original profitability analysis.¹³ More generally the CC's approach to estimating asset bases, based upon the current cost of building the modern equivalent asset and then depreciating that asset, fails to capture a reality in which

¹¹ See LT's response to the PFs, paragraph 72.

¹² See paragraph 52 of Response to Provisional Findings: Expert Report of Professor Higson.

¹³ See section 5.1 and Table 5 of RBB paper: "Current cost accounting profitability assessment for cement Lafarge Tarmac", dated 23 April 2013.

asset lives are frequently extended indefinitely through maintenance and enhancement to embody technological change. The incorporation of additional investments undertaken by Lafarge (as was) into the asset base therefore represents an improvement to the CC's analysis. LT therefore requests the CC confirm that any relevant additional investments undertaken by Hanson and Cemex have been fully captured in the CC's revised profitability analysis.

[redacted].¹⁴ [redacted].

[redacted].¹⁵ [redacted].

We note further evidence from Appendix 4 to the PDR (accessed in the Data Room) that asset lives may quite easily reach 70 years or more:

- [redacted];
- [redacted].

Adjusting the CC's profitability model to reflect asset lives of 70 years instead of 50 years substantially alters the profitability results. The table below shows that on the CC's preferred measure of detriment (after impairment and including carbon credits and assessed against a central WACC of 10%) that the average industry return above WACC was £3.2 per tonne over 2007-2012 (see also Table 1 of Appendix 2 to the PDR). [redacted]. Moreover, in the latter case, the ROCE is *within* the CC's range for the WACC and so, given the uncertainty involved in a profitability assessment of this nature, there is no proper basis for the CC concluding that industry returns have been greater than WACC, let alone that there have been excess profits.¹⁶

Put another way, if profitability is compared to the top end of the CC's WACC range (i.e. 11.5%) then industry returns compared to WACC would be only £1.2 per tonne on a 50 year depreciation profile, and would in fact become *negative* on a 70 year depreciation profile, i.e. industry returns are not above WACC with asset lives assumed to be 70 years.

¹⁴ [redacted].

¹⁵ [redacted].

¹⁶ We note that even on a 60 year asset life assumption the CC's revised profitability analysis calculates average industry returns (on the CC's preferred measure i.e. after impairment) which are within the CC's WACC range, i.e. consistent with the absence of "excess" profits.

Table 3: CC profitability sensitivities (after impairment i.e. CC's default measure)

	2007-2012 average: 10% WACC	2007-2012 average: 11.5% WACC
50 year life		
Industry return less WACC (%)	2.4	0.9
Industry return less WACC (£m)	29.4	11.3
Industry return less WACC (£/tonne)	3.2	1.2
70 year life		
Industry return less WACC (%)	[<]	[<]
Industry return less WACC (£m)	[<]	[<]
Industry return less WACC (£/tonne)	[<]	[<]

Source: CC data room, RBB analysis

3.3. The CC's findings are highly sensitive to the arbitrary treatment of carbon credits and impairment losses

The CC's revised profitability analysis includes a substantive change to the measurement of impairment losses used in the PFs. The CC's change in measurement of these losses has a substantial effect on estimated GB industry profitability, which can be seen clearly by comparing Table 4 with Table 6 of Appendix 1 to the PDR.

In particular, the CC's revised profitability measure after impairment losses predicts an average ROCE of 12%. However, this may be compared with an average ROCE of 9% (i.e. below the central estimate for the WACC) after impairment losses had the CC simply continued to use the same measurement of impairment losses adopted during the PFs.

Given the substantial range in estimated ROCE from these two alternative approaches to measuring impairment losses, with one measure showing profitability slightly above the top of the CC's WACC range and another (and originally preferred) measure showing profitability below the CC's central estimate for the WACC, we consider that there is no sound basis to conclude that the industry generates excess profits.

The CC's revised profitability analysis includes a reversal of the CC's treatment of carbon credits. In the PFs the CC treated carbon credits as an extraordinary windfall item and so excluded it from the CC's preferred measure of "profitability based on the continuing costs of supply". In its revised profitability analysis the CC now includes carbon credits in all of its profitability measures on the basis that according to the CC the following conditions do not hold: "[The carbon credit] scheme might be regarded as an extraordinary windfall item if it was

unexpected at the beginning of 2007 and not expected to continue in the future, so that it would not be a continuing cost of supply”.

It is instructive to compare the CC’s approach taken in the PFs with the approach taken in the PDR. The results are set out in the table below. The table below shows that once carbon credits are removed from the CC’s profitability assessment (consistent with the approach in the PFs) a finding of excess returns cannot be sustained, whether on a before or after impairment measure, or whether using the CC’s revised measurement approach of impairment losses or the measurement approach to impairment losses adopted by the CC in the PFs.

Table 4: CC sensitivities to carbon credits: 2007-2012 average profitability

	Before impairment	After impairment	WACC range
CC current approach*	[><]	[><]	8.2%-11.5%
CC current approach - excluding carbon credits	9.9%	9.4%	8.2%-11.5%
CC’s original approach in PFs measurement of impairment**	11.2%	8.9%	8.2%-11.5%
CC original approach in PFs measurement of impairment - excluding carbon credits	8.6%	5.9%	8.2%-11.5%

Source: Appendix 1 to the PDR (Tables 3, 4 and 6), RBB analysis. * See Table 4 of Appendix 1 to the PDR. ** See Table 6 of Appendix 1 to the PDR.

In considering the debate as to whether to include carbon credits in the assessment of profitability, it important to ask whether Lafarge (as was) would have priced any differently or changed its output levels if the price of CO₂ had been zero over 2007-2012. If not, and had the price of CO₂ been zero over this period, the CC would find that Lafarge (as was) was not earning profits above WACC, despite behaving *no differently*.

In the PFs, the CC appeared to accept that carbon credits were a windfall item on the basis that revenues derived from the sale of carbon allowances were *unrelated* to cement production.¹⁷ This suggests that Lafarge (as was) would not have altered its behaviour had CO₂ prices been lower (or zero) over 2007-2012. Indeed, we have been informed by LT that had the CO₂ price been lower (or zero) then it would not have altered its cement production volumes over the 2007-2012 period.

Moreover, if the price of CO₂ would have had *no impact* on LT’s price or output decisions (regardless of whether the credits were expected or unexpected) then it is hard to see how it is relevant for the CC’s assessment of coordination. The price of CO₂ is set exogenously (i.e. it is not influenced by cement producers in GB). According to the CC’s approach, a *critical factor* in

¹⁷ Specifically, footnote 199 to Section 8 of the PFs states that “Our analysis (see Appendix 6.5) showed that it was more profitable for GB cement producers to produce cement than to sell carbon allowances. For this reason, we considered that the EU ETS scheme was unlikely to affect decisions on total GB cement production, although it might affect decisions on how this production was distributed across different cement plants”.

the assessment of whether or not the industry was coordinating or not, and whether or not there was consumer detriment as a result, is whether the *exogenous* (i.e. externally determined) price of carbon credits was high or low, even though that price of CO2 itself did not impact materially on LT's behaviour during 2007-2012. Put differently, *even if one accepts the CC's asset valuations, the CC's finding of excess profitability relies on including the value of carbon credits – the value of which bears no relation to whether or not coordination existed in GB.*

For the above reason alone, we consider that an assessment of profitability should at the very least consider a sensitivity that excludes carbon credits. As Table 2 above demonstrates, excluding carbon credits brings the ROCE down to *within or below* the CC's range for the WACC, and always below the CC's central estimate for the WACC.

3.4. The CC's findings are highly sensitive to the treatment of intangibles

We do not consider that the CC has rebutted the view set out by Professor Higson on intangibles (See LT's response to PFs: Expert Report of Professor Higson). We note the following:

- The CC's expert, Professor Whittington, asserts his own belief that intangibles are unlikely to be important in the cement industry and uses this assertion to conclude that the CC's approach of excluding intangibles is substantially justified. In contrast, Professor Higson explained the importance of organisational capital as a relevant, important intangible asset in most modern business and, in his view, this included the cement industry.
- Professor Higson valued intangibles noting that goodwill potentially has three components: overpayment for the acquired businesses; the capitalised value of excess profits or market power; and the cost of non-identified intangible assets. He explained that:
 - In 2006 and 2007 Lafarge carried £[>]m of goodwill, which was impaired to £[>] in 2008, which he considered to have effectively impaired overpayment.
 - Regarding capitalised market power, he noted that (taking the CC's results, refuted by LT, at face value) the CC had provisionally estimated industry harm totalling £180m from alleged coordination over the period 2007-2011 (this figure was subsequently revised to £110m after LT made the CC aware of a calculation error the CC had made¹⁸), i.e., £36m per year, which as a perpetuity, using the CC's WACC of 10%, suggests a capitalised value of £360m. Lafarge (as was) had a maximum share of GB clinker or cement production over 2007-2011 at [>]%. Conservatively assuming that Lafarge's share of the £360m worth of harm was [>]%, this suggests an estimated capitalised value of Lafarge's "market power" of £[>]m. This represents between [>]% and [>]% of Lafarge's goodwill in each year over 2007-2011.

¹⁸ See Letter from CC to LT dated 17 July 2013.

- The remainder (estimated conservatively at [x<] % of Lafarge's goodwill in each of the years 2007-2011) can be included in the asset base as the value of a non-identified intangible asset. Applying this same methodology to the CC's revised profitability analysis we find that ROCE on an after impairment basis (i.e. the CC's preferred measure) falls from [x<] % to [x<] % i.e. below the central WACC of 10%.
- In other words, the CC has no basis to exclude intangibles on the grounds that they might reflect capitalised market power. If the CC were correct that part of goodwill reflected capitalised market power then we should find that Lafarge (as was) persistently earns above its WACC where the asset base has been adjusted to include tangible assets plus adjusted goodwill, where the latter equals goodwill net of the capitalised value of the CC's estimate of Lafarge's market power. However, we find that so doing gives rise to profits below the WACC. In turn, this finding supports the view that the CC had no basis in the first place to exclude goodwill.

3.5. Conclusion

In conclusion, we have demonstrated that the CC's findings on profitability are not robust to small but entirely reasonable (and, in some cases, plainly necessary) changes in the underlying assumptions. For example, any one of: (i) revising asset lives to reflect the reality of recent transactions (and to be consistent with the CC's time period for the assessment of the overall costs and benefits of intervention); (ii) sensitivity testing revenues to the inclusion or exclusion of carbon credits as a windfall item (since the extraneously determined price of those credits has no bearing on whether or not Lafarge (as was) engaged in coordinated behaviour); or (iii) adding back a reasonable estimate for the value of intangibles, leads to industry profits being *within or below* the CC's range for the WACC.

The CC emphasises the uncertainty associated with its approach to assessing profits; it should therefore be willing to place considerable weight on reasonable sensitivity checks which remove entirely a finding of excess profitability.

Furthermore, we disagree with the view that the CC's approach is conservative due to the recession: first, the CC has excluded the key factors above; second, profitability (on the CC's measure) does not appear to be high in 2007 (a boom year) when compared to the range of the CC's estimates for 2008-2012, indicating no reason to suspect higher profitability prior to 2007. Indeed, given the CC's approach to asset valuation and depreciation, if anything, we might expect profitability to have been lower if estimated in the years prior to 2007.

Finally, we consider that the firm-by-firm breakdown of the CC's finding of excess profits is difficult to rationalise with its conclusion that the GB cement industry has been characterised by coordination over 2007-2012. The CC's revised profitability analysis calculates that on average and on an after impairment basis over 2007-2012, Lafarge earned a ROCE of [x<] %, Hanson [x<] %, and Cemex [x<] %. Therefore, Cemex and Hanson have not earned excess profits as their ROCE has been within the CC's WACC range (with Cemex's well below the central estimate for the WACC). If Cemex and Hanson have not earned profits above WACC, and hence not set excessive prices, then it is difficult to understand how the CC can arrive at its conclusion of tripartite coordination (see also LT's response to PFs, paragraphs 60-61).

4. Impact of the CC's proposed divestments

In this section we explain that the proposed GGBS remedy has considerable scope to lower the price of grey cement (as well as GGBS) in GB. In contrast, the CC's proposed cement plant divestment remedy would not increase output and is likely to increase production costs for LT and for the acquirer of the divested cement plant (relative to LT's cost of operation), putting upward pressure on prices. Put differently, the CC cannot safely assume that a cement plant divestment would have a beneficial impact on competition.

4.1. Beneficial impact of the GGBS remedy

There are a number of reasons that would suggest that the proposed GGBS remedy is sufficient to address the CC's concerns over coordination and, in any event, would be substantially more effective than a cement plant divestment of either Cauldon or Tunstead.

- **There is spare capacity in the supply of GGBS.** The proposed GGBS remedy would be expected to increase the supply of cementitious materials in GB by up to 0.8Mt based upon LT's submission in Annex H to the PDR.
- **There will be a greater incentive to lower the price of GGBS to sell the additional capacity.** In order to sell the additional amounts, the price of GGBS will have to fall. As noted by the CC in Appendix D to the PDR, in a situation where GGBS is supplied by a non-cement producer there would be a greater incentive to reduce the price of GGBS because the new operator would not cannibalise some of its cement sales.
- **There is considerable scope for the price of GGBS to fall.** The CC's estimate of profitability in relation to GGBS is [x].
- **As the price of GGBS falls, so will the price of CEM I.** Since GGBS is a substitute for CEM I (the former can replace the latter to a considerable degree, e.g. 40-50% on average), a lower price of GGBS will reduce the price of CEM I. [x], i.e. an amount equal to the estimated overcharge based upon the CC's revised profitability analysis (which, as explained above, is a gross overestimate).
- **It is plausible that the GGBS remedy would cause a sufficient reduction in the cement price to remove the CC's estimated overcharge in cement.** In the same way that Hanson currently has a limited incentive to reduce the price of GGBS (given that this would cannibalise sales of cement), it also has a weakened incentive to reduce the price of cement (because it would cannibalise sales of GGBS). The latter "cost of cannibalisation" is substantially reduced as a result of the GGBS remedy. First, the impact of divesting grinding stations reduces the diversion ratio from Hanson cement to Hanson GGBS. Second, as the price of GGBS falls, the benefit of diverting sales from Hanson cement to Hanson GGBS also falls (since Hanson earns a lower margin on whatever GGBS it sells post divestment). Both factors work to incentivise Hanson to

lower the price of its cement. Under some assumptions, the incentive to lower price could be sufficient to reduce the cement price by £3 per tonne.¹⁹

4.2. Harmful impact of a divested cement plant

In contrast to the beneficial effects of the GGBS remedy, a cement plant divestment of either Cauldon or Tunstead may not have a marked impact on the price of cement.

- Cauldon and Tunstead cement plants are currently operated at full capacity; therefore, the new owner would not be likely to increase cement or cementitious supply (but may actually reduce supply in the event that it is, as might reasonably be expected of a stand-alone operator new to production on the UK market, less efficient than LT).
- We understand that LT would lose, inter alia, purchasing economies and some of the benefits of operating a larger network of plants. By the same token, the divested plant would operate less efficiently (compared to its position in the LT network), and face higher costs. For example, a single plant operator would face higher maintenance costs than a network operator because it would be less able to risk a plant breakdown and, accordingly, would need to increase spending on maintenance (and in turn incur longer kiln shutdown periods) in order to reduce the risk of breakdowns. Reduced resilience to breakdowns would have a direct impact on customers as a result of the new single plant entrant's reduced ability to ensure continuity of supply. The result is that a non-coordinated outcome would give rise to single cement plant operators producing less cement than a multi-plant operator on a like-for-like basis.
- Therefore, a cement plant divestment of either of LT's Tunstead or Cauldon plants would not result in increased cement output (since these plants are already operated at capacity), and this plant would be operated at higher cost, potentially leading to higher cement prices. This likelihood is even greater given that purchasing efficiencies would be lower for a single plant operator.²⁰
- In addition, and based upon LT's experience with acquiring Tarmac's (as was) Tunstead plant, single plant operators are less able to benchmark plant performance than network operators. LT expects that a plant divested to a new single plant entrant would be more likely to experience reduced plant operating KPIs of which kiln reliability factor and mean time between failures are two key parameters. LT submits that such

¹⁹ We can think of this in terms of an upward pricing pressure (UPP) framework as sometimes used in merger analysis (here, thinking of the divestment as a demerger). Suppose that Hanson divested two GGBS grinding stations out of the four that it currently owns. Suppose further that losing half of its GGBS production assets halved the diversion ratio from Hanson cement to Hanson GGBS. For sake of argument, suppose that the diversion ratio fell from 20% to 10%. Second, suppose that the price of GGBS fell by £10, such that the absolute margin over variable costs that Hanson earned on GGBS fell by £10. For sake of argument suppose that the absolute margin fell from £30 to £20. In this stylised example, the "cannibalisation cost" of lowering the price of cement that Hanson faces pre-divestment is £6 (20% times £30); however, after the divestment that "cannibalisation cost" falls to just £2 (10% times £20). If the pass through rate were 75% then the impact would be that Hanson should lower its price by £3.

²⁰ Furthermore, the following scale economies are enjoyed by network plant operators, and would therefore be lost to a single plant operator: (a) bulk purchasing of road and rail freight; (b) bulk purchasing of fuels and raw materials; (c) the ability to source a wide range of alternative fuels to reduce CO2 emissions and production costs; (d) joint research and development; (e) single management and administration; (f) sharing IT facilities; (g) supply chain and logistics optimisation; (h) optimised haulage such that customers are supplied from the nearest plant; and (i) flexibility in supplying customers as a result of having access to a rail network which enables deliveries on a nation-wide basis. See LT's submission of 31 July 2013 to the CC on the efficiencies of multi-plant operators.

factors were evident in the data for the Tunstead cement plant for the year prior to JV formation when it was operated as a single plant (reliability factor and mean time between failures were considerably below the Lafarge Group operating standards for a mastered and robust plant). Lower plant operating KPIs give rise to higher operating costs due to the need to use higher cost fuels for kiln start-up following a plant outage, as well as a reduced ability to use alternative fuels due to the need to achieve greater kiln stability in the first place.

- For example, following the integration of Tunstead into LT's network, LT installed a FMCR at Tunstead which controls emissions and allowed the plant to be operated at higher output and efficiency levels. LT submits that this improvement would not have occurred had Tunstead been operated by a single plant operator. Indeed, this is demonstrably the case as Tarmac (as was) did not initiate the improvement.
- While the CC notes that there could be efficiencies from operating a network of plants, (and therefore inefficiencies from LT divesting one of its plants to a single plant operator) the CC questions whether cost changes are passed on to consumers (paragraph 5.16). This is incorrect as a matter of theory and practice:
 - First, as any basic textbook on industrial economics would indicate, standard economic theory predicts that price is a function of demand and cost and, accordingly, where there are marginal cost savings due to the existence of a plant network, even a monopolist (i.e. a perfectly coordinating group) would pass on part of its cost savings onto consumers; by the same token, where marginal costs rise, higher costs would be passed on in the form of higher prices.
 - Second, in any event, cement prices fell sharply in 2009 from their peak in Q1 (caused by underlying variable cost increases) and have fallen in real terms since then (i.e. since the peak on cost inflation), which is entirely consistent with passing on benefits to consumers.
- LT estimates its own additional on-going costs of the divestment to be £[>]m (LT estimated that its own additional on-going costs would be £[>]m, the additional costs to a new entrant would be £[>]m and that the inefficiencies from being separate from LT's network – evidenced by cost reductions from bringing Tunstead into LT's network – were estimated to be £[>]m), compared to the CC's estimate of £[>]m.²¹ Even taking the CC's estimate of £[>]m, the on-going increment in costs is substantial, amounting to over £[>] per tonne of cement produced by LT in 2012.
- Finally, in theory, a divestment of either Cauldon or Tunstead might also create production symmetry between Lafarge Tarmac, Hanson and Cemex (whose production shares would become more similar). Economic theory indicates that increases in production symmetry may be more likely to facilitate coordination than increases in

²¹ See Table 1 of Appendix 8 to the PDR.

production asymmetry, especially where the asymmetry is between the smallest and largest firms in an alleged coordination group.²² Therefore, the CC's proposed divestment might *enhance* the scope for coordination.²³ (By contrast a divestment of a cement plant from Hanson or Cemex would increase the asymmetries in production between the alleged coordinating group.)

4.3. Summary

We conclude that the GGBS divestment may reduce the price of cement to such a degree that a cement plant divestment would be unnecessary and indeed potentially harmful given the upward price pressure caused as a result of increases in marginal costs.

5. The CC has no sound basis to conclude that the benefits of a divestment remedy outweigh the substantial costs.

This section incorporates the preceding points into an assessment of the costs and benefits of a divestment remedy. In order to come to a view on whether a divestment is likely to give rise to net benefits, we need to assess:

- The time period over which any relevant benefits and costs should be assessed, having regard to the need for consistency with the lives of the plants in question assumed in the CC's profitability assessment.
- The expected incremental costs of the divestment; and
- The expected incremental benefit of the divestment (taking account, inter alia, the possibility that the proposed divestment may not be necessary and/or may not be effective).

We find that when these important points are taken into consideration, a divestment of either Cauldon or Tunstead is unlikely to be proportionate; it would be likely to generate a net *disbenefit* overall.

5.1. The relevant time period for assessing net benefits

In this section we discuss the relevant time period for assessing net benefits. The CC has been inconsistent with respect to its assumption about net benefits and its assumption on asset lives. The CC has extended the net benefits of its remedy out to 30 years (i.e. to 2043) yet it has assumed that the asset lives of cement plants (with the exception of Tunstead, Rugby and

²² The CC would appear to acknowledge this risk in its PDR, see 6.21 and 6.22.

²³ As explained above, LT rejects entirely the CC's assertion that asymmetries increase the scope for coordination, most notably because the CC's approach has been inconsistent as regards its assessment of coordination in the Anglo American – Lafarge JV investigation (where the CC wished to increase LT's exposure to the external market) and the MIR (where the CC now considers that this exposure enhances the scope for coordination).

Padeswood) end well before 2043. The need for a remedy might fall away in the future, for example, in the event that the market structure was materially affected by the impact of several plant closures.

To ensure consistency with the CC's time period for assessing net benefits, we adjust asset lives of cement plants to be 70 years instead of 50 years so that cement plants that the CC assumes to be fully depreciated before 2043 are fully depreciated in only around 2043. In this case, we find that compared to a 10% WACC and on an after impairment basis returns compared to WACC are at most £[>] per tonne, but compared to an 11.5% WACC (i.e. the top end of the CC's WACC range) returns are not greater than the cost of capital.

5.2. Expected incremental costs

The CC supposes that the one-off costs of a divestment would be £10m in each of the first two years. Thereafter, the CC presumes on-going costs of £5m per year. As noted above, LT's own evidence is that based upon its experience of divesting the Hope cement plant that these costs are substantial *underestimates*. Specifically, LT estimated that its own additional on-going costs would be £[>]m, the additional costs to a new entrant would be £[>]m and that the inefficiencies from being separate from LT's network – evidenced by cost reductions from bringing Tunstead into LT's network – were estimated to be £[>]m).

5.3. Expected incremental benefits

In its treatment of the expected incremental benefits of a divestment remedy (see PDR, section 6), the CC has (in effect) proceeded on the basis that: (i) coordination exists now and would persist indefinitely and to the equivalent extent right up to 2043 absent divestment; (ii) coordination has a substantial impact on raising price and the other remedies proposed would (in isolation) have no impact in reducing the supposed price raising effect of the coordination; and (iii) the divestment remedy is critical to securing a complete elimination of the coordination and will secure such complete elimination. However, once those extreme assumptions are relaxed, it is clear that the CC has not demonstrated that it is likely to be beneficial to consumers for LT to divest a cement plant.

The following sections set out a number of reasons why any positive effects of a divestment remedy may well be very limited.

5.3.1. The divestment remedy may bring no benefit because there is no coordination

LT set out in detail a number of reasons why the CC's findings on coordination were not supported by observed market outcomes. The evidence included the following:

- When fairly assessed, the market outcomes considered by the CC do not support the CC's view that the cement market is coordinated. Market shares are demonstrably *not* stable; prices have fallen in real terms since their Q1 2009 peak (associated with the height of variable cost inflation); margin stability is straightforward to explain as a result

of unilateral cost saving measures, including the closure of inefficient plants; and switching among independents (when properly measured) is not low.

- The CC's profitability analysis is misconceived (as explained further above). When appropriately considered, the evidence demonstrates that cement suppliers in GB do not earn excessive profits.
- Further, the share growth of independent RMX producers (which is not what would be expected if this group were suffering harm as a result of inflated prices of cement) and the relative absence of customer concern would also suggest that prices for the supply of cement are not likely to be coordinated.
- In short, LT has presented a substantial body of evidence to suggest that coordination did not occur over the period 2007-2011; the CC must therefore take into account the possibility that its findings are not correct, namely that either coordination did not occur or that, if it did occur, it did not lead to material consumer detriment.

5.3.2. The divestment remedy may bring no benefit due to the strength of competition in 2013 and beyond

The preceding views are compounded when recent developments are considered, namely the key competitive constraint placed by HCM (as evidenced by LT's substantial losses in 2013 to HCM), the substantial degree of switching in 2013, the continued reduction in prices in real terms and the increased strength (and substantial spare capacity) held by Irish importer, CRH.

A broad range of industry players considers HCM to compete aggressively. LT provided switching evidence on this point in its response to PFs. Further several industry participants would appear to agree that HCM is an important competitor.

- [×].
- [×].
- [×].
- [×].
- [×].

In short, the CC appears to have ignored evidence on HCM (and downplayed the importance of CRH); however, the combined constraint of HCM and CRH may be sufficient constraints to undermine any coordination in 2013 or by the time any divestment remedy could take effect in [×] at the earliest.

5.3.3. The divestment remedy may be ineffective while GGBS remedy may be sufficient

As set out in section 4 above, the GGBS remedy may be sufficient to lower the price of grey cement.²⁴ Not only does the GGBS remedy free up a substantial amount of capacity to supply a close substitute to grey cement, creating an external constraint on any alleged coordinating group, it also impacts substantially on Hanson's structural position in the cementitious market, thereby potentially undermining internal stability in the alleged coordinating group. On the other hand, the CC's proposed divestment remedy may fail to increase output, succeeding only in increasing production costs.

5.3.4. Other divestment remedies, even if not sufficient, may remove a substantial degree of consumer detriment such that a cement plant divestment remedy has only a limited incremental benefit

The CC's analysis proceeds on the assumption that any coordination (and the supposed price rises that accompany it) is an 'all or nothing' affair. However, it is more plausible to consider that coordination (if it exists at all) and any effect of such coordination on prices is a matter of *degree* that might be, in large part or in whole, be undermined by the other proposed remedies.

Even if coordination existed (which LT refutes) and would only be partially undermined by the other remedies such that the cement plant divestment remedy were required to remove any remaining asserted consumer detriment, the beneficial impact of the cement plant divestment remedy would have to be reduced accordingly.

For example, the impact of the other remedies on weakening internal stability (e.g. reduced transparency) and weakening external stability (e.g. due to greater competition from GGBS) would mean that even if coordination remained it might be less effective than before.

Another example would be the case where, absent a divestment remedy, one of LT, Cemex or Hanson would leave the coordinating group giving rise to the benefits of having a larger non-coordinating group that the CC considers to be important – Hanson's incentives to coordinate, for example, might be reduced as a result of the impact on Hanson of the GGBS remedy. As discussed above, Hanson currently has a limited incentive to reduce the price of GGBS (given that this would cannibalise sales of cement), and Hanson also has a weakened incentive to reduce the price of cement (because it would cannibalise sales of GGBS). The latter "cost of cannibalisation" is substantially reduced as a result of the GGBS remedy: the divestiture of grinding stations reduces the diversion ratio from Hanson cement to Hanson GGBS, and the benefit from diverting sales from Hanson cement to Hanson GGBS also falls as the price of GGBS falls (since Hanson earns a lower margin on whatever GGBS it sells post divestment). Both factors work to incentivise Hanson to lower the price of its cement following the GGBS remedy. (See section 4.1 for further details).

²⁴ While the CC states that despite this, there is a "high risk" that coordination would remain unless the structural remedy was adopted (PDR 6.66), the CC also states that its GGBS remedy is likely to (i) reduce the price sustainable by a coordinating group in cement; and (ii) weaken internal stability by reducing the gains from coordination (see also paragraphs 3.286b-c and 6.9 which cites that the GGBS remedy would add "significantly to the increase in strategic uncertainty in the GB cement markets...", and 6.12).

5.3.5. The divestment remedy removes all detriment only in a very special case

Only in the special case that:(i) coordination exists; (ii) consumer detriment does arise from coordination; (iii) the constraints of HCM and CRH are ineffective; (iv) the divestment remedy would be fully effective; and (v) the other proposed remedies would be entirely ineffective, would it be sufficient to allocate the entire benefit of reducing consumer detriment 100% to the divestment of either Cauldon or Tunstead.

5.4. Estimated incremental benefit

In the table below we update the assessment of the incremental benefit of a divestment remedy to account for the scenarios discussed above; it becomes clear that the expected incremental benefit of a divestment of a cement plant is substantially smaller than the total amount of consumer detriment.²⁵ For example, if consumer detriment were estimated to be £D, the expected incremental benefit from a cement plant divestment might be just one quarter of that, i.e. £D/4, *before* being netted off against the costs of the divestment. So if the estimated consumer detriment were £10m per annum (i.e. the approximate estimate obtained if one leaves the CC’s analysis unchanged other than to correct the conceptual error that the CC has failed to make the asset lives of cement plants consistent with the time period the CC employs to estimate detriment), the expected incremental benefit would be £2.5m per annum and thus not nearly sufficient to offset even the CC’s estimated costs of the divestment (which, as noted above, are at least £5.0m per year).

Table 5: Estimated incremental benefit of remedies

Hypothetical probability of “Hypothetical case” occurring	Hypothetical Case	Incremental benefit as a % of maximum benefit possible	Benefit	Expected incremental benefit
16.7%	Coordination did not exist during the period 2007-2011	0%	0	0
16.7%	Coordination did exist but was not effective in raising price materially and/or coordination would be undermined / rendered ineffective post 2013 due to constraints from HCM and CRH	0%	0	0
16.7%	Coordination did exist and continues but the divestment remedy would not be effective in resolving coordination.	0%	0	0

²⁵ Consider an analogy. A business that incurs spends money to invest in a new product would not presume that the new product would certainly be profitable. Instead, the business would consider the possibility of different scenarios occurring. The business would assess a risk profile of possible outcomes rather than simply assuming the best outcome must surely occur. In the table below we apply this framework to the CC’s NPV calculation; we take the costs of the remedy as given (which they are, albeit that they may lie within an estimated range) but note that the benefits of the remedy may be high or low. While we acknowledge that we cannot place an exact value on each incremental benefit figure or the probability of each scenario occurring, we consider that the table nonetheless is informative in demonstrating the very considerable degree by which the CC is likely to have overstated the expected benefits of a divestment remedy.

16.7%	Coordination did exist and continues but would be undermined entirely by the non-divestment remedies even if the divestment remedy were effective.	0%	0	0
16.7%	Coordination did exist and continues and would be partially undermined by the non-divestment remedies and fully resolved by the divestment remedy (only in conjunction with the other remedies).	50%	£D/2	£D/12
16.7%	Coordination did exist and continues and would be resolved only by the divestment remedy, which would resolve it fully.	100%	£D	£D/6
100%	Total expected benefit			£D/4

Source: RBB. Note: LT remains firmly of the view there was no coordination over the period 2007-2011. The table is for illustrative purposes to indicate that even if (quod non) the CC had a more than 80% chance of being correct as regards its finding that coordination existed over the period 2007-2011, then that by no means would indicate that a divestment is required or would be proportionate.

5.5. Impact of adopting LT’s estimated costs

Moreover, if one simply takes the on-going costs of divestment to LT alone (as LT estimates) of £[><]m per annum (LT estimated that its own additional on-going costs would be £[><]m, the additional costs to a new entrant would be £[><]m and that the inefficiencies from being separate from LT’s network – evidenced by cost reductions from bringing Tunstead into LT’s network – were estimated to be £[><]m) then in order to generate a positive NPV and even assuming estimated consumer detriment of £10m per annum the CC would have to be almost certain that: (i) coordination exists and will continue to exist indefinitely; (ii) consumer detriment does arise from coordination and will continue indefinitely to cause detriment of at least £10m per annum; (iii) the new constraints of HCM and CRH are entirely ineffective and will continue to be entirely ineffective in reducing the consumer detriment; (iv) the divestment remedy would be fully effective to entirely eliminate the consumer detriment in the relatively short term; and (v) all of the other proposed remedies would be entirely ineffective on their own. The CC could not reasonably be so certain that the preceding cumulative conditions all applied.

Put another way, contrary to the assumption embedded in the CC’s NPV calculations annexed to the PDR, it cannot rationally be assumed that the only possible outcome is that the CC’s divestment remedy will eliminate *all* of any estimated total consumer detriment (whatever that may be) from the AEC within a relatively short period. To do so is to ignore the obvious (more plausible) alternative possibilities that (even assuming there is an AEC that produces measureable consumer detriment): (a) other remedies will themselves be enough to eliminate at least *part* of this detriment (and hence the *incremental* effect of the costly divestiture remedy is almost bound to be less than the *total* estimate consumer detriment) and (b) the divestiture remedy may not entirely eliminate any consumer detriment (or may do so considerably more slowly than the CC envisages).

Moreover, adopting the more realistic approach that cement asset plants have asset lives of 70 years rather than 50 years, and noting that this assumption is in line with the CC’s approach of

estimating consumer benefits over a 30 year period, estimated total consumer detriment (if it exists at all) is no more than approximately £[><]m per annum.

Once the £[><]m is evenly slightly adjusted downwards by appropriate discounts for the risk factors mentioned above, it becomes quite clear that a fair assessment of the likely incremental benefits of divestiture will be substantially less than even the CC's own (highly conservative and unjustified) estimate of just £5m costs. In other words, on all or almost all plausible scenarios of projected costs and projected benefits, the divestment remedy will give rise to costs substantially in excess of any benefits.

5.6. Conclusion: assessment of costs versus benefits

In summary, once we take into account the large number of important factors that we consider to have been overlooked by the CC, we find that the CC *cannot* reasonably conclude that the proposed divestment remedy of either Cauldon or Tunstead would generate incremental benefits in excess of incremental costs.

UK COMPETITION COMMISSION
MARKET INVESTIGATION INTO AGGREGATES, CEMENT
AND READY-MIX CONCRETE

Response to Provisional Findings on Remedies (published on 10 October 2013)

EXPERT REPORT OF PROFESSOR CHRIS HIGSON

I, **Professor Chris Higson**, of London Business School, Sussex Place, London NW1 4SA state as follows:

1. The facts stated in this expert report are within my own knowledge unless indicated otherwise. Where any information I rely on is not from or within my own knowledge, it is true to the best of my belief.
2. As outlined in my expert report of 24 June 2013, submitted in response to the Provisional Findings (published 1 May 2013), I am a professor of Accounting Practice at the London Business School. I have been employed by the London Business School since September 1986. I am qualified as a chartered accountant, a qualification that I gained in 1974 while working with Touche Ross, an accounting firm that is now known as Deloitte. I hold a BA in philosophy and economics and a MSc in Economics from University College London, the University of London, and a doctorate in finance from the London Business School. I was the Chair of the Accounting group at the London Business School from 1994 to 2000. My area of expertise is in financial performance and valuation, acquisitions, taxation and governance and regulation. I have authored and published over one hundred academic papers, cases and books in the area of measurement of financial

performance. My book, *Financial Statements: economic analysis and interpretation*, (2nd ed) published by Rivington, addresses the issues in this report in some detail and provides the basis for much of my analysis.

3. During my career I have advised or coached around 120 organisations on financial performance issues, including many of the world's leading industrial and financial companies. I am a member of the UK's Industrial Development Advisory Board within BIS,¹ of the panel of the Heseltine Regional Growth Fund, and of the investment committee of the Business Bank. Within BIS I developed a doctrine that combines best practice in social cost benefit analysis and private sector decision-making, and that is used to assess government industrial support.
4. I am and have never been employed by Lafarge Tarmac or Lafarge SA or Anglo American Plc, or any of their subsidiaries. I have no financial links or interests in Lafarge Tarmac, Lafarge SA or Anglo American Plc.
5. I have been instructed to review the Competition Commission's ("CC") approach to the measurement of profitability of the cement industry as set out in the CC's Provisional Decision on Remedies ("PDR"), published 10 October 2013, in its market investigation into the supply of aggregates, cement and ready-mix concrete ("RMX") in Great Britain ("GB"). In the PDR, the CC sets out its conclusions that certain remedies, including the divestment of a cement plant (either Tunstead or Cauldon) is required by Lafarge Tarmac in order to address the adverse effect on competition

¹ The Industrial Development Advisory Board advises ministers on applications from companies proposing to start capital investment projects in the Assisted Areas of England who have applied for regional selective assistance under the Grant for Business Investment Scheme or the Regional Growth Fund.

("AEC") that the CC has identified in the production and supply of bulk and bagged cement. This report contains my conclusions.

6. In order to produce my independent expert report dated 24 June 2013, I reviewed the Provisional Findings Report. I also reviewed the CC's notice of possible remedies published on 21 May 2013, in which the CC sets out its proposal for the possible divestment of a cement plant, together with other possible remedies, to remedy the AECs it provisionally identified. I have also reviewed other materials provided by Lafarge Tarmac. These include Lafarge Tarmac's submissions to the CC during the course of its market investigation into the production and supply of aggregates, cement and ready-mix concrete in Great Britain.
7. I also signed a set of undertakings agreed with the CC that permitted me to access and consider material disclosed by the CC through the data room, including the financial modelling carried out by the CC and the commentary of Professor Whittington.
8. I have also had the opportunity to review the CC's PDR and related annexes and materials. I set out in this report my concerns about the approach taken by the CC in the MIR towards calculating the profitability in the GB cement industry.

A. INTRODUCTION

9. The practice of comparing accounting return on capital employed to the cost of capital to infer excess returns is widely used, by companies and by capital market practitioners, as well as by regulators and competition authorities. Best practice involves an intense focus on the potential limitations of the data, rigorous sensitivity analysis, and benchmarking against external data wherever possible. Even then, it is very difficult, using company accounting data, to be confident that one has achieved a

balance sheet that is complete and is measured at opportunity cost. In consequence, practitioners generally understand that these judgements must have a broad confidence interval placed around them².

10. Even on its own terms, the excess return that CC calculate for the cement industry is, in my view, within that margin of error and does not offer a reasonable basis for inferring industry excess profitability. I will confess to being quite shocked by the CC's apparent determination to reach a particular conclusion, despite the fragility of the evidence, and given the Draconian remedies they are proposing.
11. In my expert report dated 24 June 2013 I identified some features of the CC's approach that would lead it to understate capital employed and thus to overstate measured ROCE, including the following:
 - (a) **Depreciation.** CC estimate the current cost of building the modern equivalent asset (MEA), but then 'depreciate' the MEA in a way that fails to capture the reality of modern business where asset lives are frequently extended indefinitely through maintenance and enhancement to embody technological change.
 - (b) **Intangibles.** CC systematically omit certain intangible assets that are necessary to the operation of a modern business – I called these 'organizational capital'.

² In places, the CC appears to acknowledge this, but then proceeds to ignore it. For example, Provisional Findings, Appendix 7.7, paras 123-124, "...We therefore consider that caution on this account should be exercised when interpreting individual firm ROCEs. This is because the loss in value we ascribe to a further year's use of the firm's assets, which in our modelling is solely a function of its age, may diverge from reality."

12. Because these two issues are so fundamental to the CC approach I reiterate them below. Ultimately, the appropriateness of the CC's depreciated MEA, and the impact of missing intangibles, are empirical matters. In my last expert report I produced evidence suggesting that if *either* of these factors were realistically accounted for, it would produce a return on capital employed measure that is within the CC's cost of capital range. However, in the PDR, the CC do not address either point; they appear to miss the depreciation point and they simply brush intangibles aside as insignificant³.
13. In my expert report I showed that, in principle, income needs to be measured comprehensively. In the current context this meant using as the base measure of income the CC 'full cost' measure that included impairment and carbon credits.⁴ Since income from carbon credits is not derived from the alleged coordinated behaviour, a measure that excludes carbon credits may then be of value when drawing inferences from the profitability assessment about whether or not coordination gave rise to excess profits. The CC's argumentation around impairment is, I believe, still confused and suggests using measures with and without impairment.
14. CC themselves admitted that, in the nature of these exercises, we need to see persistently high profits to draw conclusions about industry structure and uncompetitive behaviour [Provisional Findings, Appendix 4.1, para 4]. I argued that

³ This may be doctrinal. Neither the intangibles issue nor the depreciation issue is really addressed in CC's reference literature – Jeremy Edwards, John Kay and Colin Mayer, *The Economic Analysis of Accounting Profitability*, Oxford University Press, 1987; *Accounting for Economic Costs and Changing Prices: A Report to HM Treasury by an Advisory Group (The 'Byatt Report')*, 1986. These papers were written over 25 years ago, and business practice, and our understanding of it, have evolved considerably since then.

⁴ I understand that income from carbon credits is not derived from the alleged coordinated behaviour. So while I advocate the inclusion of carbon credits on the basis of the comprehensive income principle, I note that consideration of a measure that excludes carbon credits may nonetheless be of value when drawing inferences from the profitability assessment about whether or not coordination gave rise to excess profits.

the period 2007 to 2011 is probably too short for that and is probably too economically turbulent to form a reasonable basis for analysis.

15. In the PDR, the CC now describe this period as the deepest recession for (variously) up to 100 years. They therefore suggest, in several places in the report, that estimates of harm based on that period must significantly understate the actual harm suffered by customers. At the moment, these are simply assertions by CC, and are not empirically based, as far as I see. For these arguments about the cyclicity of return on capital employed to have weight would require CC to demonstrate a much deeper understanding of the way in which company financial behaviour, and accounting impairment, responds to business cycles.

B. DEPRECIATION

16. Concerning the CC's approach to depreciation, I will start by repeating what I said in my last expert report:

- (a) *“Accountants assume a stand-alone asset that is purchased, consumed ... through wear and tear over some expected and pre-determinable life, then replaced. ... Accounting depreciation is a rule of thumb that should be redundant when assets are being valued at deprival value with comprehensive income, in the context of a careful assessment of profitability. Nonetheless, the idea of accounting depreciation, and of an ‘appropriate rate’ of depreciation, retains a powerful hold in our thinking about asset valuation.”*

- (b) *“The reality of modern business is not well described by this accounting convention. Observably, in many categories of property, plant and equipment, companies both incorporate technological change and extend asset lives,*

perhaps indefinitely, through maintenance and refurbishment. These assets may even appreciate rather than depreciate.”

17. In the PDR, the CC deflects the depreciation debate by staging it as a contest between reducing balance and straight-line depreciation. Whittington takes the same line. The CC had initially used a 3.5% reducing balance depreciation rate, arguing that this was a conservatively slow rate of depreciation but with the attraction of the soft landing given by the reducing balance schedule. The CC now switches to straight-line, arguing that it better reflects the profile of financing costs that are important for a long-lived asset.
18. This reducing balance/straight-line discussion misses the point. The question is whether *either* of these depreciation schedules yield proxy asset measures that bear any resemblance to the current value of the capital stock in the world of continuous enhancement that I describe above.
19. Obliging, the CC paraphrases my concern as follows “[*Higson says that*] *if an approach such as depreciated MEA were to be used, then these would need to be sense checked against the facts of the case – against transaction prices, where they exist and against practitioners’ knowledge of the economics of a particular [asset] class.*” The CC responds that [PDR, Appendix 1, paragraph 14] “*it is not feasible for us to undertake asset-specific valuations for each of the ten GB cement plants at each balance sheet date to perform this analysis.*” It then continues, in a way that signals its determination to miss the point or at least to obscure the point: “*It is also not feasible to develop asset specific depreciation profiles which involves forecasting, among other things, the impact of future new technology and the impact of changes in the future relative prices of inputs used in the cement production process,...*”

20. The task that the CC describes in paragraph 14 would indeed be onerous. However, the issue under discussion is different. The CC is conducting an historical review of profitability. The question is a simple empirical one – whether the CC’s depreciated MEA reliably proxies the current opportunity cost of the capital stock. This is a fundamental question that it cannot duck.
21. In my last expert report I provided strong evidence that depreciated MEA significantly understates the opportunity cost of the capital stock for old cement assets:
- (a) The economic life of a cement works reflects the longevity of the raw materials reserves to which it is adjacent rather than the physical life of the plant itself. Estimates from Lafarge Tarmac suggests that, in the presence of favourable reserves, plant lives can and will be extended well beyond 50 years.
 - (b) Plant efficiency appears to have little direct relationship with plant age in this industry. Using plant ages as at 1 January 2007, evidence presented to CC suggested that Tarmac Tunstead (3 years) was similar in operating efficiency to Hope (37 years), while Lafarge Cauldon (22 years) was significantly more efficient than either. This evidence appeared to be confirmed by the CC’s own analysis of the cost structures of cement plants, presented in Figure 12 of Appendix 6.5 to the Provisional Findings.
 - (c) A 7 January 2013 valuation of four cement plants conducted for Lafarge by KPMG also contains convincing evidence of the lack of connection between kiln age and plant value, and of the resulting undervaluation produced by a depreciated MEA metric. Whilst for relatively young plant, the CC valuation

approximates the independently-assessed fair value, on a price adjusted basis, for other plant it significantly undermeasures value in a way that is essentially linear with age.

22. I would have expected the CC, as a matter of fundamental professionalism, to be collating this evidence in order to empirically test their depreciated MEA valuation rule. It has not done so.
23. The CC's revised profitability analysis, as contained in the PDR, contains revised estimates for the MEA of cement plants, reflecting both the CC's new approach to depreciating assets and the inclusion of certain additional investments undertaken by cement producers. The CC's revised profitability analysis assigns a value of £[>]m to the Hope cement works at the end of 2012. I note this is an order of magnitude lower than the apparently accepted estimated transaction price for the Hope plant of £[>]m at the beginning of 2013, based upon EBITDA multiples (which I identified in my previous Expert Report, paragraph 52).
24. Adding to the CC's revised Hope MEA valuation in 2012 the £[>]m of additional investment expenditure undertaken at Hope, the adjusted value at the end of 2012 in the CC's revised profitability analysis is therefore £[>]m.⁵ However, this is still very substantially lower than the benchmark transaction value of £[>]m. This alone provides a clear empirical indication that the asset life assumed by the CC is implausible and that the CC's revised analysis still fails to capture the reality in which asset lives are frequently extended through maintenance and enhancement.

⁵ Approximately £[>]m when adjusted for inflation.

25. Moreover, when assuming asset lives are 70 years instead of 50 years Hope's adjusted MEA value is approximately £[><]m.⁶ An asset life of 70 years therefore represents a more realistic assumption which gives rise to asset values that are consistent with the available evidence by contrast with a 50 year asset life assumption.

C. INTANGIBLES

26. The CC uses deprival value principles in its measurement of return on capital employed. The question is '*what would it cost to reproduce the business under review*'. In the modern world, the answer to this question will involve the cost of intangibles such as '*organizational capital*' that are not recognized in a GAAP balance sheet. So while it is tempting for regulators and competition authorities to take a narrow, tangible asset-level, view of replacement cost, this is wrong in principle.
27. The cost to investors of reproducing or recreating a functioning business will include investment in working capital – inventory, debtors, creditors – and in tangible fixed assets. It will include the cost of building the organizational capital needed to operate such a business in the modern world – building customer recognition and relationships, building supplier relationships, building a skilled workforce, installing IT systems, and so forth.
28. The CC effectively excludes all intangibles from consideration, using criteria that, whilst opaque in their wording, are clearly grounded in the GAAP recognition criteria. As I explained in some detail in my last expert report, the GAAP approach was

⁶ Comparable to £[><] million once adjusted for inflation.

designed for completely different purpose and will give a downwardly biased answer to the deprival value question ‘what would it cost to reproduce this entity?’

29. Whittington, in his comments, also echoes the GAAP asset recognition criteria and the wording of the original CC policy authored by Sir Bryan Carsberg. He says that, based on his own belief that intangibles are unlikely to be important in the cement industry, “*Hence, the rather stern approach of the CC, excluding intangibles, is substantially justified.*”
30. Whittington then effectively goes on to acknowledge the point I made, “*However, the respondent do, justifiably, point out that various start-up costs create intangible assets. It is obviously the case that the new entrant would have to assemble and train a workforce, devise working practices, and possibly have a commissioning period when plant is below full capacity (I do not know whether this is built in to the estimates of plant cost).*”
31. Nonetheless, Whittington remains loyal in his defence of the CC position, and he concludes, “*I **broadly** [my emphasis] support the CC approach to intangibles, especially as it is an area where measurement is extremely unreliable.*” He reconciles the two positions by some rather loose argumentation which implies that recognising organisational capital would not be material for either the numerator nor the denominator of return on capital measure, that is, for income measurement or for net assets⁷. In fact, it is demonstrable that under weak assumptions GAAP’s conservative

⁷ He says, “*This should not have much effect on the profit and loss account because the absence of depreciation of intangibles is compensated substantially by renewals (recruitment of new staff, upgrading of computer systems etc.) which are charged to profit or loss but would not be so under the capitalisation approach ... It **may** [my emphasis] lead to a lower net assets figure in the balance sheet (and therefore a higher rate of profit) but I doubt if its value there would be material, especially as some may already be included in tangible asset values (e.g. commissioning costs in plant values, software costs in computer systems).*”

expensing of intangibles expenditures leads to an upward bias in mid measured return on capital employed.


32. Both the CC, and Whittington, simply dismiss accounting goodwill as containing information on intangibles. In reality, accounting goodwill potentially has three components: overpayment for the acquired businesses; the capitalised value of excess profits or market power; and the cost of non-identified intangible assets. In my last expert report, I used Lafarge's data – convincingly in my view – to demonstrate the decomposition of goodwill into these elements.

(a) In 2006 and 2007 Lafarge carried £[x]m of goodwill, which was impaired to £[x]m. I assume that this effectively impaired the overpayment element of accounting goodwill. The CC had provisionally estimated industry 'harm' totalling £180m from alleged coordination over the period 2007-2011, *i.e.*, £36m per year, which as a perpetuity, using the CC's WACC of 10%, suggests a capitalised value of £360m. Lafarge's maximum share of GB clinker production over 2007-2011 was [x]%. On the conservative assumption that Lafarge's share of the £360m worth of harm was [x]%, this suggests an estimated capitalised value of Lafarge's 'market power' of £[x]m. This represents between [x]% and [x]% of Lafarge's goodwill in each year over 2007-2011. Assuming that just [x]% of Lafarge's goodwill in each of the years 2007-2011 was the cost of non-identified intangible assets that do not relate to excess profits or market power, and adding this component of Lafarge's goodwill into the *industry* asset base, reduced industry profitability to 10.2% over 2007-2011 on a conservative, continuing cost of supply basis. This equated to the CC's central WACC estimate.

- (b) Applying the same methodology to the CC's revised profitability analysis as contained in the PDR results in ROCE on an after impairment basis (which is the CC's preferred measure) falling from 12.4% to 9.7%, which is below the CC's central WACC estimate of 10%.

Statement of Truth

I confirm that I have made clear which facts and matters referred to in this report are within my own knowledge and which are not. Those that are within my own knowledge I confirm to be true. The opinions I have expressed represent my true and complete professional opinions on the matters to which they refer.

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PROFESSOR CHRISTOPHER JOHN HIGSON

Dated this 8th day of November, 2013.