Prepared For:
BSkyB

Sky’s “Incentives” to Foreclose Competition in the UK Pay TV Industry
A response to the comments of LECG and NERA

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EXECUTIVE SUMMARY

1) We have been asked by BSkyB (“Sky”) to respond to comments put forward to Ofcom by LECG and NERA (on behalf of the “Complainants”, and of BT respectively) on an economic report by CRA and Prof. John Van Reenen (“the first CRA report”) dated 29 October 2007 (“Sky’s “Incentives” to Foreclose Competition in the UK Pay TV Industry”), that in turn responded to a complaint that Sky has incentives to foreclose competition in the UK pay-TV market.¹

2) This note does not present new arguments, as we have developed our initial economic analysis in a subsequent report (“the second CRA report”) submitted to Ofcom on 4 April 2008 (“Vertical Integration and Short Run/Long Run Issues”). We seek instead here to address LECG’s and NERA’s comments, where our previous work appears to have been misinterpreted or mischaracterised.

3) We conclude that:

   (a) LECG’s comments are particularly ill-founded and misconceived, repeatedly suggesting flaws in our logic or economic analysis that only arise as a result of their consistent failure to represent our arguments with fairness and accuracy, or their acceptance as fact of the Complainants’ allegations. LECG either misunderstand or misrepresent our arguments at several places.

   (b) NERA’s comments are less tendentious, and in a number of places they contain good points, although the criticisms they level at our vertical arithmetic analysis are incorrect.

4) Our main conclusions are therefore unaffected by the criticisms levelled by LECG and NERA. The “vicious circle” theory put forward in the Complaint is not well founded, and cannot be used as a robust basis for concluding that Sky has significant incentives to foreclose competing pay-TV operators. With LECG’s admission that the argument was not in fact anything approaching “a theory”, and in spite of all ex post efforts at improving it, the “vicious circle” theory remains entirely insufficient as a basis for concluding that Sky is materially engaging in foreclosure.

LECG misrepresent our objections to the “vicious circle”

5) LECG describe our objections as based on an “incomplete” assessment: we entirely missed the “vicious circle” argument because we neglected the crucial interaction between upstream and downstream markets, and this made our argument “circular”.

¹ For the purposes of this report we proceed on the basis that the supply of pay TV services comprises a relevant product market in a competition policy sense. This should not be taken to mean that we have considered this question, and we accept that there is such a relevant market.
6) This is wholly misleading. In evaluating the “vicious circle” theory, we have looked at its individual components separately for clarity of exposition. We have considered first whether a vertically integrated firm such as Sky would have static incentives to foreclose downstream competitors by withholding premium content. At no point have we indicated however that this static analysis is conclusive or dispositive on the issue of foreclosure. We have, instead, discussed extensively the claim that Sky has incentives to foreclose downstream rivals because of the advantage that this confers in bidding for premium rights – a key “feedback mechanism” in the Complainants’ “vicious circle”. Our position is that such advantages are likely to be fairly small, unless retail switching costs are high overall (for which we have seen no evidence), and moreover bidding incentives tend to be equalised by the prospect of resale. We concluded that in the absence of any evidence that the upstream effect is material, then the total incentive to foreclose downstream remains small.

7) This was the essence of our objection to the “vicious circle”. LECG (and the Complainants) have sought to overcome the well-known limitations of a static foreclosure story (which we freely acknowledged) by introducing a couple of further steps, but have not established or quantified the scale of the advantage allegedly derived by Sky in bidding for rights from its downstream size, nor the extent to which this alleged increased benefit materially changes the trade-off between costs and benefits of foreclosure. Conversely, we have explained at length why we believe these effects to be limited, and therefore the impact on the incentive to foreclose also to be limited. The Complainants and LECG are free to make speculative claims, but caution must be exercised in taking them on board in the face of alternative arguments that go in an offsetting direction.

8) We also note LECG’s statement that “the Parties do not consider the “vicious circle” to be a theoretical construct…but rather a market reality...”. Foreclosure allegations cannot be deemed established just because one side asserts that they are “a market reality”, and such assertions cannot replace evidence being put forward in a manner consistent with the recognised standards of economic debate. LECG produce no evidence supporting the predictions of their theory – e.g. that Sky has indeed benefited from increasingly weaker opposition when bidding for premium content, for instance in the form of lower prices. LECG merely refers to allegations made by the Complainants that we are not able to verify and for which no supporting evidence is provided.

LECG’s account of our analysis of Sky’s incentives is misleading

9) LECG repeatedly represent us as denying that Sky has any incentive to foreclose downstream competitors based only on our static analysis. Again this is a highly misleading account of our position. We have not taken an absolute, dogmatic position of principle: rather we argued that – based on economic analysis – we do not see reasons for the foreclosure incentives to be strong, given all the factors that go in the opposite direction. Outlining a possible “vicious circle” theory does not represent a sufficient basis for a regulator to conclude there are justified, serious concerns.

10) Our vertical arithmetic analysis was by no means the sole basis for our overall conclusions. We explicitly considered whether the results of the static analysis may be
overturned by further "dynamic" benefits that might arise from foreclosure. Having done so, we concluded that the Complainants have not shown that the alleged dynamic benefits are established enough, and large enough, to overturn the implications of the static analysis.

11) In a similar exercise in obfuscation, LECG argue that we have ignored the extensive literature on vertical foreclosure, and lecture the reader on "Chicago" and "post Chicago" schools. Again this is misleading: we have considered a number of theories and explained why these are inappropriate. For others, we have observed that it is not clear how they fit with the "vicious circle" argument, nor how the theoretical possibility of dynamic foreclosure can justify material concerns in the circumstances under review. A regulator would have to decide whether the features of any model fit the specific circumstances of the case, and the effects are large enough to justify intervention.

LECG’s claims on “downstream advantages” derived from “upstream leadership”

12) The first “feedback effect” that according to LECG supports the “vicious circle” theory is the alleged “fact” that “upstream leadership confers downstream advantages”. However LECG offer nothing new or substantive in support of this assertion. LECG make a number of statements that appear to be based only on the Complainants’ unproven allegations; and moreover amount to a claim that Sky is in contravention of the margin squeeze test set out by the OFT in its 2002 ruling – which we find implausible.

LECG’s claims on “upstream advantages” derived from “downstream leadership”

13) The second “feedback effect” implied by the “vicious circle” theory is allegedly that Sky’s existing base of retail customers allows it to outbid its competitors in the race for content. We replied that while there may be some advantage in winning content arising from a large base of customers, we see nothing to indicate this is in fact significant; and even if some such advantage existed, it depended on Sky’s incumbency rather than on vertical integration. LECG’s response to this point has no force.

14) On the role of vertical integration, LECG only has to say that a vertically integrated firm “knows more” about downstream consumers when bidding for rights (it has their address) and moreover it is in charge of determining the retail packaging and pricing for its channels – unlike a non-integrated broadcaster. It is hard to know what to make of this. The argument that “knowing more” about your downstream customers can provide some competitive advantage is not new, but no evidence is provided here on how important such an effect might be in practice for a foreclosure strategy; moreover, LECG ignore operational and legal constraints that exist for instance on the “migration” of customers. Other than this, LECG’s arguments on the role of vertical integration are just a restatement of the conclusions they would like Ofcom to reach. Nothing in LECG’s response amounts to robust economic evidence that vertical integration is a key component of the “feedback effect” LECG claim in support of their “vicious circle” theory. The advantages that they allege Sky to have depend more on Sky’s incumbency than its vertical integration.
15) We also explained why in our view both the sign and order of magnitude of any incumbency/size effects are not established. The Complaint had argued that, when bidding for content, even small advantages can have very large effects, and referred to economic work showing that small asymmetries can be magnified in auctions. The practical relevance of this argument seemed dubious to us, inter alia because the result depends entirely on the form of the auction. LECG’s response is to draw a spurious distinction between “toehold effects”, and “the existence of asymmetries between bidders”, alleging their case is about the latter and not the former. But toeholds are just one special form of asymmetry. What we are saying is that if we take theory literally, then any small asymmetry would pre-determine the winner of an auction. In market reality, to use LECG’s expression, matters are unlikely to be that clear-cut and bidders with close enough valuations stand a chance of winning. Small asymmetries are thus unlikely to ensure the perennial triumph of one bidding party unless there is something in the auction mechanism that compounds the importance of small differences in valuations. That is where the type of auction mechanism matters, as some auctions are much more sensitive to the “winner’s curse” than others. LECG does not recognise any of this, and merely argues that “asymmetries” are sufficient to determine the outcome of an auction.

16) We further argued that Sky would be unlikely to refuse to purchase channels from third-party suppliers if it lost the content race, and therefore again it is not clear that its bidding advantages are large. LECG claim that Sky might refuse to licence DTH rights to channels from a rival who had won rights just to establish a “reputation for refusing to purchase” in future. But this is mere speculation – as far from a credible basis for a competition concern as could be conceived. Furthermore, the open nature of the DTH platform means that all Sky’s subscribers are accessible by third parties, which undermines the proposition that Sky might derive significant bidding advantages from having a large subscriber base in the first place.

17) Finally, LECG argue that a large portfolio of content facilitates the incumbent in bidding for rights because consumers have a preference for programme variety, so that the race for content “B” will always be won by the bidder who already controls content “A”. While we agree that consumers have a preference for variety, this argument is simplistic, overlooking in particular the opportunities that heterogeneity in consumer preferences creates for potential entrants.

18) LECG conclude with a list of “errors and inconsistencies” in the first CRA report. Most are repeats of points already made in the rest of the document. In addition, LECG make the pedantic point that while we denied there can be significant network effects in the pay-TV market, we in fact acknowledged that such effects exist by describing the pay-TV market as “two-sided”, and referring to “platforms”. This is pure semantics. First, we refer to “platform” competition because the term “platform” has long been used to designate a specific broadcasting technology/infrastructure. The use of the word does not therefore imply that we automatically subscribe to the view that these “technical” platforms are also “platforms” in the specific sense defined in the literature on multi-sided markets. Secondly, and more importantly, the fact that TV markets can
indeed be described as “multi-sided” does not mean that they display the type of indirect network effects that LECG need to turn its “vicious circle” argument into a proper model of dynamic foreclosure.

**Conclusions on LECG**

19) The criticisms raised by LECG are disingenuous and misrepresent our position. LECG’s defence of the “vicious circle” theory does not add substance to the debate: for all LECG’s efforts to present Sky’s incentives to foreclose rivals as self-evident, we continue to believe that there are well-grounded reasons to doubt the sign and order of magnitude of the effects. Dynamic foreclosure allegations are easy to make, but they need to be stated with economic rigour – not based around suggestive language on “mutually reinforcing upstream and downstream bottlenecks”. As put forward by the Complainants, the “vicious circle” was not a rigorously articulated theory of harm. Robust conclusions cannot be drawn on Sky’s incentives based on the “vicious circle” theory, even as augmented by LECG’s efforts at ex post rationalisation.

**NERA’s critique of our vertical arithmetic analysis is incorrect**

20) NERA allege that the “vertical arithmetic” presented in CRA’s first report is logically flawed, and, when properly interpreted, the results obtained by CRA imply both that Sky is already engaged in foreclosure, and that the extent of this foreclosure cannot be justified based on traditional “static” incentives alone. As we fully acknowledged, “vertical arithmetic” is a crude instrument. Nevertheless, it is a commonly used “first cut” to get a feel for the “orders of magnitude” involved. We cannot accept, however, that NERA’s interpretation of the results from this vertical arithmetic is correct. The results obtained do not show that Sky is already involved in any foreclosure, neither do they support the claim that there must be significant “dynamic” incentives to foreclose.

21) In NERA’s approach, “foreclosure” occurs as soon as a vertically integrated firm charges a downstream rival a higher price than an independent upstream firm would, to take into account the competitive benefits that “raising rivals’ costs” brings to its downstream arm. The “level” of foreclosure is then the difference between the price charged, and what the profit-maximising price would be if content were sold by a non-integrated upstream firm. NERA’s first point (the “cellophane fallacy”) is that if the downstream rivals already pay the profit-maximising price to the vertically integrated supplier, it is not surprising that further foreclosure (i.e. a price increase) would be unprofitable. Thus, if one starts from a situation where foreclosure already occurs and asks whether (further) foreclosure would be desirable, the answer can only be negative. This is true, but it simply underlines the well-known limitations of vertical arithmetic (that we acknowledged). Given existing prices, the exercise provides an idea of how many customers would need to switch platform for complete foreclosure to be uneconomical. If, as was the case, one finds that the “diversion ratio” required to make full foreclosure profitable is unrealistically high, then complete foreclosure is unlikely to be profitable. NERA’s argument simply amounts to saying that this point can be granted without the need for computations: if Sky supplies its premium channel to a rival platform then, by revealed preference, it would not find it profitable to completely withdraw the channel from that platform.
22) NERA further observe that if one started from the (static) profit-maximising price, a small increase should not affect profits much. Hence the fact that we find significantly negative effects from the vertical arithmetic must mean that we are starting from a price already significantly higher than the static profit-maximising level. That is, conclude NERA, Sky must be already charging a higher price than it would choose if it only had the traditional “static” incentives to foreclose; and in turn this suggests there must be an additional incentive to foreclose – e.g. a dynamic incentive.

23) We do not accept NERA’s interpretation for two reasons. First, even when “foreclosure” is interpreted as a small price increase, all that NERA’s argument establishes is that further foreclosure is not profitable. In other words, finding that a small price increase would lead to a small loss simply shows that the vertically integrated firm has already done all of the “foreclosing” that it is profitable to do. It does not establish that any amount of “foreclosing” was profitable in the first place. Secondly, our exercise did not consider a small change in price, but asked instead whether the vertically integrated firm would find it profitable to withhold premium content from a downstream rival. Our exercise implies in effect a discrete and large price increase from the level that maximises the vertically integrated firm’s profits to the price that would eliminate the downstream rivals altogether. We show that a sizeable loss can arise from complete foreclosure even without “dynamic” incentives, hence interpreting the vertical arithmetic results as demonstrating the existence of dynamic foreclosure is unwarranted.
1. INTRODUCTION

24) This paper responds to a set of comments put forward to Ofcom by LECG and NERA (on behalf of the “Complainants” as a group, and of BT respectively) on an economic report by CRA and Prof. John Van Reenen (thereinafter, “the first CRA report”) dated 29 October 2007. The first CRA report (“Sky’s “Incentives” to Foreclose Competition in the UK Pay TV Industry”) was in turn a response to a complaint put forward by BT, Virgin Media, Setanta and Top-Up TV, alleging that BSkyB (“Sky”) has incentives to foreclose competition in the UK pay-TV market (“Submission to Ofcom on the need for a market investigation into the pay TV industry”).

25) The purpose of this note is not to present new arguments. We have already amplified and expanded on our initial economic analysis in a subsequent report (“the second CRA report”) submitted to Ofcom on 4 April 2008 (“Vertical Integration and Short Run/Long Run Issues”). The purpose of this note is to address instead a number of comments made by LECG and NERA on our first report, and minimise the scope for further misunderstandings by clarifying aspects of our previous work that have been misinterpreted or mischaracterised.

26) We start with our response to LECG in Section 2 below, followed by a response to NERA in Section 3. As we explain below, we believe that once our arguments are properly understood, our conclusions are unaffected by the criticisms levelled by LECG and NERA.

2. RESPONSE TO LECG’S COMMENTS

27) LECG react strongly to the critique of the “vicious circle” theory put forward in the first CRA report, and claim all of CRA’s criticisms of the “vicious circle” are unfounded. First, LECG claim that the “circle” meets all of the conditions stated in the first CRA report for a dynamic leveraging story to be at least prima facie credible (Section 2.1, pp. 4-8 of their report). Secondly, LECG claim that CRA failed to recognise the interaction between upstream and downstream markets and therefore “ignored” the dynamic nature of the “vicious circle”, focusing instead on an irrelevant and “conceptually flawed” static analysis (Section 2.2, pp. 8-9, and further Section 4 of their report). And finally, LECG claim that the reasons we gave for questioning the size of the alleged “feedback effects”, and the extent to which they depend on vertical integration, are unjustified (Section 2.3, pp. 9-15 of their report). Based on this, LECG declare CRA’s conclusions (that “Sky has no incentive to foreclose downstream competition…and there is no risk of upstream foreclosure”, p.3 of the first CRA report) unsound and unjustified.

28) All of LECG’s comments are based on a misunderstanding and/or a misrepresentation of our arguments. LECG’s paper provides a caricature of our position.

a) The Complaint did not contain anything resembling a coherent economic dynamic theory of foreclosure. Dynamic foreclosure allegations are easy to make when
static arguments fail, and therefore need to be stated with economic rigour – not based around suggestive language on “mutually reinforcing upstream and downstream bottlenecks”. As put forward by the Complainants, the “vicious circle” was not a rigorously articulated theory of harm, but a “soft” claim which can be no substitute for coherent economic analysis. Yet in their report, which provides an opportunity for *ex post* elaboration of the economic theory that underpins the “vicious circle” construct, LECG do not do much more than re-state what was in the original Complaint. Our view remains that “telling stories” about foreclosure is always possible, but to demonstrate that foreclosure incentives are credible, and their size is large, is a much taller order. Re-stating the same arguments over and over again does not amount to improving their credibility.

b) It is highly misleading for LECG to argue repeatedly that our analysis was “incomplete” because we overlooked the dynamic nature of the “vicious circle”, and confined ourselves to an assessment of static incentives. We explicitly looked at static and dynamic incentives as separate analytical steps in an effort to improve clarity. But we explained extensively how in our view the Complaint does not make a robust case for dynamic leveraging. Where LECG take issue with our analysis of “feedback effects”, it is indeed directly referring to some of our reservations on the dynamic leveraging story. “Feedback effects” would have no place in a static approach, so it is entirely unclear to us how LECG can argue we disregarded the dynamic dimension.

c) LECG also overstate our conclusions in a way that suggests we have made blanket, categorical statements that Sky does not have any incentives to foreclose. This is not a fair characterisation of our position. Rather, both the first and the second CRA reports presented arguments which, in our opinion, strongly suggest that foreclosure would not be profitable for Sky and therefore the incentives to foreclose are at most small. We have not taken an absolute, dogmatic position of principle: rather we argued that – based on economic analysis – we do not see reasons for the foreclosure incentives to be strong, given all the factors that go in the opposite direction. Outlining a possible “vicious circle” theory does not represent a sufficient basis for a regulator to conclude there are justified, serious concerns.

29) Above all it must be borne in mind that our first report was a response to theories that were put forward in the Complaint. In our view it is undeniable that these were not clearly articulated propositions based on a rigorous application of economic theory to observable facts. On the contrary, the allegations drew very loosely on economic theory, and a substantial part of our task was to attempt to tease out more clearly the potential economic arguments that the Complainants were making. For example, our first report addressed static foreclosure arguments because it appeared to us that significant parts of the Complaint alleged foreclosure in a static context (as well as making vague references to dynamic issues).

30) Accordingly, we believe that it is entirely misconceived to criticise us – as LECG do — for not addressing each and every potential permutation of the theories being put forward in the Complaint. Had the Complaint been clearer in specifying its allegations,
then we would have been able to better focus our first report. In our view, it is significant that (a) the concepts put forward by the Complainants were not clearly articulated, (b) LECG have chosen simply to assert that they were well specified and to attack our report for claiming that they were not well specified, and (c) most importantly, LECG fail to take the opportunity in their report to add any further clarity or rigour to the Complaint’s theories.

31) We would hope that the second CRA report, which responded to more clearly articulated ideas examined in Ofcom’s consultation document, and expanded on our first report, has now clarified a number of misunderstandings and misrepresentations of our position on the part of LECG. Nonetheless we go systematically through LECG’s comments, below, and further seek to clarify our arguments. We confine ourselves here to matters of economic analysis.2

32) Before doing so, we note LECG’s statement that “the Parties do not consider the “vicious circle” to be a theoretical construct…but rather a market reality…” (top of page 4). Our view is that the whole point of economic analysis is precisely to help sort out conflicting claims as to what “market reality” really is (as opposing sides in a dispute may well have a different perception of “market reality”). To do so successfully, the arguments being made must correspond to coherent, recognised “theoretical constructs”. It is not clear to us what point LECG is trying to make here: surely, foreclosure allegations cannot be deemed established just because one side claims foreclosure is “a market reality”. The Parties should prove their allegations in a manner consistent with the recognised standards of economic debate.

2.1. LECG MISREPRESENT OUR OBJECTIONS TO THE VICIOUS CIRCLE

33) LECG write at several places that CRA entirely missed their “vicious circle” argument because we neglected to consider the crucial interaction between upstream and downstream markets, and this made our argument “circular”. In support of the claim that our analysis is thus “incomplete”, LECG claim: “First, [CRA] analyse Sky’s incentives for upstream and downstream foreclosure under the assumption that the vicious circle does not work – that is, ignoring the dynamic benefits of a foreclosure strategy. Then, [CRA] argues that the vicious circle does not work because their static analysis of Sky’s incentives, which is based on the assumption that the vicious circle does not work, indicates that Sky has no “obvious” incentives to foreclose competitors. In other words, [CRA] claim that the vicious circle does not arise because their analysis shows that Sky has no incentive to foreclose when the vicious circle is not in operation” (p. 9, emphasis in the original).

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2 We note here that LECG adopt as fact the full range of allegations about Sky’s behaviour made by the Complainants – for example that Sky “imposes excessive wholesale prices” for its channels, that it selectively distributes those channels, and that Ofcom’s oversight of Sky’s platform charges is ineffective. We do not address these allegations here, as LECG provide no evidence for them.
34) This is wholly misleading. In evaluating the "vicious circle" theory, in the interest of clarity in the analysis, we have looked at its individual components. But at no point have we indicated that the static analysis is either conclusive, or dispositive on the issue of foreclosure. We have indeed spent considerable time discussing the lack of convincing “feedback effects” – a necessary requirement for a dynamic leveraging story – in the Complaint. It would not make sense for us to discuss such issues other than in the context of evaluating a dynamic leveraging story.

35) While this is not the place to re-state our own arguments in detail, we briefly summarise our objections to the “vicious circle” below in order to further clarify our position.

36) As a first step in our analysis, we have considered whether a vertically integrated firm such as Sky can be concluded to have a static incentive to foreclose downstream competitors by withholding premium content. This seems like a reasonable place to start for any analysis of foreclosure. In line with the relevant literature we pointed out that, in the presence of sufficiently flexible contracts, no such incentive exists. As further clarified in our second report, this is because wholesale contracts that are sufficiently flexible can be used to reduce the harshness of downstream competition, and reap the benefits of downstream differentiation. Of course, if for some reason the vertically integrated firm could not implement such efficient contracts, it might find it preferable not to resell the premium content acquired upstream to downstream rivals whose product would be a very close substitute to its own downstream product. This is fundamentally why resale of identical premium content to rivals operating on the same platform tends not to be observed. On the other hand, there are strong incentives to “access” consumers who have a preference for (or are locked into) another platform. On balance we therefore believe that, when looking at traditional static incentives, the likelihood of downstream foreclosure across platforms is very low.

37) We have then considered the claim that notwithstanding the clear lack of static incentives, nonetheless Sky has incentives to foreclose downstream rivals because of the advantage that this confers in bidding for premium rights (which in turn preserves Sky's alleged downstream dominance). A key component of the "vicious circle" is thus the claim that a "downstream advantage" translates into a significant advantage when bidding for content. Our position on this point is that such advantages are likely to be fairly small as retail switching costs do not appear to be high overall, and bidding incentives tend to be equalised by the prospect of resale. As we have explained in our second report, if switching costs are modest then Sky cannot have much of an "installed base" advantage when bidding for content. If a bidder can reasonably expect that consumers who value premium content will "follow it" to whichever platform or retailer from which it is available, then the bidder has little ground to feel much
handicapped by a smaller current share of the downstream retail business.\(^3\) Furthermore, even if bidders did not expect most customers to "follow the content", they would still take into account the revenues that can be obtained by "reselling" content to the downstream rivals that have access to the less mobile customers. As discussed in detail in the first CRA report, this is the main point of Harbord and Ottaviani who show that the possibility of resale completely equalises upstream bidding incentives irrespective of the "downstream advantage" that one of the bidders might have.

38) Of course, to the extent that a greater downstream advantage could translate into a further benefit by lessening competition upstream, this would increase the incentives to foreclose downstream in the first place. In other words, if "being strong" downstream truly provided significant upstream benefits, this would increase the vertically integrated firm’s incentives to foreclose downstream beyond what our discussion of the “first component” of the "vicious circle" would suggest. Our point, however, is that this is essentially irrelevant: if, as we believe, any upstream benefit is likely to be quite small, then the total incentive to foreclose downstream remains small – even after taking into account any related upstream benefits.

39) This was the essence of our objection to the "vicious circle". The Complainants have sought to overcome the well-known limitations of a static foreclosure story (which we freely acknowledged) by introducing two further steps: first, that by shifting share to itself downstream Sky would further increase (or preserve) its current “advantage” in bidding for rights upstream; and second, that maintaining the bidding advantage is critical to increasing (or preserving) Sky’s position downstream. We do not believe that the Complainants or LECG have, however, established – beyond assertions – or quantified the scale of the advantage allegedly derived by Sky in bidding for rights from its downstream size, nor the extent to which this alleged increased benefit materially changes the trade-off between costs and benefits of foreclosure, tilting the balance strongly in favour of the benefits. Conversely, both in the first and the second CRA reports we explain at length why we believe these effects to be small, and therefore the impact on the incentive to foreclose also to be limited.

40) This is the point that we have been making: while the Complainants are free to make speculative claims, Ofcom needs to exercise caution in taking them on board in the face of alternative arguments that go in an offsetting direction. Unless a much more careful analysis is provided, the case is not remotely proven or reliable.

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3 Clearly, the open nature of the DTH platform is important here, as any operator winning rights has the ability to retail directly to all DTH households itself, and the costs to consumers of switching between different DTH retailers are small.
2.2. **LECG’s account of our analysis of Sky’s incentives is misleading**

41) LECG repeatedly represent our position as “claiming” that “Sky has no incentive to foreclose downstream competitors” based only on our static analysis, and to “ignore the dynamic benefits for Sky of a strategy of downstream foreclosure” (e.g. p. 15, and elsewhere).

42) Again, this is a highly misleading account of our position. We have drawn a distinction, in the interest of clarity, between static and dynamic foreclosure incentives. We have carried out a simple vertical arithmetic analysis to illustrate the point – well established in the economic literature, but worth re-stating in any event – that in a static framework the benefit of a foreclosure strategy is often overwhelmed by the costs. This is by no means the basis for our overall conclusions. We have indeed explicitly considered (both in the first and the second report) whether the results of the static analysis may be overturned by further possible “dynamic” benefits that may arise from foreclosure. We have concluded that neither LECG nor the Complainants have made a convincing case that the alleged dynamic benefits are established enough, and large enough, to overturn the implications of the static analysis.

43) We thus find it rather extraordinary for LECG to make statements such as “First and foremost, [CRA] ignore the dynamic benefits for Sky of a strategy of downstream foreclosure. Their model of competition in the UK pay TV industry is, therefore static” (p. 15), as if this was some new insight about our analysis. Again, we have looked first at a static framework, because it is important not to overlook the point that static incentives to resell are typically strong (especially if contracts are sufficiently flexible). In so doing, we have also acknowledged the limitations of static vertical arithmetic models for drawing definitive conclusions on foreclosure incentives. In this sense, the “incorrect assumptions and conceptual errors” (p. 15) that are attributed by LECG to our “analysis” are simply well-known shortcomings (which we mentioned ourselves) of all such analyses. But to suggest that our overall conclusions are based only on such analysis is again a caricature of our position, when we spend significant time considering the likely magnitude and significance of dynamic effects.

44) In the same vein, LECG argue at various places that CRA has ignored the “extensive literature on vertical foreclosure” (p. 15), and “relied on the Chicago school argument [...]”. They also inform us that there exists such a thing as a “post-Chicago literature that used game theory to challenge this intuition” (ibid.), and that “Chicago school

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4 LECG say our analysis is “incomplete” as it “only considers the possibility of total foreclosure”. We looked at complete foreclosure not because it is the only realistic option but because, short of considering all possible scenarios, that seems like a useful benchmark. LECG also state that our analysis is “incorrect” because it relies on the assumption that “all prices remain at their current levels”, and suffers from other flaws. Again, all of the “mistakes” that LECG claim we make in the “vertical arithmetic” analysis are standard limitations of this kind of exercise that were freely acknowledged in the document. Again, we never claimed that this was dispositive proof that Sky could not possibly have any incentives to foreclose. See further also our response to NERA’s comments on the vertical arithmetic below.
theory is based on an array of assumptions which Sky’s economists should have, but have not, verified in this case” (p. 16). There is no real place here for lectures on “Chicago” and “post-Chicago” schools. This is an exercise in obfuscation, intended to portray our analysis as just a static exercise with no thought given to dynamic effects. Our position – again – is that having considered the dynamic foreclosure incentives claimed by the Complainants and LECG, we do not believe these are well established nor that they have the potential to be large, given there are plausible effects going in the opposite direction.

45) We also reject claims that where we do reference the literature on vertical foreclosure, our references are “biased and selective” (Annex A). As further clarified in our second report, we indeed agree completely with the underlying economics of the Harbord and Ottaviani paper, in particular on the role of flexible contracts (including their effects on downstream competition). LECG appeal to theories of foreclosure that rely on the upstream firm’s commitment problem (see also Annex A): we did consider such theories, but explained these seemed inappropriate for an industry where exclusive contracts are routinely signed and enforced, and where the existence of such contracts is generally known in the industry. We did not see much point in referencing theories that should clearly be dismissed from the start. We remain of the view that within the set of theories that are at all relevant to the case at hand, the statement we made about the incentives and optimal behaviour of an independent upstream broadcaster are indeed correct.

46) LECG also claim we ignore the contribution of Weeds (2007), which allegedly provides support for the theory that a pay-TV broadcaster might have dynamic incentives to foreclose even if there are no static incentives to do so. This is again misleading. We are of course not denying that dynamic leveraging stories could justify foreclosure concerns which are not supported in a static framework. Weeds develops a specific model in which exclusive licensing of content (attracting consumers to one platform) combines with platform-specific factors (investments in improving platform quality, or switching costs/lock-in effects) to yield a foreclosure incentive. The foreclosure incentive is not generated by exclusivity over large amounts of content - even if that content is “premium content”: Weeds recognises the incentive to resell is strong. Rather it comes from some other scale effect that cannot be transferred across platforms – such as platform-specific investments in quality, or switching cost/lock-in effects.

47) However, what LECG do not explain is how this mechanism would fit with their own “vicious circle” argument, nor what kind of evidence would be needed to argue that a theoretical possibility of dynamic foreclosure might be seen as plausible in the circumstances under review. For a regulator, the issue it would have to decide is whether the features of the model fit the specific circumstances of the case, and whether the effects are large enough to justify intervention based on a material danger of foreclosure.

48) Moreover – and in spite of the claim that the “vicious circle” is now a “market reality” – LECG and the Complainants produce no evidence supporting the predictions of the theory. LECG’s paper contains a number of references (which are not supported by
evidence and that we are not able to verify) to Sky’s “uneconomic terms” of supply to cable, “refusal to supply” content to other pay-TV retailers, and more generally “use of its upstream leadership to acquire an unrivalled competitive advantage in the competition for subscribers” (p. 7). However, if Sky’s foreclosure of downstream rivals was motivated (as the “vicious circle” postulates) by the effort to weaken them in the upstream bidding for content, there should be evidence that this is having some effect; and, moreover, that Sky’s upstream advantage is steadily increasing over time – this should be an inevitable implication of the “dynamic” nature of the theory. If the “vicious circle” theory was indeed a “market reality”, we would therefore expect LECG to be able to provide evidence that Sky has indeed benefited from increasingly weaker opposition when bidding for premium content – e.g. by paying less for rights over time as rivals’ ability to compete is weakened. But this is not what we observe. And given how crucial such evidence is to the credibility of the “vicious circle” story, it is surprising that nothing of substance has been provided so far.

49) And if repeatedly granting an exclusive license to Sky would truly be leading down the path of a significant and inexorable decrease in the intensity of competition for premium content, why would the original owners of such content, who are sophisticated and well-informed sellers, choose passively to accept such an outcome when they have numerous means at their disposal for avoiding it?

2.3. LECG’S CLAIMS ON “DOWNSTREAM ADVANTAGES” DERIVED FROM “UPSTREAM LEADERSHIP” IMPLY SKY CONTRAVENES THE OFT’S MARGIN SQUEEZE TEST

50) LECG argue that contrary to CRA’s views, the “vicious circle” theory is founded on two “clearly specified” feedback effects (section 2.3): first, that “upstream leadership confers downstream advantages”, and secondly, that “downstream leadership confers upstream advantages”.

51) On the first “feedback effect”, they again quote Weeds (2007), but as we have mentioned the exclusionary effects in Weeds’ paper arise from a specific combination of exclusivity over content (on its own, insufficient to generate any foreclosure given the strong incentives for reselling content across platforms) and platform-specific scale effects arising from investment in platform quality, or lock-in effects. The practical relevance of this model to the circumstances of the UK market is not explained by LECG.

52) Beyond this, LECG again claim that CRA’s analysis of Sky’s incentives is irrelevant because it is “static” and “ignores the dynamic benefits” of foreclosure. They also make repeated assertions that “Sky has used and still uses its pre-eminent position in premium content to maintain a position of leadership in pay-TV retailing” (e.g. p.10). We have dealt with the first point already. On the second point, the substance of LECG’s claim appears to be that even when Sky makes available its content to other platforms, it does so on terms that are not “economically viable”, as Sky is “imposing
excessive wholesale prices” on rival pay-TV operators (pp. 10-11, and elsewhere). LECG assert this without presenting any corroborating evidence that we can verify. Moreover, this would appear to amount to a claim that Sky is in contravention of the margin squeeze test set out by the OFT in its 2002 ruling, which we find implausible. More broadly, LECG’s blanket dismissal of the regulatory oversight that Sky is subjected to – both in wholesaling content and in access to the DTH platform – appears to us without justification.

2.4. **LECG’S CLAIMS ON “UPSTREAM ADVANTAGES” DERIVED FROM “DOWNSTREAM LEADERSHIP” DO NOT SHOW THE ADVANTAGES ARE LARGE**

53) The second “feedback effect” implied by the “vicious circle” theory, according to LECG, is that “Sky’s existing base of retail customers allows Sky to outbid its competitors in the race for key content” (p. 11). In the first CRA report we had observed that, while there may be some advantage in winning content arising from a large base of customers, we saw nothing in the Complaint that indicated these were in fact large; we further observed that even if some such advantages existed, they rather depended on Sky’s incumbency rather than on vertical integration and as such cannot be an element of any “vicious circle”. We consider this latter point first, and then return to the possible size of the effect.

2.4.1. **On the role of vertical integration**

54) An important aspect of our argument is that, whatever (small) advantage Sky could ever gain through a combination of weakening downstream competitors and bidding advantage, the link between such advantage and vertical integration is not strong. LECG’s answer to our arguments appears to amount simply to the following (three bullet points on p. 14):

a) A vertically integrated firm “knows more” about downstream consumers when bidding for rights: in particular, it has their address, and moreover “determines the packaging and pricing for its channels”, whereas a non-integrated broadcaster “may not be able to bundle new content into existing packages that are accompanied by price increases” (p. 14). It is hard to know what to make of these claims. The idea that a broadcaster is better able to bid for content because it has a customer database and can make offers to customers seems very thin at best. The argument that “knowing more” about your downstream customers can provide some competitive advantage is of course an old one, but nobody has ever even tried to show how important such an effect might be in practice in terms of a foreclosure strategy. In the rest of the paragraph, LECG make references to the migration of subscribers from existing packages to new, more expensive packages

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5 This is principally because Sky would risk being fined under the Competition Act if it were found to be in breach of that test.
that include additional “premium” channels, but this ignores certain operational and legal constraints, which will be addressed separately by Sky. Such constraints again suggest that there is little advantage arising from vertical integration when bidding for content.

b) The second bullet point on p. 14 is just a restatement of the conclusions that LECG would like to hold. In contrast, the second CRA report explains why these “conclusions” are unlikely to hold.

c) Finally, as economists, we do not recognise statements such as “upstream competition would become more balanced under vertical separation” (first bullet point) and again “this is the natural consequence of more balanced competition at both levels of the vertical chain” (third bullet point). This is not recognisable language in terms of economic analysis. Again, this is simply a statement of the conclusion that LECG would want Ofcom to reach.

55) It is hard to see how these bullet points can possibly represent a strong economic argument that vertical integration is a robust component of the “feedback effect” LECG are claiming to be the core support of the theoretical “vicious circle” (“downstream leadership confers upstream advantage”).

2.4.2. LECG’s discussion of toeholds and asymmetry misrepresents our position

56) LECG also address our view that the claimed advantages of Sky’s downstream position in bidding for rights are overstated. We address here in particular their comments on our argument that when looked at more closely, “both the sign and the order of magnitude of any incumbency/size effects are entirely unclear”. In the first CRA report we took up an argument by the Complainants to the effect that, when bidding for content, even small advantages can have very large effects (the Complainants explicitly referenced to the work of Bulow, Huang and Klemperer (1999), which shows how small asymmetries can be magnified in auctions, because they exacerbate the penalty faced by disadvantaged bidders). We argued that the practical relevance of this argument seemed dubious to us, inter alia because the result depends entirely on the form of the auction and it was not a generalised finding.6

57) LECG respond that “the Parties’ arguments are much broader than Sky’s economists acknowledge.” 7 According to LECG, the Parties do not rely on the “toehold effect”

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6 Moreover, the theory does not appear to be borne out in reality, as demonstrated by Setanta’s success in building a portfolio of sports rights.

7 This is a particularly obvious example of the phenomenon referred to above, of LECG criticising us for not dealing with arguments that were themselves difficult or impossible to discern in the Complaint.
identified by auction theory, but rather on the existence of asymmetries between bidders” (p.11).

58) LECG’s discussion of the effect of toeholds and asymmetry misrepresents our position. We agree that toeholds are just one special form of asymmetry. We also know that efficient auction mechanisms will see the victory of the bidder with the highest valuation. So, if valuations are tied to some particular asymmetry (like a toehold or a mass of captive customers) this asymmetry will determine the outcome of the bidding. What we do not see is why these agreed upon statements help LECG’s argument.

59) If we take theory literally, then any small asymmetry (e.g. arbitrarily small switching costs combined with an arbitrarily greater number of downstream customers) would always pre-determine the winner of an auction. In market reality, to use LECG’s expression, matters are unlikely to be that clear-cut and all bidders with close enough valuations likely stand a chance of winning. Hence small asymmetries are unlikely to ensure the perennial triumph of one bidding party unless there is something in the auction mechanism that naturally compounds the importance of small differences in valuations. That is where the type of auction mechanism involved matters, as some type of auctions are much more sensitive to the “winner’s curse” than others and the “winner’s curse” can interact with small initial differences to strongly discourage weaker bidders. Since, as we have argued in our reports, we believe that the effect of existing asymmetries on the valuation of content are small, magnification of these small differences through a winner’s curse mechanism seems necessary for LECG’s “vicious circle” argument to have any strength. This is why the mechanism through which rights to premium content are sold matters and why, therefore, we felt that it should be discussed.

60) LECG point out that the issue of the auction mechanism was already raised in the “Manchester United” investigation. However, there are significant differences between that case and the current debate. The first difference is that, in the Manchester United case, the asymmetry was distinctly of the “toehold” variety. There was therefore little controversy as to the size of this asymmetry as it was well measured by Manchester United’s own share of TV revenues. There is much less certainty about the existence of significant asymmetries in bidding in the present case since, as we have argued, the possibility of resale and/or the small size of retail switching costs suggest that most bidders should have fairly similar valuations (unless there are large differences in their efficiency). The second difference is that, in the Manchester United case, there was an additional concern that Manchester United might use its influence to directly affect both the nature and the outcome of the bidding process. In particular, even if, to minimise the combined effects of asymmetries and the winner’s curse, the auction mechanism chosen was of the “first price sealed bid” type, this could be undermined if one of the bidders could get information about the bids of others.8 There is clearly no such concern in the case under review. Appealing to the Manchester United decision to

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8 It is notable that this is in fact how rights to FAPL football are sold.
argue that our arguments have already been considered and dismissed is therefore
disingenuous.

2.4.3. On the reputation argument

61) A further reason that we put forward to question whether Sky’s “bidding advantages”
were really so large, was that Sky would seem unlikely to refuse to purchase channels
from third-party suppliers had it lost the content race – i.e. Sky could not credibly
threaten not carry a third party’s channel who had won exclusive rights on all platforms.

62) To counter this argument, LECG claim that Sky would be willing to renounce the
opportunity to re-sell a third party’s channel(s) to establish a “reputation for refusing to
purchase content from third-party suppliers” (p. 12) that would be useful in future rights
auctions – and again concludes that we are in error for ignoring this “dynamic
incentive”.

63) It is all too easy to wield “reputation” arguments without providing any supporting
evidence. Once the reputation demon is unleashed, it can go anywhere. Let us try.
Allegedly smaller competitors find it hard to outbid Sky in the market for premium
content. Why would they not have an incentive to bid very aggressively, precisely
because they need to establish a “reputation” as a very aggressive bidder, thereby
improving their position in future rights auctions? Without relevant evidence, such
ideas are mere speculation.

2.4.4. On the effect of “preference for variety”

64) LECG finally argue that the reason a large portfolio of content assists the incumbent in
bidding for rights is that consumers have a preference for programme variety, which
LECG take to mean that “the value of a package comprising content A and content B
exceeds the sum of the value of content A and the value of Content B when offered
separately. Not surprisingly, the race for content B will we won by the owner of content
A” (p.13).

65) We agree with LECG (Annex A) that consumers have a preference for variety. But
what this also means is that a broadcaster can be profitable with content that does not
initially compete “head on” with Sky’s. This should enable this broadcaster to
progressively amass content to eventually be in a position (if this is what they choose
to do) to overcome any disadvantage that they might have in bidding for the most
valuable content. Seeing consumers’ preference for variety as favouring the incumbent firm seems a peculiar view of the effect of this factor on the prospects for entry.9

66) This is only one example of many places in the document where LECG adopt different standards for Sky and its rivals. Sky is always assumed to take into account long term effects such as the “fact” that weakening its downstream rivals by denying them content will make them less effective competitors in future rights auctions. On the other hand, rivals are surprisingly myopic. For example, we are told that short term contracts for rights are bad because it does not give those rivals time to set up their channels and retail them to a significant number of consumers. But, if it is true that current position helps in the future, then surely rivals would look beyond the term of this contract and realise that the progress made thanks to the content obtained yields further dividends by making them better competitors in future rights auctions. Such foresight should make it easier to justify an initial period of “investment” where the firm’s return is not as high as one would wish from a purely short term perspective.

2.5. RESPONSE TO CLAIMED “ERRORS AND INCONSISTENCIES” IN ANNEX A

67) LECG conclude with a list of “Errors and inconsistencies” in the first CRA report (their Annex A). A number of their points are already addressed above. We deal below with two specific points: first, the claim that while we denied there can be significant network effects in the pay-TV market, we in fact acknowledged that such effects exist by describing the pay-TV market as “two-sided” (“CRA…should acknowledge that the pay TV market is indeed characterised by indirect network effects given that they consider that “pay TV channel providers operate in a two-sided market” and as is well known those markets are characterised by such network effects” (p. 19 of their report)); second, the issue of switching costs (p. 20 of their report).

2.5.1. On network effects and platforms

68) In their Annex A, LECG claim that we contradict ourselves by denying the existence of indirect network effects but, at the same time, referring to “platforms”. This is pure semantics. First, we refer to “platform” competition because the term “platform” has long been used to designate a specific broadcasting technology/infrastructure. The use of the word does not therefore imply that we automatically subscribe to the view that these “technical” platforms are also “platforms” in the specific sense defined in the literature on multi-sided markets. Secondly, and more importantly, the fact that TV markets can indeed be described as “multi-sided” does not mean that they display the

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9 We also note and concur with the points made by Sky in its response to Ofcom’s consultation document in relation to this issue (in Annex 3 of its submission). Sky noted that rights that are complementary to consumers are likely to be worth the same to a broadcaster with complementary rights as one without such rights. In addition, as Sky noted, a given set of rights may actually be worth less to a broadcaster with a broad portfolio of rights than one with a narrower portfolio.
type of indirect network effects that LECG needs to turn its “vicious circle” argument into a proper model of dynamic foreclosure.

69) As explained extensively in the second report, an indirect network externality arises when consumers buying a certain good or adopting a certain technology can rationally expect that the supply of complementary goods or services will increase with the number of other consumers making the same choice. The archetypical example of network externalities is the “hardware-software” framework popularised by authors like Chou, Shy, Church and Gandal. In this framework, consumers choose between hardware platforms. The value of the various platforms on offer depends on the variety (and price) of the compatible software that is or will be available. If the platforms are compatible, in the sense that all software works on all platform, then all platforms compete on an equal footing. If, on the other hand, software is platform-specific, then indirect network externalities become an important competitive tool: by getting a large number of consumers on my platform today, I can ensure that more software gets written for my platform tomorrow, compounding my initial customer base advantage. In the presence of such effects, markets might “tip” in the sense that a dominant firm emerges and becomes ever stronger. This type of indirect network externality was an essential part of the “dynamic foreclosure” argument in the European Microsoft case: it is because a large part of application software was written for a specific operating system that Microsoft was eager to hamper the development of alternative (server) operating systems that could prove attractive to software writers, ultimately challenging the dominance of Microsoft’s own (PC) operating system.

70) But – as explained in both of the CRA reports – there is a fundamental difference here: as content is not designed to work only on a single platform, content cannot be the source of indirect network effects in the sense defined in the literature. The literature on multi-sided platforms is not directly applicable either. Taking the example of a two-sided platform, the key point of this literature is that each side of the platform cares directly about the other side. Moreover, a distinctive feature of platforms is that both sides must be induced to “get on board”.

71) Both of these characteristics are present in the hardware/software example discussed above. If platforms are incompatible then software companies will only incur the fixed cost of writing software for a specific platform if they know that this platform will be joined by enough customers. Similarly, consumers will only join the platform if they know (or expect) that enough firms will decide to write software for this platform. This creates the typical “chicken and egg” aspect of multilateral platforms, where platform owners strive to find the right fee structure to get both sides on board and break the deadlock.

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72) The mechanism on which LECG’s “vicious circle” argument relies is rather different. According to the “vicious circle” theory, having better access to customers at the retail level would make it easier for the upstream arm of a vertically integrated firm to win control of the rights to premium content. In a sense, then, having more consumers downstream leads to a higher likelihood of being able to offer better content. However, it is crucial that the availability of content arises through a price mechanism (bidding) rather than through the decision of independent agents (e.g. software designers). There is no “platform” aspect on the content side of the market. There is no need to “get content providers on board”, i.e. there is no need to induce content providers to invest in supplying content since content is not designed to operate on a single platform. Furthermore, content providers who make rights available to pay-TV broadcasters do not directly care about the other side of the market (retail consumers): their principal focus is the amount they get from the broadcasters for those rights.

73) Having said this, we should add that although we have now strived to clarify further the relationship between network externalities and “platform” competition, we do not believe that is actually very important. In some sense, the precise words used by either side in this debate do not matter as long as the economic reasoning is clearly explained on both sides. We believe, as explained above, that we have understood LECG’s main “vicious circle” argument and that we have responded to it fairly and explicitly. This is all that should count when Ofcom evaluates the merits of the economic analysis presented by both sides. Argument by incantation, calling upon magic words and unexplained authoritative texts, should have no place in the debate.

74) We should also add that the definition of what is and what is not a multi-sided “platform” is subtle and remains controversial. Still it seems worth pointing out that J.C. Rochet and J. Tirole, two of the “founders” of the budding multi-sided platform literature, explain carefully that network externalities (of any type) are not required for a platform to be multi-sided.11 Calling CRA to account for using the term “multi-sided” platform, while at the same time denying the importance of the specific type of indirect network externalities that would help LECG’s argument, seems therefore at least contradictory.

2.5.2. On the importance of switching costs

75) LECG conclude that “Sky’s economists appear to be unsure of the size and importance of switching costs in the pay TV industry” (Annex A, p. 20 of their report).

76) We are indeed unsure of the size and importance of switching costs in the industry, and we would rather avoid making strong statements of principle based on assertions on the magnitude of these costs. This is an empirical matter and as far as we are aware no robust evidence on their magnitude has been presented by LECG or the

Complainants in support of their claims. Most likely, some classes of customers have very low switching costs, while for others the cost of switching might be higher. Furthermore, the size of switching costs is unlikely to be independent of the specific pair of platforms/retailers considered. In the absence of convincing, systematic empirical evidence, we therefore prefer to remain agnostic. In any event, as we have explained in our second report, the relevance of switching costs is not completely clear: if they are small, then Sky should not have much of an advantage when bidding. If they are large, then Sky would have a strong incentive to make premium content available to all.

77) As a matter of record, we also note that LECG’s own belief on switching costs as summarised in footnote 15 is that “the costs of switching from a retailer offering inferior content to another with superior content are likely to be small”.

2.6. SUMMARY

78) We have addressed in this Response the main comments made by LECG to the first CRA report. We would hope that a number of arguments will have now been clarified by our second report, which was unavailable to LECG at the time of drafting their comments. Nonetheless, we find that a number of criticisms raised by LECG in their document are disingenuous and misrepresent our position. We also find that LECG’s defence of the “vicious circle” theory does not add substance to the debate: for all LECG’s efforts to present Sky’s incentives to foreclose rivals as self-evident, there are well-grounded reasons to doubt the sign and order of magnitude of the effects. We also believe LECG dismiss too lightly the constraints that are placed on Sky as a result of regulation – both as a result of the 2002 OFT ruling on margin squeeze, and of access requirements on the DTH platform.

79) We therefore take the view that LECG’s document has advanced no credible argument on behalf of the “vicious circle” theory. LECG’s contribution boils down at best to a claim that there “might” be foreclosure incentives. But they provide no evidence whatsoever as to how likely foreclosure will be – only some assertion that this is now “a market reality”. LECG’s analysis fails even as an academic exercise, and it certainly cannot be used as a basis for policy. Robust conclusions simply cannot be drawn on Sky’s incentives based on the “vicious circle” theory, even as augmented by LECG’s casual theorising and efforts at ex post rationalisation.

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12 We note that Ofcom claimed in its consultation document that switching costs between Sky’s and Virgin Media’s services are “high” (paragraph 5.37 of Annex 13 to the consultation document). However, this proposition also does not appear to be evidence-based (as well as being contradicted by LECG’s view presented above).
3. RESPONSE TO NERA’S COMMENTS

80) NERA’s economic report (dated 14 March 2008), commenting on Ofcom’s Consultation of December 2007, is appended as an Annex to BT’s own response to the same consultation. While the scope of NERA’s document is broader, we address here specifically the points made by NERA in their Section 3 on “Vertical foreclosure”, and in particular their critique of CRA’s vertical arithmetic exercise (section 3.3). In addition, we briefly touch upon a couple of additional points made in Section 4 (“The benefits from competition”).

81) While a number of NERA’s points have merit, as discussed below, it is important to recognise that accepting them does not alter our overall conclusions.

3.1. ON “VERTICAL FORECLOSURE”

82) NERA start with some brief “theoretical observations” on vertical foreclosure (Section 3.1). While we agree with a number of points that NERA make, we also find the references to economic theory occasionally misguided. For instance at paragraphs 33-34 NERA argue that “any rebuttal of vertical foreclosure” must address the “additional term” that vertical integration introduces in the first order condition for profit maximisation. If there were any merit in such a view, then vertical integration should be deemed _per se_ illegal, since this “extra term” would appear in the first order condition of any vertically integrated firm, however small. The mere presence of this term cannot surely be the issue. Consistent with this, many of the arguments put forward in the CRA reports have been making precisely the point that the _magnitude_ of this “extra term” is likely to be quite small.13 Moreover, as we argue in detail in our second report, an independent upstream supplier also has an incentive to “soften” downstream competition to avoid dissipating its rents, and therefore this “additional term” does not necessarily lead to an outcome that differs much – or at all – from the outcome that would arise under vertical separation.

83) In their Section 3.2 (“Incentives to target new entrants”), NERA echo a concern voiced in Ofcom’s consultation document: that incentives to foreclose might be higher with respect to new entrants. In our response to Ofcom’s document we addressed the fallacy according to which new entrants or small competitors are more natural targets for foreclosure, because foreclosing them involves smaller losses of revenue. NERA does not make this logical mistake. Their argument relies instead on the degree of substitutability between downstream platforms. Following the traditional logic of _static_ foreclosure, depriving a downstream rival of content is more likely to be profitable if the

13 We should also note that, as shown in Harbord and Ottaviani – and discussed abundantly in CRA’s second report – the presence of the “extra term” does not necessarily imply that the contract offered by a vertically integrated broadcaster and the corresponding equilibrium in the downstream market differ from the contracts and equilibrium outcomes that would arise when the upstream broadcaster is not vertically integrated.
availability of content is more likely to “move” significant numbers of customers from one platform to the other. We have indeed acknowledged that, when downstream substitution is especially strong, as in the case where the downstream competitors operate on the same platform, content is unlikely to be licensed broadly. What NERA point out is that, in the case of BT Vision, at least, customers can switch from Sky to the new platform quite readily. Whether this degree of substitutability would actually be enough to outweigh the benefits from serving customers who still have a preference for the new platform is something that, lacking any evidence, we cannot really address.

84) While we agree that resale of premium content might not occur when there is very high substitutability downstream, we do not see how this argument supports the claim that entrants and/or relatively new competitors might find it harder to succeed in the industry than more established companies. NERA’s argument implies that we would not expect several platforms that, in the eyes of consumers, are close substitutes for each other to all profitably offer the same premium content. The fact that one such platform happens to be a recent entrant is a mere coincidence. In other words, NERA’s argument is about platform heterogeneity, not about entry. We do not therefore agree that “Ofcom is right in being particularly alert to the dangers of foreclosure targeted against new entrants” (paragraph 47). We also repeat that one would expect a similar outcome even if the firm controlling the premium rights was not vertically integrated. Finally, we note that NERA acknowledge that Sky customers could readily switch to BT’s platform. As we have explained in our previous submissions, this should make it easy for BT to bid for content without suffering much of a handicap.

85) In section 3.3., NERA allege that the “vertical arithmetic” presented in CRA’s first report is logically flawed. They further argue that, when properly interpreted, the results obtained by CRA imply both that Sky is already engaged in foreclosure, and that the extent of this foreclosure cannot be justified by traditional “static” incentives alone. In relation to the first point, as we fully acknowledged, “vertical arithmetic” is a crude instrument. Nevertheless, it is a commonly used “first cut” to get a feel for the “orders of magnitude involved”. In addition, NERA’s interpretation of the results from this vertical arithmetic is not correct. The results obtained do not show that Sky is already involved in any foreclosure, neither do they support the claim that there must be significant “dynamic” incentives to foreclose. We elaborate on these points below.

86) We begin by presenting NERA’s argument as precisely as possible. In this argument, “foreclosure” is not understood as simply refusing to supply a downstream rival. In NERA’s approach, there is some degree of foreclosure as soon as a vertically integrated firm charges a downstream rival a higher price than an independent upstream firm would to take into account the competitive benefits that “raising rivals’ costs” brings to its downstream arm. The “level” of foreclosure is then the difference between the price charged, and what the profit-maximising price would be if content were sold by a non-integrated upstream firm. NERA’s point can be readily understood by looking at Figure 1 below. The horizontal axis measures the price charged to downstream rivals, and the vertical axis measures the total profits of the vertically integrated firm. $P^*$ is simply the price that maximises this joint profit. Assume now that we start from a situation where the downstream rivals already pay $P^*$ to the vertically integrated supplier. Let us now ask whether further foreclosure (i.e. an increase in $P$)
would be profitable. The answer to this question must be no: the vertically integrated firm maximises profits by charging \( P^* \) and can therefore only do worse by charging anything else. Therefore, if one begins with a situation where foreclosure already occurs and uses the prices observed in such a situation to ask whether (further) foreclosure would be desirable, the answer can only be negative. This is, as we understand it, the essence of the “cellophane fallacy” discussed in NERA’s report.

Figure 1

![Diagram showing profits of a vertically integrated firm with price charged to downstream rivals. The diagram illustrates the profits at different price levels: \( P_0 \), \( P^* \), and \( P_1 \).]

87) NERA then observe that, when doing its “vertical arithmetic”, CRA conclude that the losses from foreclosure would actually be fairly substantial. Looking back at the graph, this should be surprising. If one starts at \( P^* \), where the profit function is flat, a small increase in the price charged to rivals should not affect profits much. Hence, if one finds a significantly negative effect, it must be that we are starting from a price level, like \( P_1 \), which is significantly higher than \( P^* \). Therefore, conclude NERA, this is evidence that Sky is already charging a price that is higher than what it would choose if it only had the traditional “static” incentives to foreclose. According to NERA’s logic, this means that there must be an additional incentive to foreclose. This could be the additional effect on upstream bidding mentioned by LECG, or a truly dynamic incentive.

88) Taken in the precise sense outlined above, NERA’s “cellophane fallacy” argument is correct if all the underlying facts required to support that argument hold true. It simply underlines the well-known fact that, as we acknowledged, vertical arithmetic is a very crude methodology. The only point of the exercise is to get an idea of the order of magnitude of the effects involved. In other words, given existing prices, the exercise
provides an idea of how many customers would need to switch platform for complete foreclosure to be uneconomical. If, as was the case, one finds that the “diversion ratio” required to make full foreclosure profitable is unrealistically high, then one concludes that complete foreclosure is unlikely to be profitable, not only for platforms on which Sky’s channels are already carried but also on other emerging platforms with similar substitutability with respect to DTH as the more established platforms. NERA’s argument simply amounts to saying that this point can be granted without the need to display any computation. In other words, if Sky supplies its premium channel to a rival platform then, by revealed preference, Sky would not find it profitable to completely withdraw the channel from that platform.

89) While we acknowledge the severe shortcomings of the “vertical arithmetic” approach, we cannot accept NERA’s interpretation of the results, for two reasons. Firstly, even when foreclosure is seen as a small price increase, all that NERA’s argument establishes is that further foreclosure is not profitable. In other words, finding that a small price increase would lead to a small loss simply shows that the vertically integrated firm has already done all of the “foreclosing” that it is profitable to do. It does not establish that any amount of “foreclosing” was profitable in the first place.

90) The second error in NERA’s reading of the results of the vertical arithmetic is that CRA’s exercise does not consider a small change in price. Instead, the question asked is whether the vertically integrated firm would find it profitable to withhold premium content from a downstream rival. The significance of this difference can be seen in Figure 2, where \( P_p \) represents the price at which the downstream rival becomes unviable. As above, the graphs show the vertically integrated firm’s total profits as a function of the price that it charges for its channel on a rival platform. CRA’s exercise can be seen as a discrete and potentially large price increase from the price level that maximises the vertically integrated firm’s profits (\( P^* \)) to the price level that would eliminate the downstream rivals altogether (\( P_p \)). NERA’s “cellophane fallacy” still holds true since, if current prices do indeed correspond to \( P^* \), the exercise cannot find that such total exclusion would be profitable. However, as the graph clearly shows, one can get a quite sizeable loss from complete foreclosure even though the profits shown on the graph do not include any potential “dynamic” incentives to foreclose: a move from \( P^* \) to \( P_p \) does lead to a substantial fall in profits. Interpreting the vertical arithmetic results as demonstrating the existence of dynamic foreclosure incentives is therefore completely unwarranted.

Figure 2
3.2. ADDITIONAL COMMENTS

91) In section 4.1., paragraph 59.3, NERA repeat the old idea that “the greatest of all monopoly rewards is a quiet life”, this taste for slackness leading to “X-inefficiencies”. It is hard to see the relevance of this notion for the case at hand, for several reasons. Firstly, the idea of X-inefficiency arose in the context of full monopoly or quasi-monopoly and seems ill-adapted to companies facing other strong, well-financed, competitors. Secondly, we were not aware of Sky’s reputation as an inefficient company. Evidence to support such a claim would be most helpful. Finally, X-inefficiencies are just one side of the coin. All that we observe is that Sky has been quite successful in the industry over the past decade. While voicing fears that this might lead to complacency is one point of view, one could also argue that performance is precisely the result of Sky’s efficiency. In the absence of further evidence, it is hard to see how one would favour one hypothesis over the other.

92) In section 4.2, NERA present an example to argue that, while there might be efficiency gains from bundling, those gains cannot be assumed to always outweigh the potential gains from introducing competition. For convenience, NERA’s table 4.1, spelling out the example, is reproduced below. Assuming that each consumer purchases at most two of the four available products, a monopolist would maximise profits by offering two bundles, one including channels 2 and 3 and another that includes channels 1 and 3. Both bundles would be optimally priced at £30. At these prices, consumer A buys the first bundle, consumer B purchases the second bundle and consumer C does not get anything. NERA then show that welfare would be higher if competition were introduced even though such competition might limit the seller’s ability to bundle and might therefore destroy the related bundling efficiencies. It is therefore unfortunate that the
example chosen by NERA does not in fact allow for ANY bundling efficiency. Looking back at the table, one sees immediately that the monopolist does not need to bundle to maximise profits. The exact same level of profits and exactly the same pattern of sales can be achieved with “pure components” by selling 1 to A for £10, 2 to B for £10, 3 to B for £20 and 4 to A for £20. Since the monopolist does as well (and sells the same things to the same consumers) with or without bundling, there are no bundling efficiencies in this example so there is no potential cost from introducing competition.

NERA’s Table 4.1

<table>
<thead>
<tr>
<th></th>
<th>Channel 1</th>
<th>Channel 2</th>
<th>Channel 3</th>
<th>Channel 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consumer A</td>
<td>£10</td>
<td>£2</td>
<td>£6</td>
<td>£20</td>
</tr>
<tr>
<td>Consumer B</td>
<td>£2</td>
<td>£10</td>
<td>£20</td>
<td>£6</td>
</tr>
<tr>
<td>Consumer C</td>
<td>£1</td>
<td>£1</td>
<td>£7</td>
<td>£9</td>
</tr>
</tbody>
</table>

93) While the example presented by NERA is flawed, the basic point is obviously correct. Thinking of the extreme case where competition drives prices to marginal cost suffices to establish that significant monopoly power with bundling cannot always be socially more desirable than a more competitive industry structure. This is why we never claimed that bundling efficiencies would always outweigh the cost of other distortions arising from monopoly power. The importance of bundling efficiencies lies in countering the other extreme view, i.e. that more competition must always improve matters.