OFCOM'S DECEMBER 2007 CONSULTATION,

"PAY TV MARKET INVESTIGATION"

BT GROUP PLC RESPONSE

March 2008

Table of Contents

I Executive Summary

1. BT welcomes the opportunity to provide comments on Ofcom's December 2007 Consultation Document, entitled "Pay TV market investigation" (the "Condoc").

2. In BT's view, there are strong *prima facie* indications of consumer harm in pay TV in the UK, including:

   - <u>High retail prices</u>: Ofcom's research shows that per-subscriber pay TV revenues are materially higher in the UK than in any other surveyed EU country.[1] Whilst differences in these per-subscriber revenues may, to some extent, be justified by differences in the quality of the programming being supplied, the size of the difference between the UK per-subscriber revenues and those in other EU countries suggests that this does not provide an adequate explanation.

   - <u>Restricted consumer choice regarding access to high quality content inhibits take-up of pay TV</u>: BSkyB Group plc ("Sky") controls most of this high-quality content. It has aggregated this content into high-priced channels. There is very limited availability of these channels on the newer platforms.

   - <u>Unmet consumer demand</u>: Currently, more than half of UK households do not subscribe to any pay TV service. Many are discouraged from subscribing as a result of high prices. Newer platforms are emerging that could provide innovative pay TV services that may appeal more to these consumers. The current structure of pay TV, however, materially inhibits their ability to do so.

   - <u>Lack of innovation</u>: Although there is some evidence of technical innovation in pay TV over recent years, there is relatively limited evidence of content supply innovations at the retail level, in terms of lower-priced retail offerings of a range of smaller bundles of pay-tv content and pay-per-view services, particularly involving high-quality content that drives the take-up of pay TV and that may appeal to customers who are discouraged from subscribing to the main high-priced retail offerings currently on offer.

3. These significant *prima facie* manifestations of consumer harm originate, in BT's view, from a number of problematic features, at various levels of the supply chain. Whilst the Condoc identifies a number of features of pay TV that could give rise to consumer harm issues, if anything the Condoc understates these issues.

[1] Condoc, figure 30.

4. First, BT agrees with Ofcom that there are distinct markets for the supply of premium sports and movies channels and that Sky has substantial market power, at both the wholesale and retail levels, in these markets. The retail markets include offerings of channels containing any of these premium channels (in particular, offerings that include ‘basic’ channels, as a result of the buy-through obligation). Also, in BT’s view, Ofcom should consider more closely the issue of the market dynamics of supply of ‘basic’ TV channels. BT considers that Ofcom’s initial conclusion, that Sky has no market power in the retail supply of ‘basic’ TV, merits reconsideration.

5. Second, Sky has inherent advantages over its rivals in the race for the acquisition of content from rights holders, particularly high-quality content that drives take-up of pay TV. In BT’s view, the Condoc understates these inherent advantages, which enable Sky effectively to control the wholesale provision of this content.

6. Third, Ofcom’s suggestion, that “monopolization of content at the wholesale level does not necessarily imply a lack of competition at the retail level”,[2] as the monopolist may have sufficient incentives to wholesale its content to competing retailers, is not a robust position in BT’s view.

7. As Ofcom accepts, this ignores the real risk of detriment to consumers, as a result of wholesale price rises above the competitive level, which would then necessarily be reflected in higher retail prices, even if the retail margins are competitive.

8. In addition, Ofcom’s analysis of the incentives of a vertically-integrated operator in Sky’s position to wholesale its content to retail competitors actually suggests that Sky has a commercial incentive not to wholesale its content to competing retailers and that this incentive not to supply is particularly pronounced in respect of new entrant retail competitors. Indeed, BT considers that Ofcom’s analysis substantially understates Sky’s commercial incentives not to wholesale its content to competing retailers.

9. Fourth, in BT’s view, Ofcom’s analysis understates the likely consumer detriments from content aggregation and thereby understates the benefits to consumers of a situation in which there are competing pay TV retail providers able to aggregate content in very different ways.

10. This issue is analysed in some detail in the NERA paper, attached in Annex 2. In summary, Ofcom’s analysis runs the risk of placing too strong a focus on the efficiencies which can in some cases arise from bundling. These may benefit producers, but are also likely to be detrimental to consumers, in terms of choice

[2] Condoc, para. 6.29.

and prices. Given its statutory role as promoter of consumers' interests, Ofcom should consider this complex issue further.

<u>Determining possible remedies</u>

11. In BT's view, an appropriate obligation imposed on Sky, first, to wholesale certain of its channels and, second, wholesale certain content that it may currently warehouse, would certainly assist in the development of a more competitive market.

12. BT is concerned, however, that such obligations may not sufficiently tackle the various structural issues which have given rise to the under-performance of pay TV at all or most levels of the value chain, including Sky's increasing grip, at both the wholesale and retail levels, over content that is important for the development of pay TV. A comprehensive assessment of these and other possible remedies in the context of the market investigation would therefore be valuable.

13. In particular, a requirement on Sky to wholesale its channels together with certain content that it may currently warehouse may well not, even on the basis of detailed access rules, tackle the underlying problems for consumers of high prices deriving from upstream market power and reduced choice as a result of upstream content aggregation. Accordingly, this requirement may not satisfy the criteria (relating to consumer choice; innovation; competitive and efficient pricing) Ofcom relies on for assessing whether pay TV is functioning effectively.

14. In BT's view, appropriate remedies should also be considered to address the problem of the concentration of control over high value pay TV content at the wholesale level.

15. Finally, BT notes that Ofcom does not comment, in the Condoc, on the appropriateness of a market investigation reference or any other possible route to address the possible competition concerns it raises. BT would wish to stress that, in its view, the competition issues in question could not adequately be addressed pursuant to an investigation under the Competition Act 1998 or section 316 Communications Act 2003. Rather, the appropriate route to further investigation of these issues is on the basis of the 'market investigation' provisions of the Enterprise Act 2002.

II Consumer harm resulting from the current structure of pay TV markets

16. This section II is intended to address questions 1-10 of Ofcom's consultation questions, as listed in Annex 4 of the Condoc.

A. BT's concerns regarding consumer harm

17. BT is concerned that the current structure of pay TV gives rise to a number of material concerns regarding consumer harm. These concerns can be summarised as follows:

18. First, pay TV in the UK is characterized by high retail prices. Ofcom's research shows that per-subscriber pay TV revenues are materially higher in the UK than in any other surveyed EU country.[3] Whilst differences in these per-subscriber revenues may, to some extent, be justified by differences in the quality of the programming being supplied, this does not provide an adequate explanation for the size of the difference between the UK per-subscriber revenues and those in other EU countries.

19. In this regard, Ofcom's analysis highlights market power concerns, at various levels of the pay TV value chain. These market power concerns, particularly combined with other structural features of pay TV, are likely to give rise to retail prices above the competitive level.

20. Ofcom correctly identifies one key structural feature as aggregation of content, stating:

> "There may be detrimental effects to consumers of aggregating substitutable content, in the form of prices being raised and output potentially restricted. These effects are likely to be greater when that content sits within a relatively narrow economic market, such as the markets for premium sports and movies."[4]

21. In BT's view, this concern extends beyond premium sports and movies.

22. Second, in BT's view, pay TV is characterized by a significant level of unsatisfied consumer demand. Sky controls most of the high-value content that drives pay TV uptake. It has aggregated most of this content into high-priced channels. There is limited availability of some of the Sky channels on platforms other than the DSat platform. Sky also warehouses content that could otherwise be provided on platforms other than DSat.

23. This is a particularly important issue, given that more than half of all UK households currently do not subscribe to any pay TV service and are likely to

[3] Condoc, figure 30.
[4] Condoc, para. 6.12.

continue to be discouraged from subscribing to pay TV as a result of the current structure of pay TV. In BT's view, aggregate consumer demand would increase and consumers would derive more benefit, in terms of pricing and service offerings, if a greater range of bundles of content, particularly involving high-value content that drives take-up of pay TV, were available to them on alternative pay TV platforms.

24. Third, the limited ability of competing operators to create competing channels or other content offerings, undermines innovation in the retail supply of content and related services.

B. Ofcom's analysis of whether pay TV is functioning well for consumers

25. In this section, BT comments on Ofcom's analysis of whether pay TV is functioning well for consumers, as set out in section 4 of the Condoc.

26. Ofcom assesses the consumer experience by reference to a number of criteria. BT comments below on Ofcom's analysis, under each of these Ofcom criteria.

1. Consumer satisfaction levels

27. Ofcom's provisional conclusion is that its analysis "reveals a market that currently appears to be serving its existing consumers reasonably well".[5] This provisional conclusion is based on a number of consumer surveys. Ofcom does, however, acknowledge that evidence on consumer satisfaction levels is hard to interpret and "it is hard to infer conclusions on the effectiveness of competition within the market from satisfaction measures alone".[6]

28. In BT's view, any conclusions from the survey evidence relied on by Ofcom, for the purposes of the present investigation, need to be strongly qualified, for the following reasons in particular.

29. First, the customer satisfaction surveys do not take account of a category of people (representing the majority of UK households) who are particularly likely to be detrimentally affected by the current structure of pay TV, namely, customers who do not currently purchase pay TV. Ofcom correctly acknowledges that the limited customer survey data available to it might suggest that the current pricing structure may serve to exclude many of these customers.[7] In BT's view, this is a key issue.

30. Second, these surveys appear to focus on the satisfaction levels of customers of Sky, Virgin Media and Freeview (the vast majority of Freeview customers do

[5] Condoc, para. 4.76.
[6] Condoc, para. 4.7.
[7] Condoc, para. 4.5.

not take pay TV services). In other words, the surveys do not appear to take any account of existing customers of the newer platforms, in particular, IPTV and Internet TV; it is also not at all clear whether the surveys included the views of any of the very limited number of Freeview customers who acquire pay TV services via the DTT platform.

31. The customers of the newer pay TV platforms are, in BT's view, particularly detrimentally affected by the current structure of pay TV. Indeed, Ofcom's analysis[8] suggests that a vertically-integrated operator in Sky's position has a comparatively greater incentive to foreclose market entry to retailers on these newer platforms. Whilst BT appreciates that the volume of these customers is currently relatively low, this is at least in part due to the current structure of pay TV. Nevertheless if, as Ofcom states, it needs to take a forward-looking view of market developments,[9] full account of them needs to be taken.

32. Third, it is difficult to draw any useful conclusion about the satisfaction levels of the surveyed consumers, as they do not appear to have been presented with any counterfactual against which to compare. Consumers might be relatively satisfied with current service, but their views may well change if they became aware of the alternative services that could become available if pay TV markets were structured differently.

2. Choice of platform and content

33. With regard to content choice, Ofcom states that "the UK compares fairly well to other countries in terms of content choice".[10] As for premium content:

> "Within pay TV, premium content is skewed to pay satellite in all European markets. The availability of premium content via other distribution technologies is highly variable. For example, there is significant availability of premium content on cable in some markets (UK, Spain) but not others (Germany, France). Of the three pay DTT platforms included in our sample, France and Italy both have a greater availability of premium content than is available on DTT in the UK".[11]

34. To an important extent, these differences in content availability are affected by the particular development of each of the platforms in each of the countries surveyed.

35. It is striking, however, that whilst in the other main European markets, *ex ante* regulatory obligations (albeit in the context of merger control processes) have been imposed to ensure the wider availability of content on various platforms,

[8] Condoc, paras. 6.68-6.73.
[9] Condoc, para. 2.9.
[10] Condoc, 4.12.
[11] Condoc, para. 4.15.

the major operator in the UK, Sky, currently faces no *ex ante* regulatory obligations to supply its premium content, or indeed any of its content, to any third party (and, *a fortiori*, to supply it at any particular price). The regulatory obligations imposed in other EU countries are helpfully outlined in Annex 16 of the Condoc.

36. On the question of content choice in the UK, Ofcom helpfully assesses the availability of the most watched channels, by platform, in the UK. The Condoc provides a useful table (Figure 25), setting out the 24 most watched channels, by platform. The majority of these 24 channels are, however, not pay TV-only channels. Of the pay TV channels, the most significant is Sky One, which is wholly-owned by Sky and is not currently available on, for example, cable or IPTV.

37. As to the availability of 'premium' content on the various distribution platforms, Sky's premium channels are not currently available on DTT and, whilst they are available via the Tiscali IPTV service, this service is only available to 15% of the population.

3. <u>Innovation in platform services</u>

38. Ofcom notes that innovation to date in pay TV appears to offer strong benefits for consumers.[12]

39. In BT's view, however, whilst the technical innovations that Ofcom points to are useful, there is limited innovation in terms of packaging of content, particularly high quality content that drives the take-up of pay TV. The fact that high-value content is typically purchased exclusively and on a cross-platform basis, together with the extent of upstream aggregation of content, undermines innovation in the retail supply of content and related services.

40. The need for innovation in content offerings is critical for customer welfare, including for the more than half of all UK households that do not currently buy any pay TV service. BT Vision's strategy of pay-per-view is one example of content innovation; but this strategy is hampered by limited availability of high-value content.

41. Furthermore, consumers would benefit more quickly from innovation resulting from major investments in rolling-out higher speed-broadband/fibre networks if more high quality content were made available for supply over these networks, as this would assist in justifying the major investments involved.

4. <u>Pricing of pay TV services</u>

---

[12] Condoc, para. 4.28.

42. Ofcom notes that the average revenue per pay TV subscriber is higher in the UK than in any other surveyed EU country.[13] There may, of course, as Ofcom notes, be entirely legitimate reasons for these higher revenues, such as possible differences in the range and quality of services being offered.

43. The LECG analysis, previously provided to Ofcom, compared pay TV pricing across the EU, whilst attempting to take account of these issues relating to the differences in range and quality of services being provided. Ofcom, with the assistance of Professor Andrew Chesher, has provided its initial perspectives on the LECG analysis and reached the view that, on the basis of its assessment to date, it was unable to conclude that UK prices for pay TV are excessive.[14]

44. Further LECG analysis of this issue, which supports its initial conclusions and which may assist Ofcom, is attached as an Annex to the joint submission, to which BT is a party, which is separately being submitted in response to Sky's submission to Ofcom in October 2007.

5. Profitability and investment returns

45. Ofcom states that, on the basis of its initial analysis, it "has not found conclusive evidence of excessive profits being earned by Sky".[15]

46. BT views on Ofcom's profitability analysis are set out in detail in a paper attached as Annex 1. In summary:

- Neither of the two market-based metrics Ofcom has relied on to assess Sky's profitability (i.e., Total Return to Shareholders and Tobin's Q Ratio) is a reliable metric for determining profitability for Ofcom's purposes.

- Ofcom has relied on these two metrics as proxies for Internal Rate of Return ("IRR"), which is the more standard metric. IRR is also recommended for competition analyses.[16] In BT's view, it would appear that IRR would be the appropriate metric to assess Sky's profitability in the present case. Also, Ofcom's reasons for relying on the alternative metrics, as alternatives to IRR, do not appear to be sufficiently robust.

- BT is not in a position to carry out a detailed IRR analysis of Sky. On the basis of alternative metrics, however, such as ROCE, which are well recognized in competition analyses, BT's initial calculations suggest that Sky may be earning high profits.

[13] Condoc, para. 4.41.
[14] Condoc, para. 4.48.
[15] Condoc, para. 4.74.
[16] See e.g., the 2003 Oxera economic discussion paper for the OFT, entitled 'Assessing profitability in competition policy analysis'; http://www.oft.gov.uk/shared_oft/reports/comp_policy/oft657.pdf

- BT agrees with Ofcom that, even if Ofcom were to conclude that Sky is not earning excessive profits, this would not imply there is no competition problem in pay TV.

III Market definition and market power

47. This section III is intended to address questions 11-14 of Ofcom's consultation questions, as listed in Annex 4 of the Condoc.

A. Introduction

48. In section 5 of the Condoc, Ofcom analyses, amongst other things, the issues of market definition and market power in pay TV.

49. This chapter of BT's Response sets out BT's comments on these market definition issues and related market power issues. In summary:

- BT agrees with Ofcom's preliminary conclusion, that 'basic' pay TV and free-to-air TV are not part of the same economic market. BT is concerned, however, that Ofcom also states that its conclusion on this issue is not "overwhelmingly strong" and that free-to-air "appears to be a close and increasingly strong constraint" on 'basic' pay TV. BT sets out below a number of factors that suggest that the distinction between the two remains material, such that Ofcom should feel confident in its preliminary conclusion.

- BT agrees with Ofcom's preliminary conclusion that Sky has substantial market power, at both wholesale and retail levels, in the markets for the supply of premium sports and movies channels. BT would, however, extend the retail market definition to include any retail offering of channels which includes one or more premium sports or movies channels; this would include Sky's 'basic' pay TV channels, which are included as a result of Sky's buy-through obligation.

- As to Ofcom's finding that Sky does not have market power in 'basic' pay TV, in BT's view Sky does have market power in the retail supply of 'basic' pay TV particularly because of its purchasing power in respect of third party channels.

- BT agrees with Ofcom's preliminary conclusion, that there is unlikely to be a separate market for any individual retail pay TV platform.

B. BT agrees that basic-tier pay TV and free-to-air TV are not part of the same economic market

50. Ofcom reaches the preliminary conclusion that:

> "It seems likely that basic-tier pay TV and free-to-air TV are also in separate retail markets. However, this conclusion is less firm than our conclusion on

premium sport and movie channels, since free-to-air represents a growing constraint on basic".[17]

51. In BT's view, the market definition question to be addressed is as framed by the Director General of Fair Trading in the context of the OFT's 2002 Decision relating to its investigation of Sky; namely, "whilst free-to-air may well constrain the prices of basic TV packages to some extent, the key question is whether this constraint is sufficient to prevent the prices of basic pay TV being raised above the competitive level[18] (the "2002 OFT Decision").

52. In addressing this question, BT agrees with Ofcom that the recent Competition Commission's Report on Sky/ITV[19] is of limited relevance. In that report, the Competition Commission concluded that free-to-air and pay TV services compete within a market for 'all TV', including video-on-demand ("VOD").[20]

53. As noted by Ofcom, in that Report the Competition Commission was looking at whether the relevant merger situation would give rise to an increase in market power, rather than whether market power currently exists. As stated by the Competition Commission in its report:

> "In line with our usual practice, we have carried out our analysis at current prices and current levels of competition, regardless of whether these represent competitive price levels."[21]

54. As Ofcom is well aware, if it were simply to adopt the conclusions of the Competition Commission in this Report, this could well give rise to the error of the 'cellophane fallacy'.[22] Thus, if basic pay TV prices are already set well above the competitive level, any further price rises may be unprofitable and, hence, may suggest that basic pay TV and free-to-air are close substitutes, when in fact they may well not be substitutes if the price of basic TV were set at the competitive level.

55. Ofcom states that the distinctiveness of the differences between free-to-air and pay TV is being eroded by Freeview[23] and that its conclusion, that 'basic' pay TV and free-to-air TV are in different markets, is not "an overwhelmingly

[17] Condoc, para. 5.23.
[18] OFT Decision No CA98/20/2002, dated 17 December 2002, entitled "BSkyB investigation : alleged infringement of the Chapter II prohibition"; at para. 161.
http://www.oft.gov.uk/shared_oft/ca98_public_register/decisions/bskybfinal1.pdf
[19] Competition Commission Report to the Secretary of State, dated 14 December 2007, entitled "Acquisition by British Sky Broadcasting Group of 17,9 percent of the shares in ITV PLC",
http://www.competition-commission.org.uk/rep_pub/reports/2007/fulltext/535.pdf
[20] Ibid., at para. 4.30.
[21] Ibid., at para. 4.3.
[22] As discussed at para. 5.12 of the Condoc.
[23] Condoc, para. 5.48.

strong conclusion, and free-to-air appears to be a close and increasingly strong constraint".[24]

56. In BT's view, there are a number of factors indicating that the distinctions between free-to-air TV and 'basic' pay TV continue to be significant. These factors bolster Ofcom's conclusion that free-to-air and basic pay TV are in separate economic markets:

- First, the relative channel capacities of the main FTA and pay platforms are poles apart and this will persist for the foreseeable future. The DTT platform, on which Freeview operates, is capacity-constrained and cannot provide anywhere near the number of channels that can be supplied via DTH or cable. Although free-to-air channels are also provided on DTH, both DTH and cable are predominantly pay-TV platforms[25]. DTH and cable have therefore much greater ability to provide a range of channels appealing to a very wide variety of tastes and interests, compared to offerings on the DTT platform. This is particularly relevant given that Ofcom's own consumer research shows that access to more channels was a key driver in choosing pay TV for the majority of stand-alone basic tier subscribers.

- Second, some of the most attractive content, not limited to premium sport and premium movies, which is largely controlled by Sky (e.g., first-run US TV series shown on Sky One), is not currently made available on a free-to-air basis, and there is little prospect of it being made available on such basis. For the many customers who see this attractive content as a central part of pay TV's benefits, free-to-air offerings will not be a close substitute.

  Sky is increasingly seeking to differentiate its 'basic' channel offerings, by increasing its focus on exclusive programming. In acquiring content, Sky benefits from its market power, discussed below, as well as material advantages in competing for the acquisition of content, discussed in section IV. Since this content is not made available on a free-to-air basis in the UK, this is likely further to increase the attractiveness of pay TV for many consumers. As noted by Sky:

  > "We pride ourselves on the unrivalled breadth, depth and quality of our onscreen programming and we have spent the year furthering our leadership in this area. For example, we acquired rights to great shows, such as 'Lost' and 'Prison Break'".[26]

[24] Condoc, para. 5.52.
[25] Unlike DTH, cable does not offer a FTA only option for consumers, rather FTA channels are carried in the lowest priced bundle of basic pay channels.
[26] http://library.corporate-ir.net/library/10/104/104016/items/258443/AR07.pdf, at p.3.

Sky's 2007 Annual Review refers to the importance of 'Lost' for Sky One, as well as The Simpsons, "Which Sky One airs four years ahead of any other channel."[27]

- Third, the pricing of Sky's basic packages does not indicate that it is materially constrained by the availability of free-to-air alternatives.

57. Until 2005, Sky's basic packages prices increased annually and thereafter, as noted by Ofcom, they have been constant in nominal terms. Ofcom suggests:

> "This may indicate a competitive response to the growing threat of Freeview (and therefore suggest broadening the market), but it could equally represent competitive intensity within the basic-tier pay TV market".[28]

58. In BT's view, any such pricing analysis risks falling foul of the 'cellophane fallacy'. It may very well be the case that Sky's retail prices for its 'basic' pay TV packages have been set above the competitive level – this may be the case because, for example, Sky may have been able to use its advantages in 'basic' pay TV, together with its substantial market power in premium pay TV (particularly in combination with its buy-through obligation), to force customers to pay prices materially above the competitive level for 'basic' content. The possibility that Freeview might now exercise some competitive constraint on these prices does not suggest that they are in the same market, or that 'basic' pay TV is now priced at the competitive level.

Sky arguments

59. In its October 2007 submission to Ofcom, in the context of the present inquiry, Sky argued that pay TV and free-to-air TV are in the same economic market.[29] In Sky's view, "competition for viewing is a zero sum game",[30] as viewers gained by one provider of TV services are lost by another such provider; also, the significant growth in free-to-air services and take-up of these services suggest a wider market definition.

60. In BT's view, none of the arguments, put forward by Sky in its October 2007 submission would undermine the conclusion reached by Ofcom on this issue, which BT supports. As Sky notes with regard to past competition inquiries,[31] whilst there is no doubt that there is some competitive interplay between basic pay TV and free-to-air, the question is whether this is sufficient to justify a conclusion that the two are in the same economic market. Sky's rather general arguments confirm this interplay, which is not disputed, but do not address the issues of detail raised by Ofcom and discussed further above, which indicate that

[27] http://library.corporate-ir.net/library/10/104/104016/items/262498/Annual_Review_07.pdf at p.8
[28] Condoc, para. 5.51.
[29] BSkyB October 2007 submission to Ofcom, at para. 2.4.
[30] Ibid., at para. 2.5.
[31] Ibid., at para. 2.9.

this interplay is not sufficient to justify a conclusion that they are part of the same economic market.

61. Rather than seeking to rely on factual information to justify its argument regarding the inter-relationship between pay TV and free-to-air, Sky relies on a theoretical model, set out in Annex 1 of its October 2007 submission, entitled "The standard economic model of substitutability between pay TV and free-to-air services".

62. The fundamental flaws in Sky's economic model include:

- The model simply relies on an assumption that there is an inter-relationship between pay TV and free-to-air, to arrive at the conclusion that such an inter-relationship exists.

- The model is wholly unnecessary to make the simple and uncontroversial point that free-to-air exercises some competitive constraint on pay TV. Because the model relies on fictitious numbers and assumptions, however, which have no purported basis in fact, it provides no information whatsoever about the extent of the competitive constraint, which is the question that needs to be addressed in a market definition exercise. Sky's arguments do not address, still less undermine in any way, Ofcom's much more complete and fact-based analysis which justifies the conclusion that free-to-air does not impose a sufficient competitive constraint on pay TV to be considered to be part of the same economic market.

- The core flaw with the model can be understood by considering that it is akin to arguing that bicycle rental and walking must be in the same economic market, simply because consumers attach value to walking and may well, during the course of the period of bicycle rental, actually prefer to walk rather than cycle – whilst these factors may well be true, they tell us virtually nothing about whether walking imposes a sufficient competitive constraint, on the facts of any particular case, to justify a finding that it is in the same market as bicycle rental.

C. The markets for premium sport and premium movies

63. Ofcom concludes that there are likely to be separate wholesale and retail markets for the supply of premium sports and movies channels.[32]

64. Also, Ofcom concludes that Sky is "likely to have market power in the retail market for packages containing premium sports or premium movies channels".[33] Furthermore, at the wholesale level, "Sky is therefore likely to enjoy substantial market power in both the sports and movies markets".[34]

<u>Premium sports channels</u>: According to Ofcom:

[32] Condoc, para. 5.23.
[33] Condoc, para. 5.54.
[34] Condoc, para. 5.56.

“a ‘premium sports’ pay TV service is usually defined as one that provides live access, often on an exclusive basis, to a specific set of highly-valued sports events. For the purposes of this work, we have considered packages of premium sports that include access to live FAPL matches.”[35]

65. BT has the following observations.

66. BT understands that Ofcom’s view is that the retail market definition includes any retail offering of channels which includes one or more premium sports channels; this would include Sky’s ‘basic’ pay TV channels, which are included as a result of Sky’s buy-through obligation[36]. BT agrees with this Ofcom view.

67. BT would also note that Ofcom’s analysis may be overly-focused on FAPL live rights. Whilst live FAPL rights are, no doubt, very important, they are not the sole basis of Sky’s market power in premium sport. Thus, as Ofcom notes, in Q3 2007, subscribers to Sky Sports had access to about 14,000 hours of sports[37] – FAPL programming represented only a tiny proportion of this sports coverage. Sky benefits from its aggregation of high quality sports content. This is illustrated by a recent Financial Times report that Sky CEO, Jeremy Darroch, stated that Sky had broadened its range of sports programming, getting 4.3m viewers for a recent darts match. “You wouldn’t want to be overly exposed to one individual package (and) sports fans like a breadth of content,” he said.[38]

68. As to the question of market power, it is useful to note, with regard to the advent of Setanta’s retail FAPL sports packages, that Sky’s CEO, Jeremy Darroch is reported by the Financial Times to have stated that Sky had seen no fall-off in its football audience as a result of the regulatory intervention, saying that subscriber numbers for its sports packages had grown.[39]

69. In BT’s view, Sky has market power, at the wholesale and retail levels, in the supply of any offering containing premium sports channels.

<u>Premium movie channels</u>: According to Ofcom:

> “the primary characteristic of a ‘premium movies’ pay TV service is that it provides access on a subscription basis to first-run movies from the six major Hollywood studios. The only example of such a service in the UK is Sky Movies, which has exclusive access to this content.”[40]

---

[35] Condoc, para. 5.25.
[36] Condoc., para. 5.54.
[37] Condoc., Annex 13, para. 4.12.
[38] Article in Financial Times, 7 February 2008, entitled “BSkyB hits peak of its investment in broadband”.
[39] Ibid.
[40] Condoc, para. 5.36.

70. BT has the following limited observations.

71. BT understands that Ofcom's view is that the retail market definition includes retail offerings of channels which include one or more premium movies channels; this would include Sky's 'basic' pay TV channels, which are included as a result of Sky's buy-through obligation. BT agrees with this Ofcom view.

72. As to the question of market power, BT agrees that Sky has market power, at the wholesale and retail levels, in the supply of any offerings that include premium movies channels.

D. Sky's market power in 'basic' pay TV services

73. Ofcom appears to conclude that Sky does not have any market power, at either the wholesale or retail levels, in 'basic' pay TV.[41]

74. In BT's view, Ofcom should consider more closely the questions of the market dynamics of supply of 'basic' TV channels and Sky's market position in the markets for the supply of 'basic' pay TV services. BT considers that Sky does have market power in the retail supply of 'basic' channels.

75. First, in BT's view, Sky has market power in the supply of 'basic' channels, deriving from the buy-through obligation.

76. Retail competitors of Sky are either prevented (in the case of operators such as BT Vision) or materially inhibited from competing for consumers who wish to acquire 'basic' pay TV but who also wish to acquire premium content. This is a very sizeable group of consumers. Over 70% of Sky's over 8.5 million customers acquire a package which includes at least one Premium Channel.[42]

77. As Ofcom states, the existence of the buy-through obligation means that these consumers

> "have no choice but to purchase a combined basic/premium bundle, and they will do so from whichever retailer on their chosen platform has access to premium content. Such consumers may be unwilling to purchase a further basic package from a different provider on the same platform. The effect of buy-through may therefore be to restrict competition in basic content between retailers on the same platform."[43]

---

[41] Condoc, paras. 5.24, 5.54, 5.55.
[42] BSkyB 2007 Annual Report, at p. 7; http://library.corporate-ir.net/library/10/104/104016/items/258443/AR07.pdf
[43] Condoc, para. 6.55.

78. In BT's view, this restriction of competition extends to competition between platforms, particularly as a result of relatively low barriers to switching platforms.

79. Second, the size of Sky's customer-base for 'basic' TV (deriving partly from the buy-through obligation) gives it a material degree of buyer power. Ofcom notes that the size of Sky's demand for 'basic' TV "may afford Sky a degree of buyer power when negotiating with third party wholesale channels providers",[44] but does not analyse this very important issue. Ofcom should, in BT's view, analyse the various manifestations of this buyer power and how this affects 'basic' pay TV at the retail level.

80. A proper analysis of Sky's buyer power may well reveal the extent to which retail competition for the supply of 'basic' pay TV is restricted. The buyer power manifests itself in, for example, MFN clauses or right of first refusal clauses being agreed between Sky and third party providers of 'basic' channels. These clauses serve to foreclose retail competitors of Sky.

81. Ofcom states, as one reason for its conclusion that Sky does not have market power in the supply of stand-alone basic-tier packages of pay TV, that "Sky and Virgin have roughly equal market shares in the market for packages containing only basic-tier TV channels".[45] This market share information is, however, open to misinterpretation, as:

- It assumes that 'basic' content is undifferentiated. It fails to take any account of the fact that Sky is in a position to use its buyer power to gain exclusive access to the more attractive 'basic' content. This differentiation enables Sky, for example, to charge a retail price of £16/month for an entry-level mix of 'basic' channels,[46] whereas Virgin Media's entry-level package of 'basic' channels is retailed for "free when a consumer takes the minimum phone package at £11 per month (includes free weekend calls)".[47]

- It ignores the issue of the particularly negative impact of Sky's buyer power on new entrants, such as BT Vision. Newer entrants are more likely to be foreclosed as a result of clauses (e.g., MFNs) with third party providers of 'basic' channels which may serve to disincentivise supply of relatively small quantities to smaller entrants.

[44] Condoc, para. 5.55.
[45] Condoc, para. 5.54.
[46] Condoc, Annex 8, Table 11.
[47] Condoc, Annex 8, para. 3.114.

82. Third, the size of Sky's 'basic' customer-base also gives its an advantage over its retail competitors in terms of the recovery of the costs of acquiring high quality exclusive 'basic' content.

83. Thus, for example, Sky knows that, on its acquisition of the latest US TV series, it can ensure that it recovers its costs by showing this content to a wide audience on Sky One. A similar option is not available to rivals who may also wish to purchase the US TV series in question – there is no substitute retail channel or bundle that will serve this purpose.

84. Fourth, Sky owns, or has a level of control over, many of the more important 'basic' pay TV channels.

85. Figure 18 on p.43 of Ofcom's Condoc identifies what is described as 'must have' channels on the basis of a customer survey. This suggests that Sky One is a particularly significant 'must have' channel. Sky describes Sky One as "the general entertainment flagship channel of the Sky Channels".[48]

86. Furthermore, Sky has shareholding interests in many of the most popular pay TV channels. Sky stated, in its latest annual SEC filing (20-F):

> "We hold equity interests in ventures that own 15 (not including time-shifted multiplex versions) of the Sky Distributed Channels (including certain Premium Sky Distributed Channels) which are operated and distributed in the UK, Ireland and the Channel Islands, namely Attheraces, Nickelodeon, Nick Jr., Nick Jr. 2, Nicktoons TV, National Geographic Channel, National Geographic HD, Adventure One, Chelsea TV, MUTV, Paramount Comedy, Paramount Comedy 2, The History Channel, the Biography Channel, and Crime and Investigation Network" (p.8).

E. Could specific retail TV platforms fall within separate platform-specific retail markets?

87. Ofcom concludes that, on balance, alternative retail pay TV platforms are likely to compete in the same retail market and, therefore, there is unlikely to be a separate market for any individual retail pay TV platform.[49]

88. BT agrees with this Ofcom conclusion.

[48] BSkyB 2007 Annual Report, at p. 6; http://library.corporate-ir.net/library/10/104/104016/items/258443/AR07.pdf
[49] Condoc, para. 5.58.

IV There are significant barriers that prevent entry into the wholesale channel provision markets

89. This section IV, together with sections V and VI, is intended to address questions 15-20 of Ofcom's consultation questions, as listed in Annex 4 of the Condoc.

90. Ofcom notes the inherent advantage an operator in Sky's position has in the race for the acquisition of content from rights holders:

91. "The benefits of content aggregation combined with the staggered availability of rights suggest that there are likely to be important first-mover advantages for certain wholesale channel providers. By aggregating content into channels, wholesale channel providers can increase the collective value of the content above its stand-alone value. This means that a channel provider that already has the rights to a significant range of content can potentially extract more value from the next set of rights to come available than could a new entrant. It will therefore be able to pay more for those rights. Staggered availability of rights also facilitates the content aggregation effect described above, by making it easier for an incumbent with a significant portfolio of rights to accumulate and retail other rights as they become available."[50]

92. Ofcom also notes that the difficulties faced by new entrants are likely to be exacerbated by the long duration of rights agreements, in that it would then take the entrant a number of years to acquire sufficient content for the market to begin to 'tip' in its favour.[51]

93. If anything, in BT's view, Ofcom has understated the difficulties faced by new entrants who wish to acquire valuable content rights from rights holders. BT comments below on a number of other factors that further increase the difficulties faced by new entrants.

1. <u>Short duration of rights agreements</u>

94. Ofcom has referred to the problem faced by new entrants of the long duration of rights agreements. There is, however, the possibly more significant problem, which is not discussed in the Condoc, caused by the short duration of some rights agreements. This problem is particularly relevant in the context of sports rights.

95. This issue was raised in the July 2007 Joint Submission.[52] This Submission noted that for a number of valuable rights, the rights agreement in question expires after a relatively short duration (often, three years). This gives the

[50] Condoc, para. 6.64.
[51] Condoc, para. 6.65.
[52] At p.15.

acquiring firm a strictly limited time-period within which to make a return on their investment. Accordingly, as acknowledged by Ofcom[53], firms with an established subscriber base downstream enjoy a competitive advantage when bidding for such content.

96. In its October 2007 Submission, Sky argues against this, inter alia, on the basis that third parties can readily get access, on regulated terms, to the DSat platform (i.e., the platform which has the great majority of pay TV customers); also, if the content in question is sufficiently ‘key’, the third party could wholesale its channel in question to Sky: “it seems unlikely that – should a third party channel provider win a bid for valuable ‘key content’ – Sky could credibly refuse to purchase channels with this content (or would offer very unattractive terms for a wholesale deal)”.[54]

97. As to the claim that a third party could readily get access, on regulated terms, to the DSat platform, first, this does not at all deal with the core problem that a new entrant is hardly likely to be able to build-up a DSat customer-base that is in any way comparable to Sky’s within the space of, say, three years. Second, the fact that access to the DSat platform is subject to regulation, does not negate Sky’s incentives and ability to disadvantage new entrants. Thus, for example, BT understands that Sky has reserved the right, in conditional access contracts with third parties, to change its conditional access charges on 90 days’ notice and, in certain circumstances, on shorter notice. The uncertainties around this issue of access charges create advantages for Sky in bidding for the content in question in the first place.

98. As for the issue of the new entrant being able to wholesale its content to Sky:

- First, it seems implausible that Sky would assist its retail rivals by agreeing such wholesale terms with them that would signal to them and to other retail rivals that Sky can be outbid for content rights.

- Second, in the process of bargaining for wholesale terms, Sky would have a major advantage in that the third party would clearly be dependent on it to monetise its content rights – this means that the third party would have to cede to Sky a significant portion of the revenues that would be generated from the content in question. This inherent Sky bargaining advantage would, of course, materially disadvantage the third party in its bidding for the rights in the first place.

- Third, even if wholesale terms were agreed, Sky would not have an incentive to promote the rival channel in competition with its own channels.

[53] Condoc., para. 6.18.
[54] CRA paper, para. 90.

- Fourth, in its October 2007 Submission, Sky explains why it has a preference for retailing, rather than wholesaling, its content over third party platforms[55] - to the extent that these Sky arguments have any validity, they could also be used to explain the disadvantages that would be faced by any new entrant wholesaling to Sky. Thus, for example, Sky notes:

  > "Third party retailers do not have the same incentives as Sky to market Sky's channels. Whereas Sky has very low marginal costs (since many of its rights costs are largely fixed), third party retailers must bear a marginal cost (namely the wholesale price). This is inherent in wholesale distribution, as there is a marginal cost whatever the supply price (unless it is zero)."[56]

2. <u>Sky's advantages deriving from its supply of its channels to commercial premises</u>

99. The Condoc mentions Sky's supply of its channels to commercial premises.[57] It notes that over 45,000 commercial premises subscribe to Sky, at a monthly subscription rate of anything from £89 to £2,790, depending on the rateable value of the premises in question.

100. In an article following the most recent auction for FAPL rights in 2006, the Guardian noted that:

> "with 47,000 commercial subscribers, mostly pubs and clubs, it is believed that Sky recoups its whole outlay for the Premiership TV rights solely from this market".[58]

101. Whilst BT is not in a position to comment on the validity of this claim, the available evidence suggests that Sky does derive a material advantage in bidding for sports rights, as a result of its market position with its commercial subscribers.

102. In the first place, to BT's knowledge, Sky is essentially the sole retailer of sports channels to commercial premises (in particular, pubs and clubs) in the UK. Setanta Sports is, BT understands, exclusively retailed by Sky to commercial premises and is only available to such premises as a buy-through via Sky's retail services.

---

[55] BSkyB October 2007 Submission eg p.45.
[56] BSkyB October 2007 Submission, para. 4.17(b).
[57] Condoc, para. 3.32.
[58] *Source: http://football.guardian.co.uk/comment/story/0,,1860744,00.html*

103. Secondly, the provision of live sports broadcasts is an important part of the services provided by many commercial premises (in particular, pubs and clubs). The ability of clubs to show live sports events will have a material impact on their own revenues. Accordingly, the owners of commercial premises are, to an important extent, 'captive customers' of Sky, in that Sky faces no retail competition and owners of commercial premises can be forced to pay high prices (because of the impact on overall revenues of the commercial premises of not having the Sky sports channels).

104. This suggests that Sky has a material advantage over its rivals in bids for sports rights, in that it can leverage the significant revenues its gains each year from commercial subscribers continually to outbid its rivals to acquire high-cost premium sports content.

105. Whilst it is true that competing bidders for content could, if successful, seek to persuade many of the commercial premises owners to switch from Sky, the uncertainties of outcome surrounding this process (particularly as a result of Sky's hold over a wide range of attractive content rights, not solely FAPL rights) still give Sky a very material advantage in the bidding process.

V Sky's incentives and ability to foreclose retail competitors by restricting or denying access to content

106. This section V, together with sections IV and VI, is intended to address questions 15-20 of Ofcom's consultation questions, as listed in Annex 4 of the Condoc.

107. The Condoc provides a very informative analysis of the incentives faced by vertically-integrated operators. Ofcom notes that, whilst vertical integration can deliver efficiency benefits, it can also affect the incentives of vertically-integrated operators, in such a way as to lead them to foreclose competitors.[59]

108. The following paragraphs set out BT's views on this issue. These views are supplemented by a paper by NERA, attached in Annex 2.

1. <u>The incentives of vertically-integrated operators, with market power, to refuse to wholesale their content to downstream competitors</u>

109. In assessing this issue of incentives, Ofcom's analysis of the critical diversion ratio provides a useful framework. As Ofcom notes, the lower the critical diversion ratio, the more plausible it is that a vertically-integrated wholesaler-retailer will refuse to supply its content to rival retailers.[60]

110. Ofcom lists a number of circumstances in which the critical diversion ratio may be lower, including where the retail margin is high, for example where the relationship with the customer enables the vertically-integrated operator to earn additional profits from other products and services, such as through bundling.[61] This is a particularly important issue in the context of pay TV, given the increasing importance of multiple-play offerings from various operators.

111. Sky competes for customers, who will be sources of various revenues (in particular, pay TV, telephony and broadband). As Sky's profits from the provision of bundled services increase, its incentives to wholesale its content to retail competitors correspondingly decline. In this regard, it is noteworthy that, in its 2007 Annual Review, Sky stated that it is moving from a £7 billion industry (ie, pay TV) to a £25 billion industry (ie, for converged services).[62] Also, in a recent press release announcing that the 1 millionth customer had switched to Sky Talk, Sky stated:

112. "The increasing popularity of Sky Talk is part of the trend for customers to get all their home entertainment and communications services in one convenient package. Sky is also the UK's fastest growing broadband provider and around

[59] Condoc, paras. 5.120-5.129.
[60] Condoc, para. 6.33.
[61] Condoc, para. 6.33.
[62] http://library.corporate-ir.net/library/10/104/104016/items/262498/Annual_Review_07.pdf, at p.5.

three out of four people who switch to Sky for TV and broadband are choosing Sky Talk for their calls as well.[63]

113. Ofcom also notes the impact of switching costs on the critical diversion ratio, stating:

> "The particular role of switching costs is noteworthy, given that switching costs are likely to be higher when consumers are switching between retailers on different platforms than they are when consumers are switching between retailers on the same platform. This suggests that a vertically integrated wholesale channel provider would be much more likely to make its content available to alternative retailers on other platforms where it is not present than to alternative retailers on any platform on which it is present.[64]

> The Condoc sets out a useful general overview of switching costs. It finds, on the basis of actual switching costs and evidence of consumer activity, that "the actual barriers and 'hassle' are likely to be greater when switching platforms than when merely switching retailers on a platform."[65]

114. In BT's view, however, Ofcom's analysis may be somewhat general in nature and does not provide sufficient insight into the question of the nature and extent of switching costs that arise when high quality content that drives uptake of pay TV becomes available/is no longer available on any particular platform. Thus, for example, whilst, as Ofcom suggests, "hassle" may generally be a particularly important reason for consumers not switching retail supplier in response to movements in relative prices, this factor may be far less significant where consumers have to consider switching choices because of the availability/non-availability of important content on particular retail platforms.

115. Ofcom states that its conclusions regarding switching costs correlate in some respects with observed fact, in that, for example, Sky makes its premium content available to platforms, such as cable, where Sky is not present, but does not make this content available to other platforms on the DSat platform.[66]

116. In BT's view, however, the evidence does not necessarily suggest that Sky's incentives to supply its premium content to cable depend on the purportedly relatively higher switching costs between DSat and cable. Rather, Sky's incentives derive from the history of its supply arrangements with cable, including its undertaking to the Director General of Fair Trading, following the OFT's 1996 Review, to supply to cable on the basis of a rate card. In particular, if Sky were now to withdraw supply of its premium channels to Virgin Media,

[63] http://phx.corporate-ir.net/phoenix.zhtml?c=104016&p=irol-newsArticle_Print&ID=1105672&highlight=
[64] Condoc, para. 6.35.
[65] Condoc, para. 5.115.
[66] Condoc, para. 6.36.

this may well give rise to serious concerns regarding possible abuse of dominance; different considerations may in practice apply, under competition law, in the context of a Sky refusal to *commence* supply to any other retail operator.

2. The increased incentives of vertically-integrated operators, with market power, to refuse to wholesale their content to new entrant downstream competitors

117. Ofcom states that:

> "A vertically integrated incumbent is likely to have a much greater incentive to deny its content to a new retailer, or a new platform, than an established retailer or an established platform. By refusing to supply its content to a new entrant it is not foregoing significant levels of wholesale revenue, but it is protecting itself from a potential threat."[67]

118. Ofcom suggests two factors which may make this likely:

- The presence of low costs of switching to the new platform. Ofcom notes, in particular, that this may be the case with regard to an IPTV-based service delivered over existing broadband connections.[68]

119. BT agrees with this Ofcom view. This issue is, of course, of very direct relevance to the BT Vision business. Because of the low cost of switching, the low incentive of the vertically integrated incumbent to supply the new entrant is then analogous to its low incentive to supply another retailer on the same platform.[69]

- There are many consumers who have not yet chosen any form of pay TV. Sky may choose to attract these customers and, once they have incurred the access cost of subscribing to Sky, may be more sensitive to incurring further costs in order to switch to any other platform at any stage in the future.

120. BT agrees with this Ofcom view. BT notes, however, that Ofcom's analysis of this issue assumes that the customer's initial choice of platform depends on the availability of 'premium content'. In BT's view, for some of these customers, who do not currently subscribe to any pay TV platform, their choice is also likely to be informed by the availability of 'basic' channels (which can be acquired from £16/month i.e., a significantly lower price than the minimum £34/month for premium sports or movies).

[67] Condoc, para. 1.59.
[68] Condoc, para. 6.71.
[69] Condoc, para. 6.35.

121. BT considers that there are also other factors that should be taken into account in any consideration of the incentives of the vertically-integrated incumbent to supply new entrants on other platforms. These include the possibility that the new entrants may seek to enter the market on the basis of commercial strategies that challenge the rent extraction model operated by the incumbent. For example, certain new entrants may seek to offer unbundled content that might attract material numbers of Sky high-value customers. Thus, for example, if BT Vision were to offer Sky Sports content on a stand-alone basis, this would likely lead to increased consumer choice and innovation in content services – it could also, however, result in those Sky customers who primarily value sports switching to BT Vision, in order to take advantage of a lower price point.

122. A further factor that should be taken into account is the uncertainty, from the perspective of the incumbent, as to the *ex post* situation following entry of the new entrant. This uncertainty will be affected by informational asymmetries as between the incumbent and the new entrant. Whilst, from the perspective of the incumbent, the new entrant may grow the overall market, there is also the risk that the new entrant may transform the market in a manner that may be undesirable to the incumbent. In assessing its incentives to provide content to the new entrant, the incumbent is likely to be risk-averse in the face of such strategic issues where future developments are very uncertain, with the possibility of the entrant having a very major impact on the incumbent's business.

123. Accordingly, in BT's view Ofcom is right to be particularly alert to the dangers of foreclosure targeted against new entrants, particularly at this important juncture for pay TV, where new market entry is becoming increasingly possible due to new distribution technologies and very many consumers will be choosing a digital TV platform for the first time in the next few years, as a result of the digital switchover.

3. <u>CRA's claims regarding foreclosure incentives and its 'vertical arithmetic' exercise</u>

124. CRA claims that:

> "a standard, static 'downstream foreclosure' story is highly improbable in this market in the first place, and therefore claims built around this concept should be discounted.

125. This is because when the *costs* of a downstream foreclosure strategy are properly taken into account, they outweigh any potential benefits. This is apparent from a simple comparison of costs we have carried out, in a 'vertical arithmetic' framework. Whilst ours is a highly stylized exercise, it does confirm that a strategy of downstream foreclosure (not making sports and movies

channels available to potential subscribers on different platforms) is likely to be unprofitable for Sky."[70]

126. This CRA claim is discussed in detail in the NERA paper, attached as Annex 2. The NERA paper argues that:

- First, the CRA conclusion is fundamentally flawed, as it suffers from a version of the 'cellophane fallacy'. The Complainants have alleged that Sky is *already* engaging in a foreclosure strategy, whereby Sky has *already* restricted access to a point where a *further* restriction would be unprofitable. Accordingly, CRA's claim, that a further access restriction/price rise would not be profitable for Sky is entirely consistent with the allegation of the Complainants.

- Second, not only does the CRA 'vertical arithmetic' not support CRA's claim, it actually implies the exact opposite ie, that Sky is actually engaging in vertical foreclosure, including in the dynamic sense of restricting access beyond the 'static' profit-maximising level that would arise from 'standard' downstream foreclosure:

    - neither a further restriction of access nor an expansion of access to upstream content by downstream rivals would be profitable if Sky was at the optimal foreclosure point from a static perspective.

    - However, if there was an additional dynamic benefit from foreclosure, a vertically integrated firm would restrict access *beyond* the level at which static profits are maximised. If one then were to compare the static costs and benefits from a change (positive or negative) in access, it would actually emerge that an *expansion* of access appears (from a static perspective) to be profitable.

    - CRA states that its "vertical arithmetic" does not include any dynamic benefits that Sky may derive from foreclosing its downstream rivals. Accordingly, its focus is limited to *static* costs and benefits from a change in access.

    - On the basis of its "vertical arithmetic", CRA suggests that Sky would find an additional access restriction unprofitable. But the full implication of the result goes further: the "vertical arithmetic" demonstrates that Sky should *increase* access to its upstream content by its downstream rivals.

    - Whilst there may be innocent explanations for why – on CRA's empirical analysis – Sky appears to have restricted access beyond the profit-maximising level from standard downstream foreclosure, the most immediate explanation for such behaviour would seem to be a

[70] CRA October 2007 paper, at paras. 45-46.

dynamic benefit to preserve its competitive advantage upstream, as suggested by the Complainants.

VI The issue of aggregation of content

127. This section VI, together with sections IV and V, is intended to address questions 15-20 of Ofcom's consultation questions, as listed in Annex 4 of the Condoc.

128. Ofcom notes in the Condoc that one of the characteristics of pay TV is the aggregation of content, at various levels of the value chain.[71] Whilst aggregation of content may give rise to efficiency benefits, Ofcom distinguishes two sets of circumstances in which competition concerns could arise:

- First, whilst aggregation of content may result in increased efficiency, to the extent that it results in the creation of market power, producers are likely to gain at the expense of the consumer. This is particularly the case with regard to the aggregation of content that is closely substitutable (such as premium sports or movies).

  As to possible regulatory intervention to address this concern, Ofcom states that this risks being "counter-productive":[72]

  > "It may be appropriate for a regulator to intervene in order to ensure that a greater proportion of the benefits of content aggregation flow through to consumers, but there is a significant risk that any intervention will also reduce efficiency".[73]

- Second:

  > "where content aggregation results in the creation of market power, which can then be leveraged into other markets, it is likely to produce additional competition concerns without any compensating efficiency benefits. Such leverage is likely to be of particular concern from a competition perspective."[74]

  Any assessment of this complex issue needs to be framed within the context of the consumer focus of Ofcom's legal powers and duties. Under section 3(1) Communications Act 2003, Ofcom has two principal duties, one being to further the interests of citizens and the other being "to further the interests of consumers in relevant markets, where appropriate by promoting competition". Section 3(5) of this Act provides that, when performing its duties to further the interests of consumers, "Ofcom must have regard, in particular, to the interests of those consumers in respect of choice, price, quality of service and value for money".

[71] Condoc, para. 1.22
[72] Condoc, para. 1.61.
[73] Condoc, para. 6.20.
[74] Condoc, para. 6.21.

129. On this basis, Ofcom has set out, in the Condoc, the following criteria against which to assess whether pay TV in the UK is functioning effectively: choice of platform and content, innovation in platform services, and the competitive and efficient pricing of pay TV services.[75]

130. Ofcom's analysis of content aggregation at various levels of the value chain is considered in some detail in the NERA paper, attached as Annex 2. The issues raised in that paper regarding Ofcom's analysis of content aggregation can be summarized as follows:

131. First, Ofcom argues that content aggregation can be an efficient form of price discrimination. At the retail level, for example, where content is aggregated into channels or bundles of channels:

> "For instance, one consumer may value sports at £10 and films at £2, and the other vice versa. Both consumers would buy a joint package priced at £12, generating total revenue of £24, whereas single packages priced at £10 each would only attract those consumers who valued the individual elements at £10, generating total revenue of £20."[76]

132. In this stylised example, the bundling of two channels gives rise to higher consumption – although the entire consumer surplus is extracted by the producer. However, content aggregation need not always result in an output expansion, and the issue of efficiencies from content aggregation should accordingly be examined in light of the applicable factual matrix. Consider for instance a very minor modification of the example, so that the £2 valuations are changed to £6. In this setting, a very different result emerges: if bundling was not possible, the profit-maximising price for each of the channels would be £6 (giving total revenues of £24), with both consumers watching both channels and each consumer deriving surplus of £4. Allowing for bundling would lead the producer to set a bundle price of £16, which would not increase choice or consumption – the only effect of bundling would be to transfer surplus from the consumer to the producer (whose total revenues would be £32), leaving as a result zero surplus to consumers with no countervailing efficiency benefits.

133. This suggests that great care needs to be taken to avoid inapplicable extrapolations of the conclusion arising from Ofcom's stylised example, namely that "this type of bundling can frequently lead to an expansion of output and efficiency gains."[77] On the facts of particular cases, it may well actually result in no expansion of output or efficiency gains, but simply benefit the producer at the expense of the consumer.

[75] Condoc, para. 2.24.
[76] Condoc para. 5.83.
[77] Condoc, para. 6.9.

134. Second, there is the issue of exhaustion, or diminishing returns, of efficiencies from content aggregation, at any level of the pay TV value chain. Whilst content aggregation can give rise to increases in overall output, the circumstances in which it will have this effect, as well as the magnitude of the effect, need to be carefully examined, particularly given the level of control exercised by Sky over content.

135. The NERA paper discusses the diminishing returns which can realistically be expected from content aggregation, in terms of the generation of efficiencies. Past a given threshold bundle size, any further efficiencies which could arise from further increases in the size of the bundle may well be insignificant.

136. Whilst Ofcom has noted the issue of exhaustion of content aggregation efficiencies,[78] in BT's view, this issue needs to be looked at in considerable further depth.

137. Third, whilst aggregation of content may, up to a point, lead to efficiencies for total surplus, a situation of competition between smaller bundles at the retail level may still be preferable from a consumer perspective. Thus, for example, if a second bundle were allowed to emerge and rival the bundle currently marketed by the incumbent monopolist, the resulting competition between the two bundles would be likely to result in significant benefits for consumers in the form of lower prices and expanded output. The NERA paper sets out a stylised example to illustrate this point.

139. Fourth, the NERA report argues that rather than, for example, a situation in which one operator monopolises content at the wholesale level, a situation where there are competing suppliers of content at the wholesale level can be output expanding, for the benefit of consumers and, conversely, lack of competition between bundles of content at the wholesale level can result in those consumers who place a lesser value on content not being served at all.

140. This is a particularly important issue in pay TV, given that more than half of all UK households currently do not subscribe to any pay TV service and are likely to continue to be discouraged from subscribing to pay TV as a result of the current arrangements. In BT's view, aggregate consumer demand would increase and consumers would derive more benefit if a greater range of bundles of content were available to them. This is a business model that BT Vision is pursuing, but is facing considerable obstacles due to the unavailability of a significant amount of 'key' content for its services.

142. BT considers that the interaction of these effects in practice in the pay TV industry is ultimately an empirical question that requires careful and detailed

[78] E.g., Condoc, para. 6.19.

analysis, as is clear from the Condoc. For such an exercise, competition ought to be the benchmark against which outcomes are measured, and any deviations from a situation of competition ought to be fully justified by analysis.

143. BT is particularly concerned that the extent of content aggregation under the current structure of pay TV results in significant consumer segments not being served at all. As Ofcom has noted:

> "There may be certain types of consumers who are not well served by pay TV in the sense that the pricing structure may serve to exclude them from the market. Around half of the consumers who currently take free-to-air digital TV cite price as a reason for not upgrading to a pay TV service."[79]

144. The size of this detrimentally-affected group of consumers is very significant and cannot be ignored, as it may amount to more than half of all UK households.

145. Furthermore, new platforms for the provision of pay TV services are emerging. These new platforms should benefit consumers, by introducing innovative business models and new competitive forces. This development is, however, being significantly undermined by the current structure of pay TV, including, for example, as a result of the extent of content aggregation at the wholesale level of the value chain.

[79] Condoc, para. 1.16.

VII The need for Ofcom to address the structural problems in pay TV in the context of the "market investigation" provisions of the Enterprise Act 2002

146. As Ofcom is aware, it has discretion under section 131 Enterprise Act 2002 to make a market investigation reference to the Competition Commission where:

> "it has reasonable grounds to suspect that any feature, or combination of features, of a market in the United Kingdom for goods or services prevents, restricts or distorts competition in connection with the supply or acquisition of any goods or services in the United Kingdom or a part of the United Kingdom".

147. In the July 2007 Joint Submission, the parties explained why, in their view, the most appropriate way forward would be, in the absence of adequate undertakings being offered by third parties and accepted by Ofcom, for Ofcom to refer the pay TV industry to the Competition Commission, pursuant to section 131 Enterprise Act 2002. The following paragraphs set out some further comments on this issue.

148. In a May 2007 speech,[80] the chairman of the Competition Commission, Peter Freeman, outlined "the kinds of situation that market investigations can cover, and which a prohibition system might miss". The following lists a number of the kinds of situation identified by the chairman of the Competition Commission and shows, in BT's view, the appropriateness of a market investigation reference in the present case.

149. 1. "*Unilateral effects:* The need to improve the operation of a market dominated by one or more players, who are not themselves 'abusing' that position (particularly where incumbents are protected by high natural or strategic entry barriers that impede self-correcting entry)".

150. Ofcom's preliminary conclusion is that Sky has substantial market power at both the wholesale and retail levels.[81] Furthermore, there are significant barriers to entry at the wholesale level, given the very high costs of acquiring 'key' content, together with Sky's inherent advantages over its rivals for the acquisition for such content, as described in section IV above. The Condoc points to a range of factors which may result in pay TV in the UK not be functioning as well as it could, and these factors may not be the result of any potential 'abuse' by Sky of its market power. These factors include:

---

[80] http://www.competition-commission.org.uk/our_role/speeches/pdf/freeman_edinburgh_030507.pdf

[81] At the retail level, BSkyB is "likely to have market power in the retail market for packages containing premium sports or premium movies channels" (Condoc, at para. 5.54). Also, at the wholesale level, Sky is "likely to enjoy substantial market power in both the sports and movies markets." (Condoc, at para. 5.56).

- Ofcom notes that "where a single entity can aggregate, on an exclusive basis, the majority of closely substitutable content, that entity may be able to ensure that retail prices for that content rise above competitive levels, even if there is effective competition at the retail level".[82] This suggests that the acquisition and aggregation by Sky of high quality content, together with the various contractual provisions such as MFNs and exclusivity clauses, may well give rise to competition concerns – whilst the acquisition by Sky of high quality content and its aggregation of this content within its existing channels in particular cases may well not amount to an 'abuse', it may well raise material concerns about the proper functioning of the market.

- Ofcom notes that content providers may seek to offer rights across multiple distribution technologies, rather than offering technology-specific rights, as this may give rise to a higher price for the rights.[83] Ofcom's comments on this issue include a stylised example to illustrate the point.[84] On the other hand, however, the European Commission has noted that:

  > "Bundling of rights across platforms may represent a restriction which, due to the strong asymmetry of value between the TV rights and the [new media] rights, prevents operators that offer [new media] services from purchasing meaningful rights."[85]

151. BT Vision is particularly concerned by this issue, as it is facing considerable difficulties in acquiring high quality content rights; these rights tend to be bundled with other rights by rights holders and, in some cases, are warehoused by the rights purchaser. The effect of this is that innovation and customer choice is restricted. This competition problem may not be the result of an 'abuse' of dominance; it does, nevertheless, in BT's view amount to a market failure that needs to be addressed.

152. 2. "*Co-ordinated effects*: Non-collusive oligopoly behaviour falling short of illegal conspiracy, of the form economists would regard as tacit co-ordination leading to prices approaching the collusive (or monopoly) level."

153. The issues raised above in the context of unilateral effects may also give rise to issues of co-ordinated effects.

154. 3. "*Vertical effects*: Issues of market structures in vertical cases with parties operating at different levels of the supply chain where some 'unbundling' is perhaps needed to correct distortions in competition or actual or perceived discrimination".

---

[82] Condoc, para.6.11.
[83] Condoc, para. 5.88.
[84] Condoc, footnote 45.
[85] European Commission's Concluding Report on the Sector Inquiry into the Provision of Sports Content over Third Generation Mobile Networks, 21 September 2005, at para. 32. Whilst the Commission's comment was specifically in the context of mobile rights, the principle equally applies to newer platforms for pay TV rights.

155. The issue of the ‘vicious circle’, that the parties have argued is taking place in pay TV in the UK, fits within this criterion.

156. In BT’s view, this issue needs to be fully addressed at all levels of the supply chain. Also, this can best be done via the market investigation mechanism. Neither the Competition Act nor section 316 Communications Act would be adequate to address the range of ‘vicious circle’ issues.

157. Ofcom states that “monopolisation of content at the wholesale level does not necessarily imply a lack of competition at the retail level”.[86] BT’s concern is that, if Ofcom does not address the lack of competition at various levels of the supply chain and limits any potential intervention to seeking to address particular manifestations of the ‘vicious circle’ at the retail level, Ofcom risks dealing only with a limited number of individual manifestations of the ‘vicious circle’ problem.

[86] Condoc, para. 6.29.

VIII Conclusion

158. In BT's view, the Condoc provides a very detailed and informative analysis of pay TV in the UK. The analysis provided in the Condoc clearly suggests that there is a need for urgent regulatory intervention in order to address the current problems in the structure of pay TV.

159. BT is firmly of the view, for the reasons set out in the present response, that the UK pay TV industry is not serving consumers well. Furthermore, regulatory intervention, on the basis of the 'market investigation' provisions of the Enterprise Act 2002, is urgently necessary in order fully to address the various features of pay TV that are not functioning adequately for the benefit of consumers.

OFCOM'S DECEMBER 2007 CONSULTATION,

"PAY TV MARKET INVESTIGATION"

BT GROUP PLC RESPONSE

March 2008

Annex 1

Comments on Ofcom's analysis of Sky's profitability

1. Introduction

In Annex 12 to its consultation document (the "Condoc"), Ofcom set out its analysis of Sky's profitability. This annex sets out BT's comments on Ofcom's preliminary findings.

In principle, the primary profitability measure for use in competition cases should ideally be IRR or NPV. The Oxera discussion paper for the OFT, which addresses this issue, recommends that this profit measure should be used to the extent that its estimation is feasible [1].

In its analysis, however, Ofcom discounts the use of IRR, as :

> "Accounting based profitability measures can be a poor estimator of economic profit due to accounting distortions and, in the case of comparator analysis, differing accounting treatments"[2]

Instead, Ofcom looks at two market-based indicators (i.e. based on the company's publicly listed share price) in a bid to assess whether the company is earning excessive profits. The two metrics used by Ofcom are Sky's Total Return to Shareholders ("TRS") and its Tobin's q ratio:

- A company's TRS measures the return to shareholders over a specified time period. It takes into account any appreciation in the share price over the time period as well as any dividends received by shareholders. The figure is calculated as the internal rate of return ("IRR") earned by the shareholders from comparing their initial outlay on the purchase of the shares against the dividend income and exit (current) share price.

- The Tobin's q ratio is calculated as the enterprise value of a company (i.e the market value of its debt and equity) divided by the replacement cost of its assets.

Where a company's Tobin's q ratio is greater than 1 then the company is incentivised to invest, as for every £1 it spends it will generate more than £1 of value. A high Tobin's q is therefore indicative of supra-normal returns and therefore barriers to entry (as otherwise increased competition would normally give rise to new market entrants thereby reducing profits to normal levels).

The rationale for using TRS is less straightforward. The idea is that this looks at the IRR earned by a company's shareholders as opposed to directly measuring the IRR earned by the company. Crucially these can be very different however; the IRR earned by a shareholder is critically dependent on the share price at which they invest. If at this time the company already had

---

1 OFT economic discussion paper (2003) 'Assessing profitability in competition policy analysis' para 1.25

2 Condoc., para. 4.52.

market power (or was expected to gain market power) then this share price would include an expectation of excessive future returns and a high TRS would not necessarily be expected. [3]

2. Summary

Ofcom summarises its conclusions on Sky's profitability, in Chapter 4 of the Condoc, as follows:

> '*it seems unlikely from an analysis of Sky's profitability that Sky's returns to shareholders could be judged to be excessive, particularly given the risk profile when the early investments were being made.*
>
> *Having said that, the absence of high profits for pay TV operators does not preclude the possibility that consumers are still paying a lot for certain types of content, but this is being invested back into the firm to pursue growth rather than short-term shareholder returns. Furthermore, there are a number of indicators that there may be an incentive for Sky to invest in market share now, even at the cost of short-term profits, in pursuit of a longer-term market position.' (Condoc 4.76)*

Having reviewed Ofcom's analysis, BT's position is summarised as follows:

- BT does not believe that a conclusion that Sky is not earning excessive profits can be arrived at from the analysis provided by Ofcom. On the contrary BT believes the two market indicators are, if anything, indicative of excessive profits:
  - Ofcom concludes from its analysis of Sky's TRS that it has not outperformed the market since flotation. Even if this were true, it cannot possibly be deduced from this that the company is not making excessive returns. Ofcom itself recognises this fact, noting that if Sky's market power pre-existed at flotation then its TRS would not be expected to outperform the market. Limited consideration is given however as to why this possibility is disregarded in reaching its conclusions.
  - BT notes there is indeed evidence that Sky's market power pre-existed at flotation. In the OFT review of the UK pay TV market in 1996 it calculated the IRR as at June 1995 (shortly after the flotation date) and that it '*was possible to conclude with reasonable degree of confidence that there was evidence of supra-normal*

[3] For the avoidance of doubt, where this document refers to IRR it relates to the IRR of the company's cashflow as opposed to the IRR earned by its shareholders (i.e. TRS) unless stated otherwise

profitability consistent with the existence of barriers to entry to the UK pay tv market[4]'

  – Sky's Tobin's q ratio would also appear to be consistent with Sky having market power, although BT recognises that this indicator needs to be used cautiously.

- BT has referred to the Oxera discussion paper for the OFT on profitability assessment in competition analysis and has concerns about Ofcom's rejection of IRR as an indicator. BT also has some specific concerns regarding the application of both the TRS and Tobin's q metric:

  – As previously stated, the Oxera paper highlights IRR as the preferred measure for competition analysis. Where there are difficulties in allocating revenue and costs between discrete businesses or complications in valuing assets it suggests a number of proxy measures[5]. These difficulties would not appear to be particularly material in the present case. Sky's interests outside of domestic pay TV have been relatively minor and/or are easily capable of disaggregation. Likewise, asset valuations should be readily available. As a result, it is not clear to BT why Ofcom has chosen to discard IRR as the preferred measure.

  – Where market indicators are used as a proxy measure, these should be benchmarked against comparable companies. In its analysis, Ofcom fails to identify any suitable comparable companies and so uses the FTSE100. It is not clear why this should be a suitable benchmark: the Oxera paper recommends that any benchmark must have considerable similarity with the company or industry under investigation[6]. As an example, BT notes the Media sector is arguably a better comparator than the FTSE100 as a whole and this has underperformed the FTSE100 over the period of analysis.

  – The Oxera paper also recommends the use of Return on Sales and gross margin analysis together with market indicators, with all of these being benchmarked against suitable comparable companies. BT notes that no such analysis has been included in Ofcom's consultation document.

- This paper sets out an outline of alternative analysis that Ofcom may wish to consider exploring in more detail. Whilst BT recognises these require further analysis, at first glance these indicators appear to be indicative of excessive profits:

  – Sky generated a ROCE of 36% in 2007. This has been consistently above its cost of capital over the period from 2003 to 2007. Prior to this, profits were reduced due to significant levels of investment activity.

---

4 OFT review of BSkyBSky, Dec 1996 – para 7.13
5 OFT guidance on profitability analysis 2003 paras 1.23 & 1.29
6 OFT guidance on profitability analysis 2003 para 7.36

- Its profitability is significantly ahead of its peers[7] - in an analysis against a basket of comparable companies over the last three years, Sky has consistently come out top over a range of profitability measures (including return on sales, EBIT per subscriber and ROCE).

- BT agrees that even if Ofcom were to conclude that Sky is not earning excessive profits, this would not imply there is no competition problem in pay TV. Ofcom outlines the possibility that Sky may be investing in market share at the cost of short-term profits.

- BT notes that Sky has made some significant investments over the period of analysis and a number of these have been in loss-making companies. Additionally the company has invested in broadband as well as having to write off large amounts relating to its investing activities. The results have also incurred large levels of acquisition costs as the subscriber base has increased and these are unlikely to be incurred at the same level going forwards as growth in the customer base slows. Given all this it seems only reasonable to assume the profitability of the business will improve going forwards.

Based on this, BT does not believe a conclusion that Sky is not earning excess profits can be arrived at. Further, the initial evidence as presented in the consultation document would appear to be consistent with a competition problem in the UK pay TV market.

3. Profitability as an Indicator of a competition problem

A profitability analysis can provide a useful reference point and BT recognises that it has featured prominently in many other market inquiries (and indeed in previous market inquiries regarding Sky[8]). It may be used as an indicator of whether a particular firm has market power. Further, it may provide one benchmark for examining whether prices are likely to be "excessive".

However, and as Ofcom notes, whilst excessive profitability may provide evidence of a competition problem, this of itself would not be sufficient to demonstrate that there is a competition problem and that profitability indicators should not be used in isolation from a fuller assessment of competition in the market (para. 4.49). BT agrees with this appraisal. There are a wide variety of reasons to question the reliability of a finding based on profits analysis alone; some of these are discussed below.

A typical approach to profitability analysis is to look at a firm's return on assets or cashflows and to compare this to a relevant benchmark (e.g. the cost of capital, return on equity, returns earned by comparable firms etc).

---

7 Basket of companies

8 See OFT 1996 *The Director General's Review of BSkyB'sSky's Position in the Wholesale Pay TV Market*, Chapter 7.

But even before getting to the details of measurement and benchmarks for comparison, there are reasons to be cautious when using profitability as an indictor of market power (either in support of a conclusion that a firm does have market power or in support of a conclusion that a firm does not have market power):

- As Ofcom notes, Sky may have been investing in market share in the short run, even at the cost of short term profits, in pursuit of a longer-term position of market power.[9] BT does not have access to the detailed information that would be required to make an informed assessment, however based on publicly available information Sky's level of investing activity would appear to be high. By way of example the 3 investments highlighted below total in excess of £2.5 billion and represent more than 5 years average operating profit[10] :

  – In April 2000, Sky acquired 100% of the share capital of Kirch TV for a total consideration of £1.5 billion. At the time of acquisition Sky's share of the investment losses was £197m[11]. By 2002 Sky had written this investment off.

  – Sky acquired 100% of the share capital of British Interactive Broadcasting in 2001. At the time of acquisition Sky had already incurred losses of £284m in respect of this investment and it seems likely this investment would have had a significant negative impact on profits going forwards – at the time of acquisition BiB was heavily loss-making having lost £200m in each of the preceding financial years[12].

  – Sky entered the broadband market in 2006 with the acquisition of Easynet. Consideration was £223m in cash and the company lost £23m in the 6 months to 30th June 2006. Additionally Sky announced it would invest £250m in its network over the next two years[13].

  – Sky has grown its base rapidly - its customer base at the end of 2007 was 8.6 million compared to 3.5 million in 1998. As a result its profitability over this period will have been impacted by high levels of costs associated with acquiring these customers. By way of example BT notes that marketing costs in 2007, at £734m, were more than 4 times their value in 1998. Going forwards it would appear reasonable to assume Sky's profitability will increase as the level of customer acquisitions reduce.

9 Condoc, 4.76, bullet 7.
10 Average operating profit pre-exceptional items over 1998 to 2007 as per statutory accounts
11 Sky Annual accounts 2000
12 Sky Annual accounts 2001
13 Sky annual accounts 2006

For these reasons, BT believes that even if Ofcom's conclusion that Sky has not earned "excessive" returns was well founded, that would not point to a reliable conclusion that pay TV is priced competitively and efficiently.

4. Total Return to Shareholders ("TRS")

Ofcom analyses the TRS (dividends and changes in capital value) accruing to a shareholder that invested in Sky equity on flotation in 1994 and sold his shares at current market values. Ofcom estimate the annual IRR on this "investment" to be in the region of 6%-8%, and note that this is somewhat below the return to the stock market as a whole.[14] BT does not consider that this offers a reliable basis for concluding that Sky has not earned super-normal returns for several reasons:

- The TRS methodology is not well tested as a basis for drawing conclusions regarding market power.
- Ofcom's estimates ignore the possibility that Sky may have had market power at the time of flotation in 1994. Near contemporaneous evidence indicates that Sky did have market power at that time.
- Ofcom's analysis uses the FTSE100 as a benchmark. It is unclear why this group of companies is considered to be comparable to Sky as the vast majority will operate in completely different markets. By way of example, BT has highlighted the performance of the Media sector as an example of a potentially more suitable comparator. On this basis the same conclusions cannot be reached.
- Guidance provided by the Oxera paper for the OFT clearly states that any conclusion must consider a range of dates in order to reduce the likelihood of one-off effects influencing the result[15]. Ofcom's analysis fails to do this however and only considers a single period from flotation to 2007. BT notes there are a number of factors which may be negatively impacting Sky's current share price and therefore reducing the TRS as calculated by Ofcom.

Lack of track record for the TRS methodology

To BT's knowledge, the TRS methodology has not been widely used in a competition policy context or in past market investigations. The most prominent instance of the methodology being adopted that BT is aware of was

[14] Condoc, 4.56-4.58. Ofcom also state that it is likely that 6%-8% is below BSkyB'sSky's cost of equity, though no estimates of BSkyB'sSky's cost of equity are provided.

[15] OFT guidance on profitability analysis 2003 para 4.62 ("Oxera paper")

the Cruikshank review into banking published in 2000.[16] But when the Competition Commission reported on the *Supply of Banking Services* in 2001 it concluded that *"measures of total shareholder return which incorporate movements in stock market values are unlikely to be sufficiently robust for our purposes."*[17]

Sky's market valuation on flotation was likely to reflect excessive profits

Ofcom estimates that the TRS on Sky stock from flotation in 1994 to the present is 6%-8%.

The TRS analysis presented by Ofcom only considers the period from 1994 onwards in its calculation; thereby neglecting the market's expectations at the time of flotation. If excessive returns could reasonably have been foreseen at flotation, then future high levels of profitability would have already been built into the flotation price. In this instance excessive profits would accrue on flotation to the original investors and not to those investors entering the company subsequently. Consequently Ofcom's analysis would not be expected to show a high TRS; even in a situation where the company were making excessive returns.

This issue is recognised by Ofcom and is addressed in the final paragraphs of section 3 of their profitability analysis:

> *'It is also important to note that this analysis only measures total shareholder returns in the post flotation period. In the event that at or before flotation Sky was, or was expected in the future to be, in a position to make super-normal returns in excess of its cost of capital, the returns generated from this position would have been incorporated into its valuation at the time of the float. Under these circumstances, capital appreciation since flotation would reflect only changes in shareholder expectations of such super-normal returns and would not identify any such expectations that were already incorporated into the value at flotation.'*

(Ofcom Annex 12 para 3.10')

Ofcom also highlights that the new shareholders paid a significantly higher sum for the company than had been invested in building the business. It goes on to state, however:

> *'…the fact that Sky's implied market value upon flotation was higher than the sum of investment required to fund the business up to that point is not in and of itself evidence that shareholders were anticipating future super-*

[16] http://www.hm-treasury.gov.uk/documents/financial_services/banking/bankreview/fin_bank_reviewfinal.cfm

[17] Competition Commission (2002) *The Supply of Banking Services by Clearing Banks to Small and Medium-Sized Enterprises*, Volume 1, Conclusions, paragraph 2.418(c).

normal returns in the future which would have been in excess of the cost of capital'.

(Ofcom Annex 12 par 3.13)

Notably this however is a statement of what might be the case, not an evidenced assessment of whether it was the case. Accordingly, Ofcom's conclusion that Sky has not earned super-normal returns is ultimately based on a speculative judgement.

In fact there is near contemporaneous evidence that Sky was earning, or forecast to earn, excessive profits by the time of flotation. The OFT's review of Sky in 1996 calculated an IRR of 22.7% over the period from the mid-1980s to 30 June 1995 (shortly after the flotation date), well in excess of its assessment of Sky's cost of capital as being 11.2%.

Moreover, the OFT explicitly rejected the possibility that the *ex ante* risks faced by investors were substantially higher than indicated by Sky's costs of capital in 1995. It stated:[18]

> *"The assumption that the level of risk was uniform could, however, have resulted in an over-estimate if risks were incurred at the start of the project …and which were not… reflected in the beta coefficient at 31 March 1996… In our view, the best way to address this problem was to consider what prior probability that the investment would fail would have been sufficient to eliminate the excess return. We estimated that this prior probability of failure would have had to have been 41.1%. Given that Sky was the result of a merger between Sky Television Plc and "New BSB", so that the failure envisaged was that of the joint enterprise (that is that both BSB and Sky would fail), such a high level of risk seemed to us implausible.*

Ultimately, the OFT concluded that despite the prior risk issue:

'Nevertheless, it was possible, in our view, to conclude with a reasonable degree of confidence that there was evidence of supra-normal profitability consistent with the existence of barriers to entry to the UK Pay TV market'

(OFT Review of Sky, Dec 1996 – para 7.13)

Based on the above it is clear that the TRS analysis, which disregards the pre-flotation profits and expectations of market power in arriving at its conclusion, is not reliable. The TRS analysis asserts, without evidential foundation, that high up-front risks mean that the possibility of pre-flotation excess profits can be ignored, but the OFT which conducted a detailed examination at the time concluded precisely the opposite.

[18] OFT (1996), paragraph 7.11.

Comparators used as basis of assessment

The Oxera paper for the OFT provides detailed guidance on what should be used as a comparator on which to assess the company's profitability:

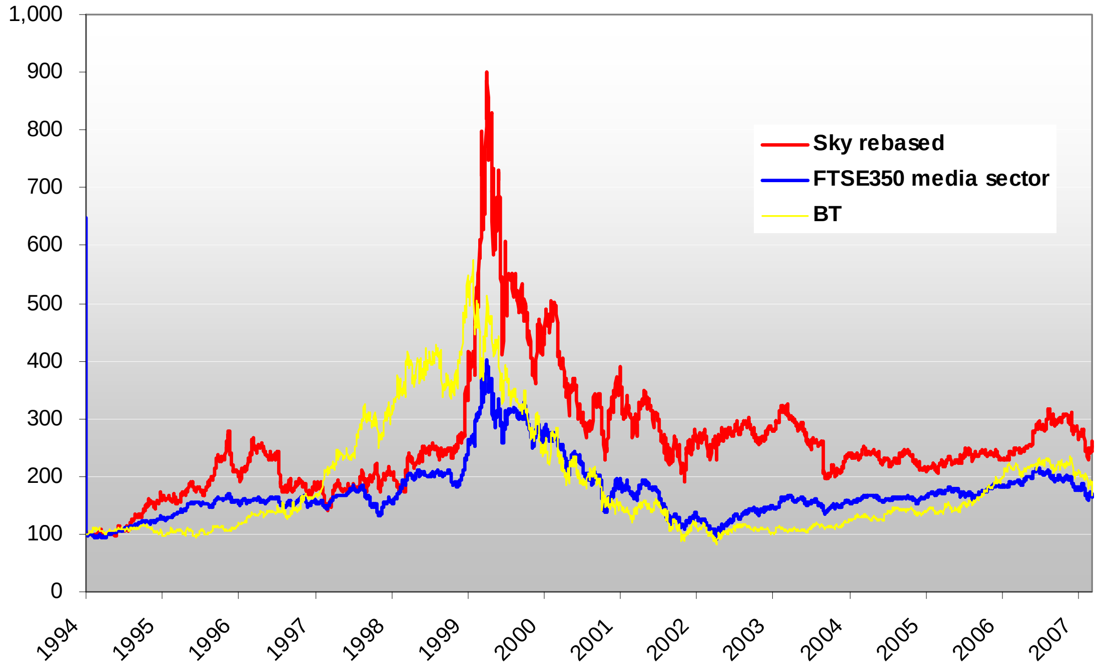
'It is essential that the companies or industries used as benchmarks have considerable similarity with the company or industry under investigation, since profitability can be expected to vary across companies, independently of whether or not profits are excessive[19]*.'*

In their analysis however Ofcom fail to identify any suitable comparable companies and so compare Sky's TRS performance to that of the FTSE100.

Ofcom's comparisons to the FTSE100, FTSE250 and the FTSE All Share Index are not on the face of it the most appropriate in terms of assessing Sky's profitability. There is no reason to assume that Sky's returns should have been similar to the stock market as a whole. Benchmark comparisons of this type are fraught with difficulty and require detailed examination before it can be confidently concluded that the comparator stocks are likely to have a similar profile of equity risk as Sky and taking other comparators could give a very different picture.

For example, the chart below compares Sky's TRS performance to that of BT and the FTSE 350 Media index. BT would contend that both of these are arguably better comparators than the FTSE100. These yielded a TSR of 4.08% and 3.90% respectively over the period 1998 to 2007; one could conclude from this that Sky's TSR of over 7% had outperformed these more comparable benchmarks. More detailed examination may well reveal that these are not particularly good comparators for Sky, but the example serves to demonstrate that simple comparisons with the aggregate indices can lead to very different conclusions.

[19] OFT discussion paper 2003 Assessing profitability in competition policy analysis para 7.36



Source: TRS per Datastream; 7th December 1994 rebased to 100

It is also worth noting that the Oxera paper for the OFT recommends that valuations are considered over a suitable time period to avoid one-off factors affecting the share price[20]. Considered over the period from 1994 to 2007 and against these new benchmarks then Sky's TRS performance has outperformed the media sector as a whole.

Specific factors impacting Sky's share price

There are several further reasons why the TRS might underestimate the profitability of Sky's core UK pay TV business:

- Sky's growth prospects were previously focused on UK pay TV and in the early years investors anticipated rapid growth in profits in that sector. The stock is now likely to be viewed as more mature in its core market (as indicated by an EV/EBITDA multiple of 13 x compared to 29 x in 1994). However, investors may view Sky as increasingly likely to expand out of its core UK pay TV activity into other activities that might have lower returns (because Sky has no market power in the new activities) or be misjudged. Experience in recent years gives some support to this possibility (see following bullet points).

- Since 2000, the group has lost nearly £2 billion through investments in non-core businesses representing significant destruction of shareholder value. In April 2000, Sky invested £1.5 billion in German pay TV operator Kirch TV. By February 2002 Sky had written off the investment as the

[20] OFT guidance on profitability analysis 2003 para 4.62 ("Oxera paper")

company had gone into insolvency. This investment represented 9 times its annual operating profit. Given Sky's track record with Kirch, the market may well take a cautious view of the increasing risk profile of the group as it looks to diversify to deliver future growth by entering the broadband market.

- There has been persistent media commentary in recent years on the possibility of regulatory intervention and some consideration of this may already be built into the share price. An example of this is the Credit Suisse analyst note 6th December 2007 "Regulatory overhang". The recent Competition Commission and Secretary of State decisions with regard to Sky's purchase of 17.9% of the issued share capital of ITV for £946m is also likely to have influenced the market's judgement in this regard.

Ofcom states that adjusting for Kirch alone would have added around 1 percentage point to the TRS. In reality the impact is likely to be larger however, as this episode is likely will have negatively impacted the investment community's perception of the Sky management team and consequently the share price As the company has recently announced its intention to invest heavily into a new market in broadband the impact could be significant.

5. Tobin's q

The Tobin's q is calculated as the ratio of the enterprise value (market value of a company's debt and equity) to the replacement cost of its assets. It is conjectured that if the market values a company at above its replacement cost, the difference is attributable to the existence of market power and barriers to entry by rival firms to erode that market power.

If the ratio is calculated simply as the ratio of the enterprise value to the company's balance sheet, Sky has a very high Tobin's q of around 7:1. That is, the market values Sky at 7 times its balance sheet value.

Whilst, as set out previously, BT does not necessarily agree that the FTSE100 is an appropriate benchmark, even using this benchmark Sky ranks around 6th or 7th (out of the 77 FTSE100 companies that BT was able to estimate a q ratio for).

080128 Tobin Q - Monthly.xls

However, there may be many other reasons (other than market power) why the book value of assets might deviate from the market valuation. One important practical issue, as Ofcom recognises, is that book values will not provide a reliable estimate of the replacement costs of intangible assets.

Ofcom seeks to address the problem of intangible assets by undertaking a bottom up estimate of the assets by capitalising all of Sky's costs (since flotation) of marketing and subsidizing consumer set top boxes. Further, Ofcom assumes that these "assets" are not amortized and are rolled forward at 3% (presumably to reflect inflation).[21] On the basis of this exercise, Ofcom estimates that the q ratio would be 1.7:1.

Ofcom's interpretation of the revised estimate is that:

> *"Although with a ratio of 1.7:1 Sky's market valuation still exceeds the asset valuation by a significant amount, this also appears to be true for a significant number of other companies. Whilst there are large numbers of other adjustments which could be made to each company in order to better equate book value and replacement costs, making them in a robust manner would be problematic."*[22]

Ofcom ultimately concludes that these adjustments fall short of providing conclusive evidence of excessive profits being earned by Sky.

BT notes that Ofcom's analysis is likely to significantly understate the degree to which Sky has a high q ratio relative to other similar companies. In particular:

- Ofcom's methodology is likely to overstate the valuation of the customer base. In its analysis Ofcom does not attempt to calculate the replacement cost of its assets. Instead it capitalises all marketing spend incurred over the period from flotation. This will significantly overstate the asset value:
  - It is highly unlikely that 100% of the marketing spend should be capitalised as not all of it relates directly to customer acquisition costs. Much of it will be general brand marketing which should not be capitalised.
  - In 1998 Sky began the process of migrating its customer base to digital. This led to the need to replace customers' existing set-top boxes. As a result a large part of marketing costs incurred before the digital switchover will represent duplicate costs and should not be included when looking at the replacement cost of the existing assets.
  - In a similar vein, a large amount of spend will relate to replacement set-top boxes, equipment for customers who have churned or even for equipment upgrades (e.g. Sky + boxes). This will also lead to an overstatement in Ofcom's adjustment.

[21] Condoc, Annex 12, 4.10.

[22] Condoc, Annex 12, 4.14.

- As Ofcom recognises,[23] any marketing capitalised over the period should be amortised and there is a real possibility that it should depreciate quite rapidly in some instances (e.g. because of declining costs of consumer equipment). Ofcom has made no such adjustment in its analysis.
- As an indication, BT notes that Sky has publicly disclosed its customer acquisition costs at £246 per customer[24], this compares to an estimate of the replacement value of a customer in the region of £600 per customer in Ofcom's analysis.

- Secondly, having made an adjustment to reflect intangible asset values for Sky, it is not then legitimate to compare Sky to other FTSE 100 companies. Even if it was considered that this was a suitable benchmark, BT notes that no similar adjustment has been made to reduce these companies' ratios. Without further investigation it is entirely possible that Sky would remain with one of the highest q ratios if other companies' balance sheets were also adjusted.

Whilst BT understands the need for more analysis in this area and specifically on the estimation of the replacement value of Sky's assets; based on this analysis it would appear that the evidence as presented is consistent with Sky earning excess profits and therefore a competition problem in the UK pay TV market.

6. Alternative analysis

BT has provided some additional analysis looking at a range of alternative indicators and this has been included at the end of this document. In summary, Sky's ROCE is significantly above its cost of capital and its returns consistently benchmark at the top of its peer group:

- Sky generated a ROCE of 36% in 2007. Whilst BT recognises that Ofcom may wish to conduct further analysis, this would appear to have been significantly ahead of its cost of capital since 2003.
- Sky's profitability would also appear to be ahead of its peers - in an analysis against a basket of comparable companies over the last three years Sky comes out at the top for a range of measures including return on sales, ROCE and the EBIT per subscriber.

[23] Condoc, 4.67.
[24] James Murdoch presentation 31.01.07, slide 27

7. Conclusion

Based on the above, BT does not believe it can be concluded that there are no indications of excess profitability in the UK pay TV market. If anything, the work to date would appear to provide some indications of excess profits.

Secondly, there are a number of issues that BT would ask Ofcom to reconsider in is application of the market indicators. Specifically it would appear that, the financial analysis set out in Annex 12 of the Condoc is inconsistent with the guidelines set out in the Oxera paper.

Given the lack of a strong track record in using the TRS approach and the large number of questions surrounding their implementation here however, BT would expect a conclusion on Sky's past returns to rely upon other, more established, approaches in addition to the TRS approach. Additional approaches might include:

- Truncated cashflow IRR
- ROCE %
- Gross margin and Return on sales
- Benchmarking to other comparable companies
- Tobin's q ratio based on a more detailed estimation of replacement value of assets

On the basis of the information set out in the Condoc and also in this document BT concludes as follows:

- Ofcom's TRS analysis is incomplete and inconsistent with the guidelines as set out in the Oxera paper
- The OFT investigation into Sky provides evidence that Sky was earning supra-normal profits at the time of flotation
- Sky's Tobin's q ratio would appear to be indicative of a competition problem in the UK pay TV market
- Sky's profits, when looked at against comparable companies, consistently benchmark at the top of its peers

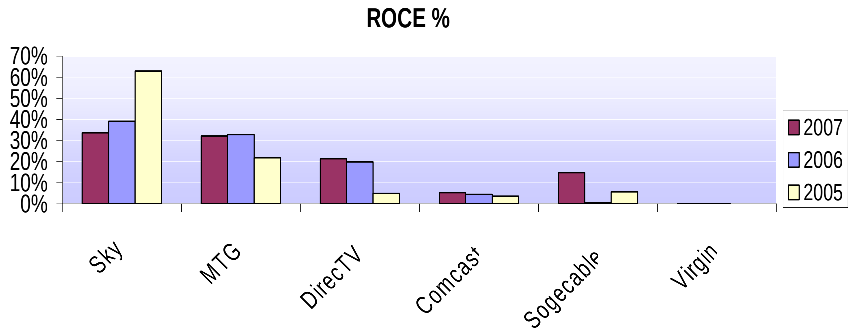
Based on the above BT believes the above provides evidence of a competition problem in the UK pay TV market

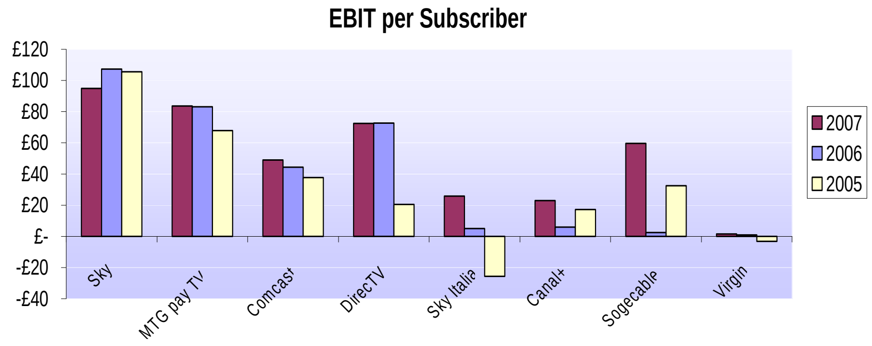
Appendix 1 - Sky financials

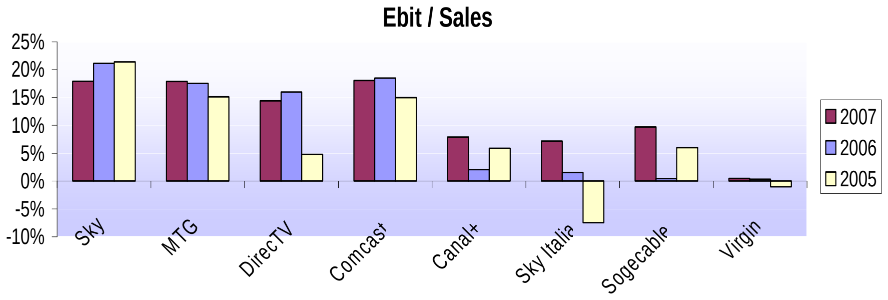
	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Turnover										
RTL (DTH subscribers)	968	979	1,189	1,537	1,929	2,341	2,660	2,968	3,154	3,406
WHS (Cable and DTT subscribers)	228	253	303	299	279	202	215	219	224	208
Advertising	195	217	242	271	251	284	312	329	342	352
Interactive	-	-	5	93	186	218	307	124	128	47
Other	44	97	108	107	131	141	162	202	300	538
Total Turnover	**1,434**	**1,545**	**1,847**	**2,306**	**2,776**	**3,186**	**3,656**	**3,842**	**4,148**	**4,551**
Operating expenses										
Programming	688	787	946	1,134	1,439	1,604	1,711	1,635	1,599	1,539
Transmission & related functions	70	91	105	129	147	143	146	171	234	402
Marketing	168	216	381	378	417	401	396	527	622	734
Subsciber mgmt	92	154	200	243	291	324	371	392	468	618
Administration	76	112	130	187	203	243	257	295	348	443
Betting	-	-	-	75	88	108	175			
Total operating expenses	1,094	1,360	1,762	2,146	2,585	2,822	3,056	3,020	3,271	3,736
Operating profit pre exceptionals	**341**	**185**	**85**	**160**	**192**	**364**	**600**	**822**	**877**	**815**
	24%	12%	5%	7%	7%	11%	16%	21%	21%	18%
Goodwill & exceptional items	-	(456)	(105)	(67)	(137)	(116)	(119)	-	-	
Operating profit	**341**	**(271)**	**(20)**	**93**	**55**	**248**	**481**	**822**	**877**	**815**
Joint venture goodwill (written off)			(14)	(101)	(1,070)					
Share of operating results of JVs								14	12	12
BiB	(5)	(44)	(99)	(135)						
Programming JVs	(11)	(13)	(11)	(4)	(7)	3	5			
KirchPayTV	-	-	(11)	(116)	(70)	-				
profit on FA investmt (net) and other			(15)	(118)	(48)	(15)	75	29	52	46
EBIT	**324**	**(329)**	**(171)**	**(382)**	**(1,139)**	**236**	**561**	**865**	**941**	**873**
Notes:										
Depreciation	(17)	(33)	(52)	(71)	(81)	(98)	(102)	(47)	(89)	(120)
Amortisation	-	-	-	(44)	(118)	(122)	(119)	(45)	(51)	(72)
of which exceptionals	-	-	(3)	(51)	(118)	(122)	(119)			
EBITDA pre exceptional charges	357	218	134	224	273	462	702	914	1,017	1,007
EBITDA post exceptional charges	357	(239)	32	208	255	467	702	914	1,017	1,007
Capital Employed (Source :consolidated balance sheets)	326	527	2,457	2,886	1,296	1,023	1,194	1,306	2,240	2,421
ROCE%	99%	-62%	-7%	-13%	-88%	23%	47%	66%	42%	36%
Subscribers (y/e closing)	3,547	3,460	4,513	5,453	6,101	6,845	7,355	7,787	8,176	8,582
Subscribers (mean)	3,540	3,504	3,987	4,983	5,777	6,473	7,100	7,571	7,982	8,379
Subscribers (gross adds)	549	453	1,472	1,438	1,249	1,355	1,200	1,225	1,275	1,446

Appendix 2 - Comparable company analysis

Notes







- The charts benchmark Sky against a number of comparable companies for a range of kpi's. On all 3 metrics Sky ranks ahead of its peers.
- In all cases results are stated pre-exceptional items
- ROCE is defined as EBIT pre-exceptional items divided by capital employed
- Numbers have been sourced from annual reports or 20F submissions
- Sources of comparator data:
  - Sky: BSkyB annual report
  - MTG: annual report
  - Direct TV: annual report
  - Sky Italia: annual report
  - Comcast: annual report
  - Canal + : Vivendi annual report
  - Sogecable: annual report
  - Virgin: annual report
- Footnote to graphs:
  - Virgin data includes cable TV, broadband and phone
  - Comcast data includes cable TV, internet and phone
  - MTG Pay-TV EBIT has been used for EBIT per Sub. Total EBIT used to calculate ROCE and EBIT/sales

14 March 2008

Pay TV Market Investigation

Comments on Ofcom Consultation

Report for British Telecommunications plc

NERA

Economic Consulting

NERA Economic Consulting
15 Stratford Place
London W1C 1BE
United Kingdom
Tel: +44 20 7659 8500
Fax: +44 20 7659 8501
www.nera.com

Contents

Executive Summary

This report sets out our observations on Ofcom's Consultation Document on the pay TV market investigation.

We agree with Ofcom's concerns that the UK pay TV industry has a number of characteristics that could inhibit the emergence of rivals, and accordingly also stronger competition and its associated benefits in terms of lower prices, higher output, and better choice and innovation. We further consider that Sky's vertical integration and resulting position at various levels of the supply chain is of particular significance, although other features of the market may also be of concern.

This report provides further analysis of certain aspects of the marketplace:

§ *Market power and market features which may be affecting competition and consumer welfare*

We consider that market power may be present more widely in the pay TV industry than is explicitly recognised in the Consultation Document, notably through the aggregation of *control* (rather than just ownership) over the sale of substitutable content. In particular, it is plausible that market power would also exist in relation to basic content.

In this context, we consider that a number of market features in the pay TV industry may be such as to create significant difficulties for the emergence of rival providers, to the detriment of consumers. Such features, which may themselves be manifestations of more fundamental competition issues, include ownership interests and contractual provisions such as MFNs, exclusivity arrangements and first-right-of-refusal clauses. We note that several of these features relate to the position of the largest incumbent in the market, i.e. Sky, but the areas of potential concern are not limited to this one operator.

§ *Sky's incentives to engage in downstream foreclosure and empirical indications in this respect*

In our opinion, foreclosure issues merit close investigation, including whether there may be comparatively stronger incentives to target new entrants. We also consider that the "vertical arithmetic" presented by CRA actually provides an indication that Sky is currently engaging in foreclosure (rather than, as claimed by CRA, that Sky has no incentives to foreclose), and that it is doing so even beyond the statically optimal level – which is suggestive of dynamic incentives for foreclosure.

§ *The benefits from competition*

Competition generally results in lower prices, higher output and greater choice. On the basis of illustrative examples, we show that these generic benefits can equally apply in an industry where some degree of bundling is justifiable on grounds of efficiency and that, accordingly, the stifling of emerging competitors can result in significant consumer harm. While these examples are necessarily not grounded in empirical facts, they nevertheless establish that as a general rule competition between bundles could lead to higher consumer welfare than the monopolistic provision of one big bundle (even though the latter situation is likely to feature fewer unexploited bundling efficiencies than the former). Accordingly, facilitating the emergence of new rivals in pay TV could lead to significant benefits for consumers. These examples are relevant for premium pay TV as well as basic pay TV.

Furthermore, in order to determine that consumers are well served, it is necessary to examine the state of competition at every level of the supply chain, since competition at one level of the supply chain cannot "neutralise" or "offset" consumer harm at a different level.

1. Introduction

1. British Telecommunications plc ("**BT**") has asked NERA Economic Consulting ("**NERA**") to provide a report to comment on some of the main economic issues raised by Ofcom's Consultation Document.

2. This report provides an appraisal of those issues and is structured as follows:

   2.1. Section 2 discusses market power in the pay TV industry and provides an illustrative list of measures and features that may hinder the emergence of rival providers.

   2.2. Section 3 considers vertical foreclosure questions, in particular the incentives to target new entrants and implications of the "vertical arithmetic" analysis provided in a report by CRA International ("**CRA**") and Prof. John van Reenen on the incentives of British Sky Broadcasting Group plc ("**Sky**") to foreclose competition in the UK pay TV industry (the "**CRA Report**").

   2.3. Section 4 analyses the benefits that could arise from greater competition in the supply of pay TV in the UK, notwithstanding the efficiencies that bundling may be able to generate. It also addresses issues relating to market power at the upstream levels.

   2.4. Section 5 provides some concluding observations.

2. Market power and features with potentially negative effects on competition and consumer welfare

3. The UK pay TV industry is characterised by a number of features which could well make it more difficult for a smaller rival or an entrant to establish a material presence – both at the retail and wholesale levels of the supply chain. Many of these features are highlighted by Ofcom in the Consultation Document as part of the descriptive material on the industry.

4. Importantly, we note that the features discussed below are being deployed in an environment characterised by the presence of market power.

   4.1. Ofcom reaches the conclusion in the Consultation Document that Sky is likely to have market power "*in the retail market for packages containing premium sports or premium movies channels*" (¶5.54); similarly, at the wholesale level, Ofcom concludes that Sky is "*likely to enjoy substantial market power in both the sports and movies markets*" (¶5.56). The Consultation Document further recognises that there may be market power further upstream (¶1.35).

   4.2. In addition, we consider that market power may also apply in relation to basic content, and could in particular be created through the aggregation of *control* over the sale of substitutable content – even where the individual units being so aggregated would have little or no market power on their own.[1] While Ofcom recognises the linkage between the direct aggregation of content and market power (¶6.11), the circumstances in which market power over basic content can arise are more general. We discuss these issues in greater detail in Section 2.1.

5. We note that several of the features highlighted below relate to the position of the largest incumbent operator in the sector, namely Sky, and that Sky also stands out as a particular beneficiary of such features in many cases. The areas of potential concern may however not be limited to Sky; for example, there are also some indications that exclusivity in the selling of content upstream from Sky may not serve consumers well.

6. The pay TV industry's characteristics – cumulatively but potentially also individually – could plausibly result in the creation of very significant difficulties for smaller rivals and/or new entrants by cutting off (or over-pricing) the supply that would allow them to provide a competitive service, as discussed in Section 2.2.

7. Section 2.3 provides an overall assessment of these issues.

8. The features identified below are not meant to constitute an exhaustive list; they merely highlight, by way of example, some of the types of measures which can be *observed* in the marketplace and which, as a matter of economic theory, could be seen to create obstacles to the emergence of rivals. It is however important to recognise that these may only be *manifestations* of more fundamental economic issues, potentially of a structural nature, which will be discussed in the following Sections.

2.1. Creation of market power through aggregation

9. Ofcom rightly recognises the issue that the aggregation of content can increase its value to suppliers (¶6.8) and that the aggregation of closely substitutable content may lead to retail prices that are above competitive levels (¶6.11).[2] It further notes that "*There may be an incentive for this aggregation to take place as far upstream as possible*" (¶6.14).[3]

10. This "aggregation of substitutable content" evoked by Ofcom can manifest itself at various levels.

    10.1. At the *upstream* level:

---

1 Such control can be obtained in a variety of ways, including through contract restrictions of various kinds or through the exercise of buyer power by a major distribution platform.

2 We note that issues of market power may arise even when the content being aggregated is not purely composed of closely substitutable material. This is true of situations where the emergence of competition between bundles is prevented by market characteristics which lead to the outcome of a monopoly big bundle.

3 However, horizontal content aggregation also takes place at subsequent levels of the supply chain, for instance at the wholesale level (e.g. ¶5.73).

10.1.1. One form of such aggregation is collective selling of sports rights by leagues, associations, or other organisational bodies; the FAPL being a prominent example.[4]

10.1.2. There are also providers of other content that control an aggregation of a number of valuable rights (and are able to sell them as a bundle) – television networks are possible examples.

10.2. At the *wholesale* level:

10.2.1. Sky's bundle of premium channels has received considerable attention.

10.2.2. However, aggregation of substitutable content also takes place in relation to basic pay TV content. For example, Sky One continues to be the main pay TV channel that offers first-run showing of several premium US television series.

10.3. At the *retail* level (e.g. ¶5.76).

11. But market power can also be created by means other than the *direct* aggregation of substitutable content referred to by Ofcom. In particular, it can be achieved through the aggregation of *control* of channel distribution. Indeed, a firm may well have a measure of control over several channels, even where the channels in question are not (wholly) owned. Possibilities include:

11.1. *Partial ownership stakes.* Indeed, it may be that a partial ownership stake gives even greater incentives than complete ownership to distribute the channel in a way that favours the partial shareholder's other pay TV interests, as we discuss in Section 2.2.

11.2. *Buyer power.* In circumstances where digital satellite accounts by far for the largest number of pay TV subscribers of any platform, and where that platform is dominated by Sky's retail package, most channels that rely on subscription income will wish to access the Sky subscriber base. This is likely to afford Sky a degree of "control" over the distribution of that content to other packages or platforms. This general point may manifest itself through:

11.2.1. *Exclusive distribution agreements.* It may be that some channels agree to be exclusively distributed by Sky, in order to be aggregated with other content controlled by Sky.

11.2.2. *Contractual provisions.* In particular, the ability to negotiate contract terms that limit the scope for competition from rivals other than through exclusivity clauses. Examples would include most-favoured-

---

4 In other cases the sport organisation may be structured such that the organising body "owns" the rights at the outset (i.e. there is no "collective selling" in the strict sense of the term) but the effect is much the same: one content provider controls the media rights to a number of sporting events.

nation ("MFN") clauses or other restrictions and incentives relating to how the channel or content may be distributed.[5]

12. The following Sections discuss a number of market features in the pay TV industry that may be of particular concern in situations involving market power, and which are likely to create obstacles for the emergence of new rivals.

2.2. Measures cutting off supply to rivals and entrants

13. The Consultation Document notes the presence of several potentially restrictive contractual clauses at the wholesale and content acquisition levels of the supply chain. These might impose severe limitations on the content that would be accessible to smaller rivals and/or new entrants. The provisions in question include the following:

    13.1. Exclusivity restrictions at the level of content acquisition (¶5.84). The exclusivity granted frequently not only covers a given platform, but extends to multiple distribution technologies. Ofcom reports this to be the case for the contracts signed by Sky for premium movies (¶5.86), and as a result Sky benefits from exclusivity for the subscription pay TV window over the content of the six major Hollywood studios with which it contracts (¶5.71).

    13.2. MFN clauses at the wholesale level (¶5.118).

    13.3. First-right-of-refusal clauses at the wholesale level (¶5.118).

14. Sky's position as a key retail distributor for most pay TV channels and the channels' desire to access Sky's digital satellite package might offer Sky substantial indirect influence over the channels' distribution, including but not limited to the deployment of restrictions such as the above.

15. Such clauses could have *inter alia* the effect of putting the content in question out of the reach of rivals and potential entrants. We discuss the operation and effects of such provisions in greater detail in Section 4, also with regard to their role in facilitating rent extraction from customers. However, their potential role in hampering the emergence of rival providers would in itself be worthy of close scrutiny.

16. An additional vehicle to foreclose new entry (and for the exercise of market power in narrow content markets) is potentially provided by shareholding interests of the kind that are maintained by Sky. The Consultation Document reveals at ¶5.75 the ownership interests of Sky (or its parent company) in several of the top 25 most viewed basic-tier channels. Apart from Sky One and Sky Two, which Sky wholly-owns, the list includes: Nick Jr, Nickelodeon, Paramount Comedy, Nicktoons and FX.

17. From a theoretical perspective, having a measure of control with *partial* ownership could potentially be more harmful to competition than having full control with *full*

---

[5] This is not to say that obtaining "control" of content and the terms on which it is supplied is the only explanation for these contracting features, merely that they are one possible explanation.

ownership. Suppose for example that Sky has negative control over a given channel as a result of its partial ownership interest, and that the question of renewing a wholesale arrangement of this channel to a competing retailer arises. Assume further that this channel is also present in the Sky bundle.

17.1. Preventing the competing retailer from accessing the channel is likely to lead to a diversion of consumers towards Sky's retail offering.

17.2. While exercising negative control to block the renewal of the wholesale arrangement would result in a loss of wholesale revenues, Sky's partial ownership interest implies that it would only bear part of that loss.

17.3. By contrast, Sky would derive 100% of the benefits from customer diversion to its own retail offering.

17.4. As a result, the threshold at which the cost/benefit calculation on the profitability of foreclosure is met is likely to be lower in a situation of partial ownership, and any incentives for foreclosure accordingly greater.

18. We therefore consider that the market power of an incumbent operator such as Sky, and the possibility of consumer harm, can be potentially greatly increased through ownership interests in general, and minority stakes with a more-than-proportionate degree of control.

2.3. Overall assessment on market power and market features with potentially negative effects on competition and consumer welfare

19. Market power could either arise intrinsically for a particular unit of content or through the aggregation of control over the sale of substitutable content. The latter situation could be achieved either *directly* through the aggregation of content (e.g. at the wholesale level, by the compilation of channels) or *indirectly* through the aggregation of *control* over content (e.g. through ownership interests in channels such as those of Sky, and discussed more fully in Section 2.2).

20. The content in question would most obviously involve the premium content identified in the Consultation Document relating to particular live sports (¶5.25) and certain movies (¶5.36). However, as market power can be achieved through the aggregation of control over content which individually might have no market power, the list of content concerned would plausibly be much more extensive. A particular candidate for consideration might be the aggregated "premium" US TV series, as shown on Sky One.

21. The emergence of rival providers in the UK pay TV industry appears potentially complicated by the existence of a number of measures put in place by current incumbents, and most particularly Sky, which would tend to curtail their accessible supply.

22. Accordingly, it is important to consider whether these features – cumulatively, and perhaps also in isolation – are preventing the entry of players which would otherwise emerge. To the extent that this would (or could) be the case, it is entirely plausible that

Sky would have incentives to adopt measures of the kind discussed above, or would encourage third parties to enforce such measures (e.g. in the case of MFN clauses for content acquired upstream).

23. In addition, as will be discussed in Section 3.2, there are plausible reasons that new entrants may be a particular target for foreclosing behaviour by an incumbent with a strong market position such as Sky.

24. A fundamental question of any investigation in this sector would involve an examination of the relationship between features of the type described above and market power. Indeed, such features could *inter alia* facilitate:

    24.1. the *creation* of market power, for instance by assisting in the aggregation of control (e.g. by way of ownership interests); and

    24.2. the *preservation* of market power, for instance by facilitating the foreclosure of new entrants (e.g. through cross-platform exclusivity restrictions; see also Section 4.4.2).

25. Having identified in this Section a set of *prima facie* areas of potential concern relating to market features, the rest of this report will address potential deeper seated issues.

26. The effective foreclosure of new entry into the pay TV industry can potentially cause significant harm to consumers from a welfare standpoint. This is an argument that we discuss in Section 4. The next Section considers issues relating to vertical foreclosure, including the *incentives* that Sky may have to foreclose downstream competitors.

3. Vertical foreclosure

27. Section 2 has highlighted a number of measures which may be stifling the emergence of rivals that would otherwise be able to increase competition in the marketplace. As argued above, Sky may well have incentives to maintain such measures in place, the (individual and cumulative) effect of which would require empirical scrutiny. Any incentive to foreclose may also be particularly pronounced in relation to new entrants, compared to more established competitors.

28. One issue on which some empirical analysis is already available concerns the incentives of Sky to engage in downstream foreclosure. The analysis in question is a "vertical arithmetic" exercise provided in the CRA Report.

29. We very fundamentally disagree with CRA's interpretation of the results and consider that – if methodologically valid – the "vertical arithmetic" exercise does not only fail to establish that Sky has no incentives to foreclose, but in fact actually provides an indication that Sky is currently engaging in foreclosure. CRA's exercise would even tend to demonstrate that Sky is currently engaging in foreclosure *beyond* the statically optimal point, which would potentially suggest additional dynamic foreclosure motivations.

30. While this Section deals with the resale of elements of Sky's package, rather than with the emergence of a fully-fledged competitor to Sky's offerings, the analysis presented does in our view provide indications with wider relevance, which are also consistent with the general concerns expressed in Section 4.

31. The remainder of this Section first provides a number of theoretical observations on downstream foreclosure (Section 3.1), then considers the question of whether entrants are a particularly likely target of foreclosure (Section 3.2), and finally evaluates the empirical analysis provided by CRA (Section 3.3). Section 3.4 provides an overall assessment on the issue of foreclosure.

3.1. Theoretical observations

32. In its analysis of the characteristics of UK pay TV, Ofcom discusses the industry's extent of vertical integration and the incentives faced by vertically integrated firms (¶5.120 onwards). While vertical integration can deliver efficiency improvements (¶5.124), Ofcom recognises that it can also affect the incentives of vertically integrated firms in such a way as to lead them to foreclose competitors, due to either downstream (¶5.126) or upstream considerations (¶5.127).

33. The basic mechanism whereby vertical integration can give rise to foreclosure effects is an "additional term" in the vertically integrated company's profit function.

    33.1. Without any downstream operations, a provider of upstream content would raise its price to the level where (i) the positive effect from the higher per-unit margin is exactly balanced by (ii) the negative effect from the lower volume.

    33.2. If the upstream content provider also has downstream activities, when contemplating a price rise to its downstream rivals it will consider (i) the positive effect from the higher per-unit margin, (ii) the negative effect from the lower volume, and (iii) an ***additional*** positive effect from potentially shifting customers from its downstream rivals to its own downstream activities.

34. We recognise that a fully comprehensive analysis of vertical foreclosure is a highly complex exercise. Vertical integration can notably give rise to efficiencies, which would have to be part of the balance of any assessment of its overall effects. However, any rebuttal of vertical foreclosure certainly ought to include a discussion of the above mechanism which leads to a change in the economic "first-order condition", and the resulting effect on prices and output.

35. Ofcom correctly recognises that vertical integration modifies the optimisation problem of firms and can lead them to "*refuse to supply other retailers with key content or supply them on less favourable terms*" (¶5.126). Ofcom notes that the incentives for foreclosure notably depend on the ability of the vertically integrated firm to capture a sufficient number of the customers being diverted from the downstream competitor, and emphasises the importance of switching costs in this respect (¶6.34). It notes that the predictions of its theoretical analysis appear to be verified by the facts of the market (¶6.36).

36. Ofcom also notes that a vertically integrated wholesaler-retailer may have incentives to supply only a degraded version of its channels to third party retailers (¶6.41). From an analytical perspective, a decrease in quality is in essence analogous to an increase in price, and the same logic as was described above in relation to price will be applicable.

37. Overall, we agree with the issues raised by Ofcom's analysis and note in particular the foreclosure implications stemming from CRA's "vertical arithmetic" analysis (see Section 3.3).

3.2. Incentives to target new entrants

38. We now turn to a consideration of the incentives that incumbents such as Sky might have to hinder new *entrants*, rather than more established competitors.

39. Ofcom gives careful consideration in the Consultation Document to the long-run operation of the market, and in particular the risk that new entry might be foreclosed. Ofcom further notes that this is of critical importance, since "*we are now at a point in time where new market entry is becoming increasingly possible, based on new distribution technologies*" (¶1.55).

40. In this respect, Ofcom suggests that a vertically integrated incumbent "*is likely to have a much greater incentive to deny its content to a new retailer, or a new platform, than an established retailer or an established platform*". Ofcom reasons as follows: "*By refusing to supply its content to a new entrant [a vertically integrated incumbent] is not foregoing significant levels of wholesale revenue, but is protecting itself from a potential threat*" (¶1.59).

41. At first sight this observation may not appear entirely consistent with the standard ("static") theory of vertical foreclosure:

   41.1. A foreclosure decision by a vertically integrated firm against an established rival will involve a trade-off between (a) a loss of upstream profit due to the deviation of the wholesale price from its upstream profit-maximising level; and (b) a gain in downstream profit arising from the diversion of customers from the rival's service to that of the vertically integrated firm.

   41.2. Similarly, a foreclosure decision by a vertically integrated firm against a new entrant will involve a trade-off between (a) a loss of upstream profit due to the deviation of the wholesale price from its upstream profit-maximising level; and (b) a gain in downstream profit arising from preventing customers from leaving the vertically integrated operator in favour of the new entrant.

42. Since these two situations share the same core mechanism, it cannot *a priori* be taken for granted that new entrants would be a particular object of foreclosure. This is a conclusion which would require the model to be specified further.

43. It is however possible to conceive of credible mechanisms which mean that a new entrant may be particularly at risk of foreclosure initiatives by established vertically integrated incumbents. Ofcom itself provides one such credible reason in ¶6.71. The emerging platform might be accessible with particularly low switching costs, which

may make foreclosure more profitable for the vertically integrated incumbent. Ofcom uses the example of an IPTV entrant, as existing broadband connections may make switching away from Sky particularly straightforward. This is of course of prime relevance to the service provided by BT Vision. As Ofcom recognises, the structure of the situation would then be analogous to that between two retailers on the same platform, which is analysed in ¶6.27 onwards of the Consultation Document (see ¶6.33 in particular).

44. In addition to the empirical point relating to switching costs, there are other credible reasons why new entrants might be particularly targeted which seem to have some *ex ante* plausibility when considered in the context of the pay TV industry.

45. New platforms may seek to enter the market on the basis of commercial strategies that challenge the rent extraction models being operated by incumbent market participants. By way of example, a new entrant could offer services that are unbundled to a greater degree and that might attract material numbers of Sky's high value customers. If BT Vision were to offer Sky Sports content on a stand-alone basis at a lower price than the Sky premium-plus-basic bundle, Sky customers who value primarily sports may switch. As a result, the new platform may threaten the price discrimination rents that Sky/content providers currently extract through the bundle.[6]

46. Other relevant factors include uncertainty in the eyes of the incumbents as to the type of threat from entry. In particular, when faced by innovative business models such as that proposed by BT Vision, the incumbents may be rather unsure about whether this competition would marginally constrain their room for manoeuvre, or whether it would lead to a fundamental tipping of the market.

    46.1. In some states of the world, the new entrant will primarily grow the overall market, while in others it will catalyse a transformation of the marketplace that is welcomed by consumers but potentially undesirable for the incumbent (e.g. by challenging its rent extraction mechanisms through a greater degree of unbundling, or by presenting an attractive technological alternative with particularly modest switching costs).

    46.2. Sky would be happy to supply in the first case, but not in the second. Under such uncertainty, Sky may find it preferable to develop the IPTV platform itself so that it can control events and avoid the competitive challenge implied by the second scenario.

47. In our view, Ofcom is right in being particularly alert to the dangers of foreclosure targeted against new entrants at this important juncture (¶1.55).

---

6 When examining such issues, careful consideration should be given to our observations in Section 4, in order to come to a balanced judgement on the welfare implications of these developments. In particular, the empirical issue of the exhaustion of bundling efficiencies and the benefits of competition should be at the core of the analysis.

3.3. Indications of actual foreclosure from CRA's "vertical arithmetic"

48. To solidify its theory-based arguments against vertical foreclosure, the CRA Report presented an empirical analysis, in terms of a "vertical arithmetic" framework.[7] This exercise purports to investigate whether, on the basis of actual margin data from Sky, an output reduction would be profitable. We do not have access to any detailed results from this calculation, but CRA reports its finding that such an output restriction (which is presumably intended to proxy a foreclosure strategy) would be unprofitable.

49. For purposes of this report we do not engage in a debate about the merits of CRA's proposed "vertical arithmetic" framework, but instead we proceed on the assumption – as suggested by CRA – that it is an appropriate method to analyse foreclosure incentives. Accordingly, our comments are limited to CRA's ***interpretation*** of the "vertical arithmetic" calculations.

50. We very strongly disagree with the interpretation in the CRA Report that the "vertical arithmetic" makes it apparent that, when the costs of a downstream foreclosure strategy are properly taken into account, they outweigh any potential benefits. CRA's conclusion is fundamentally flawed since it suffers from a version of the "cellophane fallacy".[8]

    50.1. The potential allegation facing Sky – which is a vertically integrated company – is that it is ***already*** engaging in vertical foreclosure against its downstream rivals. On that basis, Sky would ***already*** have restricted access to a point where a ***further*** restriction would be unprofitable.

    50.2. While in a merger case – where the pre-merger behaviour by the merging firms does not yet reflect the incentives deriving from vertical integration – it would make sense to investigate whether a price rise and/or access restriction might be profitable, in the present context one would expect the price rise and/or access restriction to have happened ***already***.[9]

    50.3. On that basis, it is not surprising that a ***further*** price rise and/or access restriction is not profitable. Such a finding is fully consistent with concerns over foreclosure, and therefore unfit to rebut them and also unfit to support CRA's interpretation.[10]

---

[7] CRA Report, Section 4.3, ¶57 to ¶65.

[8] The "cellophane fallacy" is an elementary antitrust mistake cautioned against in competition textbooks (see e.g. the standard text by M. Motta, 2004, "Competition Policy"). The fallacy is named after the 1956 US case of UNITED STATES v. du PONT & CO., 351 US 377 (1956).

[9] It might be argued that Sky has been constrained from pursuing its profit maximising degree of foreclosure by the threat of action under competition law. In that situation the cellophane objection would not apply (since it could not be presumed that Sky is foreclosing to the profit maximising level). However, in that scenario CRA's "vertical arithmetic" approach would clearly be inappropriate since this situation would arise only where Sky ***does*** have incentives to engage in foreclosure. Accordingly, CRA's conclusion that Sky does not have such an incentive would necessarily be incorrect.

[10] Conversely, a finding of a profitable further price rise and/or access restriction would amount to an interesting insight – specifically, given that Sky is already vertically integrated, only the result of a ***profitable*** further price rise and/or access restriction would constitute evidence that Sky is ***not*** engaging in vertical foreclosure to the profit-maximising extent. In

51. In fact, not only does the "vertical arithmetic" not support CRA's interpretation – it implies the precise *opposite*: that Sky is actually engaging in vertical foreclosure, including in the dynamic sense of restricting access beyond the "static" profit-maximising level that would obtain from "standard" downstream foreclosure.

    51.1. At the "static" profit-maximising foreclosure level, neither a further restriction of access nor an expansion of access to upstream content by downstream rivals would be profitable from a static perspective.

    51.2. However, if there was an additional dynamic benefit from foreclosure, a vertically integrated firm would restrict access beyond the level at which static profits are maximised. If one then were to compare the static costs and static benefits from a change (positive or negative) in access, it would actually emerge that an *expansion* of access appears (from a static perspective) to be profitable.

    51.3. CRA states that its "vertical arithmetic" does not include any dynamic benefits that Sky may derive from foreclosing its downstream rivals. Accordingly, its focus is limited to *static* costs and *static* benefits from a change in access.

    51.4. The result from CRA's "vertical arithmetic" implies that an additional access restriction reduces profits. But the full implication of the result goes further: the "vertical arithmetic" demonstrates that Sky should *increase* access to its upstream content by its downstream rivals.

    51.5. While there may be innocent explanations for why, on CRA's empirical analysis, Sky seems to have restricted access beyond the profit-maximising level from standard downstream foreclosure, the most immediate explanation for such behaviour – other than perhaps methodological problems in the "vertical arithmetic" approach – would appear to be a dynamic benefit to preserve its competitive advantage upstream.

3.4. Overall assessment on foreclosure

52. We consider that the issue of vertical foreclosure merits further analysis. In that context it may be appropriate to consider the incentives to target new entrants separately from the incentives to target more established competitors.

53. There are in fact indications that foreclosure is already taking place. Rather than demonstrating that Sky does not have any incentives to engage in static (or dynamic) foreclosure, we consider that CRA's "vertical arithmetic" exercise indicates that Sky is actually engaging in foreclosure, and that this foreclosure includes dynamic elements.

54. While it may be the case that there are serious shortcomings in CRA's proposed methodology of "vertical arithmetic", we consider that, when taking the results advocated by the CRA Report at face value, there would appear to be a very clear case for addressing Sky's conduct.

---

other words, such a finding would demonstrate that Sky has an incentive to engage in foreclosure (as might be predicted by various models in the academic literature), but is not (or not fully) responding to that incentive.

4. The benefits from competition

55. Section 2 has highlighted the presence of market power at several levels of the supply chain and the existence of a number of features in the UK pay TV industry which could plausibly create significant difficulties for the emergence of rival providers. Section 3 in turn has demonstrated that the empirical indications currently available suggest that Sky has incentives to foreclose, is in fact currently engaging in such foreclosure, and that the degree of foreclosing behaviour indicates dynamic considerations.

56. In light of the above, we now set out a framework in which to conceptualise the loss that could potentially be sustained by consumers as a result of the foreclosure and competition concerns flowing from the market features and concerns highlighted above.

57. The following discussion uses stylised examples that necessarily do not reflect industry data. However, the examples illustrate the possible consequences of features and behaviour that prevent the emergence of more effective competition. These issues may arise in relation to premium sports and premium movies, but they may also be relevant to basic pay TV, especially to the extent that there is market power in the supply of basic pay TV services (including as a result of leverage from premium sports and premium movies channels).

58. The discussion is structured as follows:

   58.1. Section 4.1 sets out the benefits from competition which are generally emphasised by economic theory.

   58.2. Section 4.2 argues that these basic principles of competition policy equally apply in the presence of bundling. In fact, competition between bundles may lead to an output expansion, as well as increase consumer surplus and efficiency. Moreover, given diminishing marginal returns to bundling in terms of efficiencies, there is a point at which the exploitation of efficiencies is outweighed by the imperative to achieve allocative efficiency through competition.

   58.3. Section 4.3 emphasises that competition must be considered at all levels of the supply chain, in order to determine that the pay TV industry is ultimately serving consumers well.

   58.4. Section 4.4 discusses the consumer harm which could arise as a result of the presence of exclusivity restrictions, since such restrictions can act as a means of:

      58.4.1. exploiting market power, by extracting rents from customers and channelling them to suppliers; and

      58.4.2. foreclosing rivals and reducing competition, particularly in the case of cross-platform exclusivity provisions.

58.5. Section 4.5 provides some comments on the links between various levels of the UK pay TV supply chain.

58.6. Section 4.6 concludes with an overall assessment of these issues.

4.1. Competition is likely to improve consumer welfare and expand output

59. As a matter of theory, monopoly (and market power more generally) is widely recognised to be associated with a number of harmful welfare consequences:

59.1. Monopoly generally leads to higher prices, with the consequence that consumers who would have bought the products in question under a more competitive situation are excluded from the market. This represents a "deadweight loss" to society, and a reduction in both consumer and total welfare. In other words, monopoly is said to lead to *allocative inefficiency*.

59.2. Those higher prices also have distributional consequences for consumers who are still in the market following monopolisation, as the rents extracted by the monopolist straightforwardly lead to a decrease in consumer welfare.

59.3. Monopoly may also have negative consequences beyond allocative inefficiency:

59.3.1. It may lead to *productive inefficiency*, resulting in the non-minimisation of production costs – perhaps due to X-inefficiency or the absence of the Darwinian discipline of competition.

59.3.2. It may lower innovation and result in *dynamic inefficiency*.

59.3.3. Monopoly may be sustained through the incumbent engaging in wasteful rent-seeking activities to preserve its position.

60. Such problems are generally alleviated by competition. This recognition is of course at the heart of the role of competition authorities, and also underpins Ofcom's duty to promote competition, as is restated in the Consultation Document (¶2.17).

61. The following Sections build on this fundamental intuition and argue that:

61.1. The benefits of competition also apply to situations characterised by bundling; in particular, competition may well outweigh any efficiencies from a monopolistic bundling structure and deliver lower prices, higher output and greater choice and innovation.

61.2. The degree of competition ought to be analysed throughout the supply chain. In particular, as noted by Ofcom, competition at the retail level will not necessarily drive retail prices down to the competitive level (¶1.36). These issues are considered in greater detail in Sections 4.3-4.5.

4.2. The benefits of competition may well outweigh any efficiencies from monopolistic bundling structures

62. The UK pay TV industry is characterised by various bundling practices. However, the presence of bundling does not, in our view, invalidate the general presumption that competition serves consumers better than monopoly (or an industry with substantial market power). In particular, we consider that consumers would benefit from the emergence of more effective competition, not necessarily limited to premium sports and premium movies pay TV, but potentially also in relation to the provision of basic pay TV.

63. When discussing bundling, Ofcom provides a stylised example in the Consultation Document at ¶5.83, which demonstrates that bundling can result in increased efficiency. We consider here a slight extension of this model. Suppose that there are three consumers (A, B and C) and four channels. Suppose further that consumers are only able to watch two channels (e.g. due to limited hours available in the evening). In particular, we assume the following consumer preferences for channels:

Table 4.1
Model with three consumers and four channels

	[X]		[Y]	
	Channel 1	**Channel 2**	**Channel 3**	**Channel 4**
Consumer A	£10	£2	£6	£20
Consumer B	£2	£10	£20	£6
Consumer C	£1	£1	£7	£9

64. Suppose first that all channels are provided by a monopoly supplier. It is straightforward to show that the monopolist will simply choose to supply a bundle of Channels 1 and 4 destined for consumer A at £30, and a bundle of Channels 2 and 3 destined for consumer B at the same price, leaving zero consumer surplus and ignoring consumer C.[11]

65. Suppose instead that Channels 1 and 2 are under the ownership of firm [X], whereas Channels 3 and 4 are under the ownership of firm [Y] and that – for simplicity of exposition – there is frictionless competition between providers, which in turn face zero cost. In this case:

---

[11] Note that a similar outcome occurs if we remove the assumption of a viewing constraint of at most two channels. In that case, the monopolist would supply bundle [X] at a price of £12 and bundle [Y] at a price of £26. Intuitively, the monopolist compares the profits from pricing bundle [X] in such a way as to eliminate the private information of consumers A and B as to their valuations – so that he can extract their full surplus – and from offering a lower price which would also allow consumer C to be served. (For completeness, we note that the monopolist might also offer a single bundle with all four channels, at a price of £38. The resulting profits would be the same as from offering [X] for £12 and [Y] for £26, since these two bundles already exhaust all available efficiencies; see also paragraph 70.2.)

65.1. Firm [X] would charge £0 for the bundle of Channels 1 and 2.[12]

65.2. Firm [Y] would charge (just under) £14 for the bundle of Channels 3 and 4, serving consumers A, B and C.

66. As a result:

66.1. All consumers are served and have an aggregate surplus of £26 (£12 each for consumers A and B, and £2 for consumer C).

66.2. Firm [Y] would make a profit of £42.

67. This example therefore shows that introducing competition between bundles can potentially not only increase consumer surplus, but also lead to an output expansion and higher efficiency. In essence, competition here eliminates the "deadweight loss" from monopoly which led to consumer C not being served at all in this market, and also ensures that consumers A and B enjoy a share of the available surplus.

68. We note that the "channels" in this example could just as easily be bundles of channels. In fact, a channel is itself of course nothing more than a bundle of units of content, as noted by Ofcom (¶3.19).

69. Also, the conclusions of the analysis do not require any assumption that all consumers view the alternative bundles as an "either-or" choice. It may well be that many consumers will not view the two bundles as good substitutes, and might actually want to purchase both of them. But as long as a sufficient number of consumers view the two bundles as substitutes, prices could be lower under competition between bundles than under a situation where there is only one bundle (which is necessarily controlled by a monopolist).[13] Accordingly, this analysis can be applied at a number of different levels, and only requires that the basic structure of the problem be preserved.

70. Admittedly, competition as described above could prevent the full harnessing of bundling efficiencies:

70.1. In essence, the aggregation implied by bundling may allow channel providers to obtain a more reliable estimate of consumers' willingness to pay and provide a more practical means of setting different prices to different groups of consumers. The reliability of this estimation is likely to increase with the number of channels in the bundle and, in the limit, the situation may become analogous to one of first-degree price discrimination.

70.2. The example above (based on the model in the Consultation Document at ¶5.83) essentially presents a situation in which – setting aside the assumption that only two channels can be watched by a given consumer – bundling efficiencies for consumers A and B are fully exhausted by the provision of two channels per

---

12 In this simple example, firm [X] is *de facto* acting in the same way as a potential entry constraint.

13 We note the possibility that at least some customers would find themselves in a situation where their favourite channels are spread across bundles, and that the price reductions would not be large enough to fully compensate them.

bundle. It is apparent that a monopolist could do no better by providing all four channels in a single bundle than by providing the separate bundles [X] and [Y]. A generalised form of the above setting could potentially have involved residual efficiencies when moving from bundles [X] and [Y] to the all-encompassing bundle.

71. Two important observations must however be attached to the preceding point, which in our view seriously dent its practical significance:

71.1. First, even if bundling is efficient in a particular case, it may not be optimal from a consumer welfare perspective.

71.2. Second, there will realistically be diminishing returns to bundling in terms of the resulting efficiencies.

72. We now consider each of these observations in turn.

4.2.1. Bundling and consumer welfare

73. The Consultation Document notes that the essentially fixed-cost nature of content for pay TV creates an incentive for provision to as large an audience base as possible (¶5.81); at the same time, while marginal cost pricing may ensure wide distribution, it would not allow for a recovery of the fixed costs incurred. This leads Ofcom to note that "*The most efficient means of reconciling these considerations is by means of retail pricing structures which involve some form of price discrimination*" (¶5.82).

74. Price discrimination can be achieved by bundling. It is well established as a matter of economic theory that bundling can potentially lead to higher profits for firms as well as an output expansion, thereby generating a more efficient outcome from the perspective of overall social welfare (i.e. the sum of consumer and producer surplus). This is illustrated by Ofcom's example at ¶5.83. However, while this stylised example is useful for illustrating some of the potential benefits from bundling, it does not follow that bundling in and of itself, and in all circumstances, will be such as to serve consumers well.

75. The simple stylised example presented by Ofcom in fact illustrates a situation in which consumers are perhaps not served as well as possible. In this case, all surplus is appropriated by the monopoly channel provider, leaving consumers with zero surplus. Accordingly, it does not seem that the situation is one in which prices "*give consumers good value*" (¶2.24).

76. Of course, Ofcom's example is calibrated to illustrate a point, and in practice not all consumer surplus will be extracted by bundling. But it is a general feature of price discrimination – of which bundling efficiencies is one form – that while it may result in an output expansion it will also result in suppliers appropriating a larger amount of surplus. As a matter of economic principle, it is entirely possible that consumers might be worse off under unrestrained bundling, even though it may result in an increase in overall efficiency.

77. Furthermore, one can also construct examples where bundling leads to no increase in overall efficiency, and instead only results in the transfer of surplus from consumers to producers. For instance, consider a slight modification to Ofcom's example at ¶5.83, whereby the valuations of £2 are increased to £6.

Table 4.2
Modified bundling example

	Ch 1	Ch 2
Consumer A	£10	£6
Consumer B	£6	£10

78. If, under this set-up, channels were only allowed to be sold separately, the profit-maximising price would be £6 for each of the two channels, and both consumers would watch both channels and derive consumer surplus of £4 respectively. By contrast, if bundling was allowed, the profit-maximising selling strategy would be £16 for the bundle of both channels. The consumers would still watch both channels, but their previous consumer surplus of £4 would now be extracted by the provider. Accordingly, bundling would lead to no change in overall efficiency; its only effect would be the transfer of surplus from consumers to the supplier.

4.2.2. Diminishing marginal returns from bundling

79. While Ofcom's example illustrates the point that bundling *can* result in significant increases in overall output, this does not mean that it *will* have this effect in all relevant circumstances. In particular, it is not clear that the potential for achieving bundling efficiencies provides a strong justification for measures that serve to create barriers to entry or otherwise reduce competition.

80. It is possible that the main advantage claimed for bundling can be achieved even if retail distributors do not account for all (or a very large share) of content available on a platform, or indeed a very large share of all content across more than one platform.

81. It seems likely that as the number of channels increases, the marginal contribution of a channel in helping to identify consumers' aggregate valuation is likely to decrease. This would imply that the efficiencies arising from bundling diminish with the number of channels, so that in the limit additional channels would only make increasingly insignificant contributions. Ofcom recognises the existence of this mechanism in the Consultation Document at ¶6.19.

82. We consider it probable that there is a point after which the foregone efficiency benefits arising from not adding a further channel to the initial bundle are overtaken by the allocative efficiency benefits which accrue from instigating competition between smaller and separately-owned bundles.

83. Accordingly, the presence of bundling efficiencies is not generally sufficient to justify a restriction of competition.

4.3. On the need to examine competition throughout the supply chain

84. In order to establish that consumers are served well, in line with Ofcom's criteria for assessing outcomes in the pay TV industry (¶2.24), one needs to consider the possibility of systemic market failure or abuse at *every* level of the supply chain. In other words, competition at one level of the supply chain cannot "neutralise" or "offset" consumer harm at a different level of the supply chain. In particular, if wholesale prices are too high, retail prices will necessarily also be too high (¶1.36); competition at the retail level would ensure that the retail *margin* is not excessive, but it could not compensate for excessive wholesale prices.[14]

85. As already set out in Section 2, market power based on content can be achieved at least in the following ways:

85.1. First, particular pieces of content may command market power in their own right.

85.2. Second, market power can be created through the aggregation of control over the sale of substitutable content – even where the individual units being so aggregated would have little or no market power on their own.[15]

86. In the following Sections we discuss how market power in content (and through content aggregation) can be exerted and how various vertical restrictions such as exclusivity can contribute both to the exploitation and preservation of that market power.

4.4. Exploitation and preservation of market power through the use of exclusivity restrictions

87. The most obvious way in which owners of content with market power such as Sky can exploit customers is simply by setting high prices.[16] Ofcom reports that Sky controls all of the rights to first-run movies from the six major Hollywood studios for the subscription pay TV window (¶5.71). As a consequence Sky is likely able to set higher prices for that content than would be the case if it faced horizontal competition from another pay TV provider that also offered content of a similar type.

88. Setting high prices may be supported by conferring exclusivity restrictions: Ofcom notes the presence of exclusivity restrictions at the level of content acquisition in the Consultation Document (¶5.84). The exclusivity granted frequently covers multiple distribution technologies. Ofcom notably reports this to be the case for the contracts signed by Sky for premium movies (¶5.86), and as a result Sky benefits from exclusivity for the subscription pay TV window over the content of the six major

---

14 In order to bring retail *prices* back to the competitive level, retailers would need to incur losses. However, continuous losses are not consistent with an equilibrium outcome.

15 Such control can be obtained in a variety of ways, including through contract restrictions of various kinds or through the exercise of buyer power by a major distribution platform.

16 Where Sky is the retailer, this would be high retail prices. Where Sky distributes through other retailers, it would be through high wholesale prices.

Hollywood studios with which it contracts (¶5.71). As we set out below (Section 4.4.1), and as recognised by Ofcom, exclusivity is a means of transmitting market power based on content down the supply chain, which in turn allows for the appropriation of the resulting rents up the supply chain.[17]

89. Importantly, exclusivity restrictions can also be a means of preserving market power through the exclusion of new entrants (Section 4.4.2). This risk is particularly pronounced when vertically integrated incumbents acquire cross-platform exclusivity rights, leading to a warehousing of the rights which could have enabled entrants to access the market.

90. Having analysed the possible mechanics of exclusivity clauses in the pay TV industry, Section 4.4.3 discusses the resulting effects on consumer welfare.

91. There are of course a number of possible rationales for exclusivity clauses. For instance, a well-known example involves the use of exclusivity restrictions by a manufacturer to avoid free-riding between retailers of its products in terms of service provision. However, in the context of pay TV contracts the rationale relating to the exploitation and preservation of market power based on content seems at least plausible, as set out below.

4.4.1. Exclusivity restrictions as a way of exploiting market power

92. As noted by Ofcom (¶5.87), exclusivity clauses can assist an upstream supplier in solving its "commitment problem" and thus prevent the erosion of high price levels.

92.1. Consider a content supplier whose output would have a value π if exploited by a downstream monopolist. The supplier would then wish to extract that maximum value of its rights by licensing them for exploitation (e.g. to firm A) at a price of π.[18] However, firm A might be concerned that once it pays π for the rights, the content supplier would renege on its promises and sell the same set of rights to firm B, albeit for a lower price, given that B would need to exploit the rights in a downstream duopoly.[19] Since Firm A would foresee this, it would be unwilling to pay very much for the rights in the first place.

92.2. In essence, the content supplier can avoid this problem by committing itself not to renege on its promises through the incorporation of enforceable exclusivity clauses in its contracts, thereby providing comfort to firm A that it can recoup the payment of π.[20] In other words, exclusivity clauses represent a safeguard

---

[17] We note upfront that there are several other instruments (in addition to straightforward exclusivity restrictions) which can lead to broadly similar results in terms of their allowing suppliers to harness the market power of their content. For instance, MFN clauses and similar non-discrimination provisions can have the same effect. We note that the Consultation Document also indicates the presence of such clauses, at least at the wholesale level (¶5.118).

[18] Although Ofcom frames its example in ¶5.87 in terms of content sold on a fixed fee basis, the same logic generalises to content sold on a per subscriber basis.

[19] This reasoning can similarly be extended to additional firms, i.e. if firm A and then firm B had purchased the rights, the content supplier would try to sell the rights to yet another firm.

[20] The same outcome can be achieved through, for instance, the use of MFN clauses.

that market power downstream will be preserved and consequently allow the resulting rents to be extracted upstream.

93. Ofcom further notes that content suppliers may offer rights to a single wholesale channel provider across multiple distribution technologies (¶5.88). It relies on the following example (see Table 4.3) involving two rival bidders (X and Y) for a given piece of content and two platforms (A and B) to illustrate this claim:

93.1. Sold separately, X would acquire the rights for platform A for just over £4m, and Y would acquire the rights for platform B for just over £8m, yielding revenues of approximately £12m.

93.2. Sold as a bundle, Y would acquire both rights for a price of just over £13m.

Table 4.3
Ofcom stylised example for cross-technology exclusivity

	Platform A	Platform B
Bidder X	£5m	£8m
Bidder Y	£4m	£10m

94. While this simple example may provide some form of *explanation* for the bundled sale of content rights across distribution technologies from the perspective of a content provider, it is important to note that in no way does it provide a *justification* for such a mechanism from a welfare perspective. Instead, the focus is placed on how best to exploit market power, rather than on how to provide good value to customers and consumers.

95. The structure of this example is in many ways similar to that of the simple stylised bundling model discussed earlier in Section 4.2.1. We note that it assumes the granting of platform exclusivity and is effectively silent on:

95.1. The possibility of intra-platform competition, as the granting of a second license on a given platform would presumably change these payoffs, which embody the exploitation of market power related to the content in question.

95.2. The possibility of inter-platform competition, as the example treats both platforms as being fully independent. Presumably, if the platforms competed, the valuation for the rights would be contingent on whether the bidder is able to secure the rights on one or both platforms.

4.4.2. Exclusivity restrictions as a way of excluding rivals

96. It must be noted that a wholesale bidder that is vertically integrated downwards with the platform/retail level would place incremental value on securing the rights even for platforms where it is not present. On the one hand, this could be because it might be best placed to wholesale the rights to retailers on these alternative platforms. On the

other hand, however, such behaviour could also potentially be explained by a desire to prevent the rights from eroding its downstream market power by being made available on a competing platform.[21]

97. In particular, such behaviour could correspond to a forestalling strategy based on the warehousing of content rights for alternative competing or emerging platforms. In this respect, standard economic theory straightforwardly predicts that *ceteris paribus* the incumbent would be able to outbid an entrant for an additional license to use the content rights, if this allows it to preserve the pre-existing position of market power.

4.4.3. Assessing the effect of exclusivity clauses on consumer welfare

98. As discussed above, exclusivity clauses may be detrimental to consumer welfare through two different mechanisms:

    98.1. by facilitating the extraction of rents and their flow up the supply chain; and

    98.2. by leading to the exclusion of downstream competitors.

99. The preceding Sections are suggestive of a situation in which rents arising from market power derived from content are ultimately flowing up the supply chain. This is consistent with Ofcom's analysis of the flow of funds in UK broadcasting, which suggests that "*a relatively small proportion of total broadcast revenues (£1.4 billion) are retained at the retail level. Most of the revenue generated by the industry flows through either to content rights holders (£5.3 billion), wholesale channel providers (£2.8 billion) or providers of wholesale platform services (£1.4 billion)*" (¶3.31).

100. Ofcom further considers that "*although aggregation will affect retail pricing, it may be unlikely to result in excessive profits being generated by retail pay TV providers. Indeed, depending on the relative negotiating strength of content rights holders and buyers, it may not result in excess profits at the wholesale channel level either (because any monopoly rents accrue to the rights holders)*" (¶6.14). The corollary of this would be that "*even where premium content is made available to all retailers, and there is effective competition at the retail level, this competition may not drive the retail price of the premium content down to the competitive level*" (¶6.15).

101. In our view, a reasonable possibility of retail prices above the competitive level – irrespective of whether the ultimate beneficiaries of the market power created are the wholesale distributors, the rights content aggregators, the original rights holders, or a combination thereof – means that the market power driving this process ought to be examined and addressed.

102. The kinds of exclusivity clauses which appear to be applied at the upstream levels of the pay TV industry may ultimately have as a result the restriction of competition between bundles, with the consequences discussed above. Multi-platform exclusivity may be particularly concerning in this respect, as it could effectively prevent the

---

[21] Or, alternatively, ensuring that even if it was supplied to another platform, wholesale pricing or other restrictions on retail distribution limited competition to its own downstream operation.

emergence of innovative distribution and retailing strategies which would be highly valued by consumers if they had the possibility of reaching the market.

103. While a given contract including restrictions such as those highlighted above may be reasonable from the perspective of the contracting parties, and might on its own have no or only *de minimis* negative consequences for competition and consumer welfare, it is possible that the *cumulative* impact of such contracts leads to significant distortions in the UK pay TV industry. Accordingly, it would not be sufficient to examine each contract on a standalone basis.

104. It might be argued that contract features of this type are merely "standard industry practice", or that they are demanded by suppliers that on their own have no market power, or otherwise that there is no evidence that these features are motivated by any desire to create systemic market failure or otherwise to stymie competition. However, that should not preclude regulatory examination of these features if the combined effects of these practices are suspected to be harming competition and consumers.

4.5. Linkages along the pay TV supply chain

105. Ofcom states in the Consultation Document that "*while the content is exclusive at the wholesale level, that exclusivity may not endure at the retail level*" (¶5.90). While that is indeed possible, the retail distribution of the content may be strongly influenced and curtailed by the wholesale terms on which it is supplied. In particular, if wholesale exclusivity results in higher wholesale prices, the absence of exclusivity at the retail level would not be sufficient to bring the price level back to the competitive level.

106. There are at least two mechanisms by which exclusivity at the content acquisition level can trickle downstream and influence outcomes there:

106.1. First, as discussed above, vertical integration between the wholesale and platform/retail levels may give rise to incentives for seeking to obtain exclusivity across multiple platforms in order to preserve market power.

106.2. Second, rent extraction mechanisms put in place to channel profits up the supply chain – of which exclusivity is an element – may indirectly require the preservation of market power at the retail level. As Ofcom notes, "*while licensing channels on an exclusive basis to specific retailers will reduce the number of subscribers to that content, it might increase the amount earned per subscriber*" (¶6.30). From the perspective of a wholesale channel provider, this may potentially constitute the optimal way of meeting the demands placed by high prices for upstream content. This is consistent with the presence of MFN and right-of-first-refusal clauses at the wholesale level, which is noted in the Consultation Document (¶5.118). In a sense, therefore, the rent extraction mechanism implemented upstream might be "mirrored" at the wholesale/retail interface.

107. Moreover, platform exclusivity, at least, ***does*** endure at the retail level. While there may be competition between platforms, that does not prove that each platform lacks market power; it *may* do.[22]

108. In our view, a complete assessment of the pay TV industry must consider competition throughout the supply chain, as well as the complex interrelationships and feedbacks that may exist between the various stages.

4.6. Overall assessment on competition, bundling and exclusivity restrictions

109. Monopoly can harm welfare in a number of ways, and notably in terms of allocative inefficiency, productive inefficiency and dynamic inefficiency. It may also involve wasteful rent-seeking activities. All these problems are generally considerably mitigated by the presence of competition, thus making competition the default benchmark against which market outcomes are typically assessed.

110. The presence of bundling does not make competition generally undesirable, and it remains the case that competition is likely to result in output expansion, higher consumer welfare and higher total efficiency.

111. While some bundling efficiencies may potentially have to be foregone when the emergence of additional rivals in the pay TV industry or on particular platforms is not stifled, there will realistically be diminishing returns to bundling so that the losses on this count may be limited and well outweighed by the benefits from competition.

112. In our view, a reliance on bundling efficiencies to support a monopolistic outcome, rather than the emergence of competition, would require particularly robust evidence, in both fact and theory.

113. In addition, it stands to reason that competition at one level of the supply chain cannot "neutralise" consumer harm at a different level of the supply chain. For instance, if wholesale prices are too high, retail prices will necessarily also be too high; competition at the retail level would ensure that the retail ***margin*** is not excessive, but it could not offset excessive prices further up the supply chain.

114. We have noted in particular the presence of exclusivity and other similar contractual restrictions in the industry. These restrictions can facilitate the extraction of rents from consumers and their transfer to levels of the supply chain upstream of retail. They may constitute a means of enforcing a restriction of competition, which in the pay TV industry seems to commonly extend across platforms and distribution technologies. Such clauses may provide particularly effective ways of preserving market power, with consumer and total welfare harm, e.g. arising as a result of both rent extraction and the impediment to newly emerging innovative business models.

---

[22] For reasons of the cellophane fallacy, a conclusion that Sky has market power as the leading retailer on digital satellite is entirely consistent with a conclusion that digital satellite competes at the retail level with other platforms.

5. Conclusion

115. In the Consultation Document, Ofcom has identified the presence of market power at the wholesale and retail levels for certain premium content, and has suggested the existence of market power further upstream. We consider that market power may be present more broadly in relation to basic content, and could in particular arise as a result of the aggregation of ***control*** over the sale of substitutable content.

116. In this context, we have identified a number of features, measures, and practices in the UK pay TV industry that may inhibit the emergence of rivals and stronger competition. These potential concerns frequently feature Sky, but also extend to other parts of the pay TV industry.

117. While substantial empirical analysis would be necessary to establish the individual and cumulative effects of these features, one area where there are already some more detailed empirical indications is the issue of foreclosure: in contrast to CRA's conclusion, we consider that its "vertical arithmetic" actually indicates that Sky is currently engaging in foreclosure.

118. If any industry characteristics have the effect of stifling the emergence of rivals and competition, consumers are likely to suffer as a result, in terms of higher prices, lower output, and reduced choice and innovation. We note in particular, that these general benefits from competition are not negated by the possibility of bundling efficiencies. In particular, competition between bundles could lead to higher consumer welfare than the monopolistic provision of one big bundle (even though the latter situation is likely to feature fewer unexploited bundling efficiencies than the former).

119. The state of competition needs to be considered throughout the supply chain, since competition at one level of the supply chain cannot "neutralise" or "offset" consumer harm at a different level. In this respect, we have noted the presence of exclusivity and similar restrictions, which could serve to ensure that rents extracted from consumers downstream are channelled up the supply chain, and could in addition have exclusionary effects. This may be particularly concerning in the context of cross-platform exclusivity restrictions which create obstacles to the emergence of new rivals.

120. The effects of content aggregation at various levels of the supply chain would require additional examination, including in relation to the interrelationships and cumulative effects of the various issues and potential concerns.

NERA

Economic Consulting

NERA Economic Consulting
15 Stratford Place
London W1C 1BE
United Kingdom
Tel: +44 20 7659 8500
Fax: +44 20 7659 8501
www.nera.com