Additional comments on Ofcom’s analysis of market definition and market power in the pay TV review

1. Introduction

1.1. Ofcom’s approach to issues of market definition and the examination of market power in its First Consultation Document was deficient in numerous respects. It was Sky’s expectation that this was essentially the result of the fact that it was a preliminary analysis, as part of a first consultation aimed at eliciting information and comments from consultees, and that the analysis of these matters in Ofcom’s Second Consultation Document would, therefore, be substantially improved. Even though Ofcom did not engage in any further discussion with Sky during the preparation of its Second Consultation Document, the significant period of time that elapsed between the end of the first consultation period and the issuing of the Second Consultation Document gave Sky some confidence that this would be the case.

1.2. Those expectations, however, were undermined by the quality of Ofcom’s analysis of the issues of market definition and market power in its Second Consultation Document. It is now evident that, despite Sky’s submissions in response to the First Consultation Document, (a) Ofcom proposes to continue along much the same lines as the First Consultation Document in relation to these issues, and (b) its approach to these matters remains highly inadequate.

1.3. The short period permitted by Ofcom for responses to the Second Consultation Document, and the large number of errors in relation to more significant issues, meant that Sky dealt only briefly with issues of market definition and market power in its Response to that consultation. Following the submission of Sky’s Response to the Consultation Document, we have taken the opportunity to comment in more detail on a number of the flaws in Ofcom’s approach to market definition and market power in this case.

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1 All paragraph references in this submission are to paragraphs in Ofcom’s Second Consultation Document unless otherwise stated.
2 See Part One of Annex 2 to Sky’s Response to Ofcom’s First Consultation Document.
3 Ofcom’s Second Consultation Document proposed to proceed directly to imposing new, highly intrusive compulsory licensing regulation on Sky on the basis of a significantly flawed analysis. Sky therefore focused on responding to the basis for Ofcom’s regulatory proposals. In light of the fact that there is little indication available to us that Ofcom accepts the arguments that Sky has put to it in relation to the necessity, proportionality and consistency of its regulatory proposals, it is necessary to document in greater detail the flaws in Ofcom’s approach to market definition and market power in its inquiry, given that these matters may fall to be examined in an appeal process.
4 This further submission was largely completed before the receipt of Ofcom’s detailed information requests in March 2009 and has not, therefore, materially impacted Sky’s ability to respond to those information requests. Sky has also prioritised commenting on the draft Oxera report on Sky’s profitability over completion of this submission.
5 This submission augments our previous submissions on these issues. In general, Ofcom has failed adequately to have regard to arguments and evidence presented by Sky both in its response to the Complaint of October 2007, and in its response to Ofcom’s First Consultation Document, in April 2008.
1.4. This submission comments on a number of different aspects of Ofcom’s analysis of market definition and market power. Given the numerous significant flaws in Ofcom’s analysis we have not commented on all of them. Failure to comment on any particular aspect of Ofcom’s analysis cannot be taken to mean that Sky agrees with it.

2. **Ofcom places an inappropriate weight on market share as an indicator of market power in this case**

2.1. It is important to recognise that Ofcom’s analysis of relevant markets in its pay TV investigation is undertaken principally in order to establish market shares attributable to Sky, as an indicator of Sky’s market power. Ofcom’s analysis relies on three indicators of market power:

(a) market shares;
(b) barriers to entry; and
(c) the extent of countervailing buyer power.

2.2. Of these, however, primacy is given to market shares. Citing competition law precedents, Ofcom views high market shares as strong *prima facie* evidence of market power, with evidence on barriers to entry and countervailing buyer power playing a supporting role. Ofcom states:

“The OFT Market Power Guidelines state that, in general, market power is more likely to exist if an undertaking has a persistently high market share (paragraph 4.2). Further, it is unlikely that an undertaking will be individually dominant if its share of the relevant market is below 40% (paragraph 2.12). The European Court of Justice has stated that dominance can be presumed in the absence of evidence to the contrary if an undertaking has a market share persistently above 50%.”

2.3. Having defined, in Ofcom’s own words, “narrow” markets for specific types of pay TV channels – those in which Sky specialises – at the wholesale level, Ofcom naturally then finds Sky to have very high market shares in those putative markets, and therefore presumes that Sky is dominant in those putative markets. In relation to the wholesale supply of premium sports channels, Ofcom states:

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6 Many of the issues raised in this submission concern (a) Ofcom’s analysis in both its consultation documents, and (b) market definition at both the wholesale and retail levels.

7 Paragraph 1.28 of Annex 7. At paragraph 1.29, Ofcom states that: “we recognise that market shares are not conclusive” (we assume in relation to a finding that a firm has market power) and then discusses bidding markets and product differentiation. This ‘recognition’, however, appears to do nothing to reduce Ofcom’s reliance on market share as the central element in its findings in relation to market power. As discussed below, Ofcom’s attempts to address product differentiation do not adequately deal with this issue.

8 See, for example, paragraphs 1.2, 1.20, 1.22, 3.13, 4.4, 4.6, and 4.143.
“our view is that Sky’s market shares are a strong indication of it possessing a dominant position in the wholesale supply of Core Premium Sports channels.”

2.4. Similarly, in relation to Sky’s premium movie channels, Ofcom states:

“Our view is that Sky’s market shares are a strong indication of it possessing a dominant position in the wholesale supply of Core Premium Movies channels.”

2.5. The key problem with this approach, however, is that there are strong grounds for treating market share estimates as an indicator of market power with a high degree of scepticism in this case. Market shares are an indirect and often highly imperfect indicator of market power. In order for market shares to be a reasonable indicator of market power there needs to be a reasonable degree of confidence that the ‘market’ used to calculate market shares is a ‘relevant market’. There are two reasons, however, for considering that the markets that Ofcom has defined are poor bases for the evaluation of Sky’s market power:

(a) the conclusions reached by Ofcom as to the scope of relevant markets in which Sky supplies its premium sports and movie channels are unreliable. We explain the reasons for this view in Section 3 below; and

(b) Ofcom fails properly to consider the implications of product differentiation for its analysis of market definition and market power. We discuss this further below.

2.6. Given this, significant caution must be exercised as to the meaningfulness of the market shares that are attributed to Sky by Ofcom as an indicator of its market power. As the quotations above show, Ofcom fails entirely to exercise such caution.

The implications of product differentiation for the analysis of market definition and market power

2.7. Product differentiation lies at the heart of the provision of audiovisual services. Every audiovisual programme (including movies) is different to other such programmes, and every collection of programmes (for example, a television channel, or a package of television channels) is different to other collections of programmes. In Sky’s view, these points are uncontroversial, and appear to be accepted by Ofcom.

2.8. It is well known that it is appropriate to be sceptical of the value of market share as an indicator of market power in sectors in which differences among firms and products play an important role in competition among them. This issue is explained fully in Bishop (2001):
“In applications involving highly differentiated products or companies
distinguished by factors such as their location or product mix the
calculation of market share and HHIs is less useful..... [A]n analysis based
solely on market definition and market share copes poorly with
differentiated product markets because it does not allow for the competitive
influence of products outside the defined market and only gives weight to
products within the market in direct proportion to their market
shares....Because market shares need not reflect the degree of
substitutability between one product and another, there is much greater
interest in going beyond the broad structural measures of market
concentration...in a differentiated products setting.

In summary, the inability of market shares to reveal the “closeness” of
competition and the difficulty of identifying supply substitutes underscore
the shortcomings of analysing competition among differentiated products
using an approach that is largely or exclusively based on market definition
and the analysis of market shares. In such markets, market definition
remains an element of the analysis, but it is important to recognise that its
significance may be much reduced.”

2.9. In particular, it is generally recognised that attempting to draw ‘bright lines’
around product groups in cases involving differentiated products can result in
two potential sources of analytical error:

(a) overstating the significance of distant substitutes by including them
within the relevant market; and

(b) understating the significance of important substitutes by excluding them
from the relevant market.

2.10. Given that, in Ofcom’s own words, it has defined “narrow” wholesale markets,
it would appear evident that the latter of these two errors is more likely in this
case.

2.11. One of the key problems introduced to the analysis of market power by
reference to market shares in a differentiated products setting is that it is
difficult to apply standard market definition procedures. A relevant market is
‘something worth monopolising’
. The standard framework for analysing
market definition aims to establish the boundaries of the market by beginning
with the narrowest potential market market, and adding products if it is found

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12 Simon Bishop. ‘Market Definition: Principles and Fallacies’, Paper presented at: The Use of
Underlying this point is the fact that the proposition that there is a one-to-one relationship
between market share and market power is based on a simple ‘structure-conduct-performance’
(“SCP”) paradigm that is now generally acknowledged to be applicable only to the simplest of
economic settings. For example, as John Fingleton (now Chief Executive of the Office of Fair
Trading) has noted: “SCP had some merit in the context of theory [of the 1950s] .... However, it is
now largely discredited and is considered to have little or no predictive power.” See John Fingleton,
13 See footnote 8, above.
14 See page 89 of Simon Bishop and Mike Walker, The Economics of EC Competition Law; Concepts,
that monopolising the supply of the candidate product would not be worthwhile. In a situation in which product differentiation is a key feature of a sector, however, it may not be possible to identify any products that should be added to the candidate market, even if it is found that monopolisation of the candidate product would not be worthwhile. In essence, in a setting with differentiated products, supply of a particular product may be constrained by a range of alternatives, none of which is a close substitute, but which, together, provide a sufficient constraint on the supplier of the candidate product.

2.12. This point is made in a 2007 LECG publication:

"In the majority of merger cases competition authorities carry out a two step process – define the relevant market and then assess competition within that relevant market. This works well in most cases and imposes a discipline on authorities to adopt a reasoned and consistent approach to analysing mergers. However, where the boundaries of the market are indistinct or where customers substitute to many different alternatives, the two-step process can make it difficult to assess all the relevant constraints...[In] such cases it is critical that the competition authority recognises the limits of the two-step test. In carrying out the hypothetical monopolist test the authority must take account of the collective substitution to all possible alternatives."\(^5\)

2.13. When it is difficult to apply standard market definition procedures there is an inherent tendency to fall back on, or to rely to a greater extent on, differences among products’ characteristics as indicators of whether they should be considered to be supplied in different relevant markets. It is straightforward to see that, in a situation in which firms compete by selling products that are different to those sold by other firms, such an analysis will inevitably produce erroneous conclusions about the strength of competition among them.\(^6\)

2.14. The observation that the analysis of relevant markets becomes significantly more complex in sectors in which firms compete via product differentiation is, in Sky’s view, commonplace. For example, Baker (2007) states:

“Market definition may make little contribution to antitrust analysis, for example, when market boundaries are difficult to draw, making the resulting market concentration statistics close to arbitrary. This may occur in industries in which firms are differentiated in product or geographic space."\(^7\)

2.15. Furthermore, in a sector in which competition via product differentiation is important, it is easy to confuse firms’ ‘local market power’ with them having


\(^{16}\) This will certainly be the case in any circumstances (i.e. not just in circumstances where product differentiation is important) if the focus is on those characteristics of products which drive the purchasing behaviour of infra-marginal consumers.

‘significant market power’ (or ‘dominance’) in the sense of a level of market power that produces adverse economic outcomes. As we discuss in Section 4, below, a key element of competition via product differentiation is that firms that operate in such an environment have a degree of pricing power – an ability to set prices above marginal cost – while earning only a reasonable return on their costs. Such a market position is entirely different from what is normally intended by the terms ‘dominance’ or ‘significant market power’.18

2.16. As noted above, Ofcom clearly accepts the fact that it is dealing with a sector in which product differentiation plays a central role, yet it fails to recognise “the shortcomings of analysing competition among differentiated products using an approach that is largely or exclusively based on market definition and the analysis of market shares”, or that market concentration statistics may be “close to arbitrary” in such a situation. Instead, as discussed above, the central purpose of Ofcom’s market definition analysis is to establish such statistics.

2.17. Ofcom attempts to address the problems raised by product differentiation for definition of relevant markets by considering the impact on its estimates of Sky’s market share of alternative market definitions. As we discuss in Section 4, below, the inconsistent way in which Ofcom has undertaken this analysis means that it fails to provide any remedy to the problems raised by product differentiation for market definition in this case.

2.18. Baker (2007) states:

“Market definition is least useful when market shares would not be strongly probative as to market power or anticompetitive effect, while direct evidence as to market power or anticompetitive effect is available and convincing.”19

2.19. In Sky’s view, this proposition has considerable force in this case. This case is one in which “market shares [are] not strongly probative as to market power”, while “direct evidence as to market power...is available and convincing”. We reiterate Sky’s view that Ofcom’s conclusion that Sky holds dominant positions in narrowly defined relevant product markets is inconsistent with a range of readily available and convincing evidence – particularly (a) evidence about Sky’s behaviour20 and (b) internal documents available to Ofcom21.

3. Ofcom’s market definitions are not well founded

3.1. As discussed in Section 2, Ofcom places very significant weight on market share evidence as demonstrating that Sky has dominant positions in two narrowly defined markets. It is clear, however, that such conclusions are reliable only if

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18 For example, firms operating in a sector in which competition occurs via product differentiation do not have the ability to act independently of consumers or rivals. In the US, the term ‘monopoly power’ is used to indicate market power that carries with it the possibility of adverse economic outcomes.


20 See, for example, paragraphs 6.21 - 6.23 of Sky’s Response to Ofcom’s First Consultation Document.

21 In relation to Sky’s internal documents, see, for example, the documents received by Ofcom in response to Question 10 of Ofcom’s information request of 29 May 2008.
(among other things) the ‘markets’ used to calculate such market shares are meaningful ‘relevant markets’. In the current case, however, there are numerous reasons for considering that the conclusions that Ofcom has reached about the scope of relevant markets are not well founded, and do not therefore support Ofcom’s conclusions in relation to Sky’s market shares.

3.2. The most fundamental of these reasons is that the analysis and evidence cited by Ofcom as the basis for its conclusions as to the scope of relevant markets in this case does not support those conclusions. More generally, Ofcom’s market definition analysis is unsystematic, inconsistent and maladroit.

3.3. We discuss these issues further in the sections below.

3.4. In considering the strength of evidential support required in relation to Ofcom’s conclusions about the scope of relevant markets and Sky’s market power, it is important to recognise the context in which that analysis has been undertaken. This analysis comprises a key element in Ofcom’s argument that it should impose new, highly intrusive regulation on Sky. Sky has argued that, in order to establish that such regulation is necessary and proportionate, Ofcom must satisfy itself based on clear evidence that, for example, the alleged potential behaviour addressed by such regulation is more likely than not to occur and, if it does occur, it is more likely than not to have a material effect on the competitive process. In Sky’s view, therefore, given the key role that Ofcom ascribes to its findings in relation to Sky’s dominance as support for its regulatory proposals, the standard of evidence required in relation to relevant markets and market power should be at least as high as that in relation to the other elements required to support a case that Ofcom’s proposed regulation is necessary and proportionate.

3.5. It is notable that, in numerous instances in its market definition analysis, Ofcom adopts a low evidential standard – for example Ofcom states that evidence “suggests” a particular conclusion, or that a piece of evidence “seems to” imply a particular conclusion. In Sky’s view, such a low standard for evidence is wholly inappropriate.

(a) Ofcom’s evidence and analysis does not support its conclusions about the scope of relevant markets

3.6. In considering the evidence and analysis on which Ofcom’s conclusions on the scope of relevant markets are founded, it is helpful first to set out those conclusions.

3.7. In relation to premium sports channels, Ofcom states:

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22 See, for example, paragraphs 3.14 – 3.16 of Sky’s Response to Ofcom’s Second Consultation Document.
23 See, for example, paragraphs 4.85, 4.86, 4.88, 4.98 and 4.226.
“there is a narrow economic market for the wholesale of certain premium sports channels, specifically those premium channels which contain live FAPL matches.”

3.8. Ofcom does, however, also take the view that the relevant market may be “slightly narrower” or “slightly broader” than this definition. Ofcom states:

“...We acknowledge that there are arguments both for a slightly narrower market definition (e.g. one that excludes channels such as Sky Sports 2, which only contain a small number of live FAPL matches) and for a slightly broader market definition (e.g. one that includes channels which contain a significant volume of other high quality live sports).”

3.9. Nevertheless, it is evident from the firmness with which Ofcom’s initial conclusion about the scope of the relevant market is put, that Ofcom clearly prefers the formulation of a “narrow economic market for the wholesale of certain premium sports channels, specifically those premium channels which contain live FAPL matches”.

3.10. In relation to premium movie channels, Ofcom states:

“We are also consulting on our view that there is a narrow economic market for the wholesale supply of channels which include movies from the major six Hollywood studios, shown in the first pay TV window. We use the term ‘Core Premium Movies’ to refer to these channels. We acknowledge that there is a growing constraint on such channels from other means of watching movies, but do not believe that the strength of this constraint currently justifies the adoption of a broader market definition.”

3.11. As was the case with Ofcom’s First Consultation Document, a review of the bases for the conclusions that Ofcom has reached in relation to relevant markets indicates that the evidence and analysis cited by Ofcom is wholly unreliable, and does not support those conclusions. In particular, the evidence and analysis cited by Ofcom in support of its conclusions falls far short of the standard of being clear evidence.

3.12. We set out our detailed review of Ofcom’s evidence and arguments in Annex 1, and summarise that review in Tables 1 and 2, below.

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24 Paragraph 1.20.
25 Paragraph 1.21.
26 Paragraph 1.22.
27 See paragraph 1.72 of Annex 2 of Sky’s Response to Ofcom’s First Consultation Document.
<table>
<thead>
<tr>
<th>Indirect constraints</th>
<th>Ofcom proposition/ approach</th>
<th>Key reasons why Ofcom’s evidence and analysis do not support its conclusions on the scope of the relevant market</th>
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<tbody>
<tr>
<td>(a) “Consumers’ estimated responses to price changes”</td>
<td>Critical loss analysis. Addresses the following question: is the estimated elasticity of demand for pay TV packages that include premium sports channels less than the demand elasticity required to make price rises unprofitable?</td>
<td>Ofcom’s estimates of demand elasticities used in this analysis are wholly unreliable. (See Section 4 and Annex 5, below.)</td>
</tr>
<tr>
<td>(b) “Consumers observed responses to price changes”</td>
<td>If it is observed that: (i) firms were unwilling to impose price rises on their customers; or (ii) large numbers of consumers would switch in response to price rises, it may be possible to infer that firms’ pricing was constrained and markets are broad.</td>
<td>Ofcom does not reach proper conclusions as to changes over time in prices adjusted for inflation and changes in quality so has no basis for applying either of these tests. If Ofcom’s erroneous analysis of the impact of discounts is set aside, the evidence suggests that firms have been “unwilling to impose price rises on their customers” in relation to pay TV packages that include premium sports channels for some time, thereby, according to Ofcom’s test, providing evidence that pricing is constrained and markets are broad.</td>
</tr>
<tr>
<td>(c) “The popularity of free to air TV”</td>
<td>Whether the growth in the number of households who receive free to air DTT services has had “an observable impact on subscriber numbers to packages containing Sky Sports”.</td>
<td>Testing such a proposition requires proper multivariate analysis. Ofcom’s approach consists of examining a chart of trends in these two variables which is an unreliable method of testing Ofcom’s proposition. Proper analysis of this issue by Professor Seabright et. al. shows Ofcom’s conclusion to be erroneous.</td>
</tr>
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</table>
| (d) Survey of consumer preferences and characteristics of premium sports channels | Viewing football matches involving teams currently in the Premier League is “very important” to marginal subscribers to services that include premium pay TV channels, and because (a) there is an insufficient number of such matches on free to air television | • Ofcom exercises insufficient caution in relation to the reliability of its consumer survey evidence. • Ofcom’s determination that the preferences of marginal and infra-marginal subscribers are similar is
channels, and (b) the matches broadcast free to air are not broadcast regularly throughout the season, an insufficient number of subscribers to services that include premium sports channels with live Premier League football would regard free to air television as an adequate substitute for a pay TV service that includes Sky's premium sports channels.

- There is no evidential support for Ofcom's propositions that the number of matches and their regularity throughout the football season are significant determinants of consumers’ switching behaviour.
- Ofcom fails to consider the argument that a ‘lower quality’ product provided at a cheaper price may provide an effective substitute for a product of higher quality provided at a higher price.

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<th>Direct constraints</th>
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<tr>
<td><strong>Direct wholesale demand-side substitution</strong></td>
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</table>
| (a) What products do pay TV retailers regard as substitutes for Sky’s sports channels? | Ofcom simply asserts that there are no substitutes for Sky’s sports channels from the point of view of pay TV retailers.

This fails to have proper regard to the argument that ‘switching’ in such a situation occurs in terms of allocation of sales effort, rather than in terms of dropping particular television channels, and replacing them with other channels. |
| (b) Have cable operators ceased to carry Sky’s sports channels when their carriage fees have increased? | As discussed above, this is based on a false premise that ‘switching’ in such circumstances would involve ceasing to carry a particular television channel, and replacing it with an alternative. |

<table>
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<tr>
<th>Changes in wholesale prices</th>
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<tbody>
<tr>
<td>Rebuttal of Sky’s argument that flat or falling charges indicate that Sky does not have significant market power.</td>
<td>Even if Ofcom’s rebuttal were correct (which it is not), it would not comprise positive evidence in support of Ofcom’s conclusion on the scope of the relevant market.</td>
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<th>Wholesale supply-side substitution</th>
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<tr>
<td>Do supply-side considerations warrant widening the relevant market?</td>
<td>Ofcom’s arguments on this matter are irrelevant because the evidence and analysis adduced by Ofcom do not support the market that it has defined by reference to demand-side considerations.</td>
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Table 2

Ofcom’s evidence and analysis in relation to market definition for the wholesale supply of premium movie channels

<table>
<thead>
<tr>
<th>Indirect constraints</th>
<th>Ofcom proposition/ approach</th>
<th>Key reasons why Ofcom’s evidence and analysis do not support its conclusions on the scope of the relevant market</th>
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<tbody>
<tr>
<td>(a) Firms’ views on likely substitutes</td>
<td>Examines Sky and Virgin Media’s internal documents to determine whether firms consider that there are substitutes for premium movie channels.</td>
<td>Ofcom’s conclusion (that there is a wide and growing variety of potential substitutes for Sky Movies channels) does not comprise positive evidence in support of Ofcom’s conclusion on the scope of the relevant market.</td>
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<td></td>
<td></td>
<td>On the face of it, however, the observation that there is “a wide and growing variety of potential substitutes for Sky Movies channels”, appears out of line with Ofcom’s conclusion that Sky’s movie channels are supplied in a “narrow market”.</td>
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<tr>
<td>(b) Consumers’ estimated responses to price changes</td>
<td>Critical loss analysis. Addresses the following question: is the estimated elasticity of demand for pay TV packages that include premium sports channels less than the demand elasticity required to make price rises unprofitable?</td>
<td>Ofcom’s estimates of demand elasticities used in this analysis are wholly unreliable. (See Section 4 and Annex 5, below.)</td>
</tr>
<tr>
<td>(c) Observed responses to price changes</td>
<td>Unclear.</td>
<td>Ofcom concludes that its analysis under this heading does not provide clear indications as to the scope of the relevant markets.</td>
</tr>
<tr>
<td>(d) Consumer preferences and features of premium movie packages</td>
<td>Unclear.</td>
<td>Ofcom’s conclusion is consistent with the scope of the relevant market being broader than that which it concludes is appropriate.</td>
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</tbody>
</table>

Ofcom’s analysis in relation to the constraints from DVD sales and rentals, and content accessed via the internet (discussed below) (a) fails to have regard to the aggregate constraint imposed on the supply of premium movie channels from all potential substitutes and (b) fails entirely to have regard to either “non-movies programming” or movies in the library window as potential.
<table>
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<th>The potential constraint from DVDs</th>
<th>substitutes.</th>
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<tr>
<td>(e)(i) DVD purchases</td>
<td>(a) Comparison of the characteristics of purchasing programming on DVD and subscribing to a service that includes premium movie channels.</td>
<td>Ofcom draws no conclusion from this comparison. It does not therefore comprise positive evidence in support of Ofcom's conclusion on the scope of the relevant market; If Ofcom intended this comparison to be evidence that DVD purchases are in a separate relevant market to services that include premium movie channels, this fails to recognise that products' characteristics do not need to be identical for them to be considered to be supplied in the same relevant market.</td>
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<td></td>
<td>(b) Whether prices for DVDs and pay TV services that include premium movie channels have either (a) moved in a similar manner over time, or (b) diverged without significant levels of switching between the two products.</td>
<td>Ofcom does not properly determine the relationship between prices for these two products over time, so it is not possible to determine whether they have moved in parallel, diverged, or converged. Ofcom fails to consider whether falling numbers of subscribers to pay TV services that include Sky's movie channels is at least in part attributable to divergence in prices between these two products (if in fact there has been divergence in prices, as Ofcom appears to conclude).</td>
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<tr>
<td>e(ii) DVD rental</td>
<td>(a) A brief comparison of the characteristics of renting programming on DVD and subscribing to a service that includes premium movie channels.</td>
<td>If Ofcom intended this comparison to be evidence that DVD purchases are in a separate relevant market to services that include premium movie channels, this fails to recognise that products' characteristics do not need to be identical for them to be considered to be supplied in the same relevant market.</td>
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<td></td>
<td>(b) Examination of a chart that compares the total value of UK over-the-counter and subscription DVD rentals between 2000 – 2007.</td>
<td>Appears to be entirely irrelevant to the issue of whether DVD rental is a substitute for services that include premium movie channels. The issue examined by Ofcom appears to be whether DVD subscription services are a substitute for over-the-counter DVD rentals.</td>
</tr>
<tr>
<td>(f) The potential constraint from content downloaded over the internet.</td>
<td>The number of households who download programming via the internet (whether legally or</td>
<td>Taken at face value, this would indicate only that the market should not be widened to</td>
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</table>
Ofcom’s analysis, however, fails to consider that such services may comprise part (and an increasingly important part) of the constraint imposed on the supply of premium movie channels by a variety of alternative services.

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3.13. These tables indicate clearly the unstructured and *ad hoc* nature of the analyses that Ofcom has undertaken.

3.14. Throughout its analysis, Ofcom attempts to increase the value of its evidence and analysis by implying that the weight that may be attached to its conclusions is cumulative in nature – for example that a particular piece of evidence or analysis *reinforces* the implications drawn from previously examined evidence. In the majority of cases, however, such assertions are spurious for the straightforward reason that the previously examined evidence is significantly flawed. An ill-founded conclusion cannot be ‘reinforced’ by other evidence.

3.15. Accordingly, it is apparent that there is no proper basis for, let alone clear evidence in support of, Ofcom’s conclusions as to the relevant markets in which

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28 See, for example, paragraph 4.106.
Sky’s premium sports channels and premium movie channels are supplied. This means that no weight can be placed on the market shares calculated by Ofcom as an indicator of Sky’s market power.

(b) The unsystematic, inconsistent and maladroit nature of Ofcom’s analysis

3.16. A key reason for the failure of Ofcom’s analysis to produce reliable conclusions in this case is its unsystematic, inconsistent and maladroit nature. We discuss these issues further in the sections below.

(b)(i) The unsystematic nature of Ofcom’s analysis

3.17. It is commonly recognised that a central purpose of examining relevant markets in competition cases is to ensure that the competitive constraints that firms face are examined in a systematic way. Ofcom’s analysis and examination of evidence, however, comprises a series of ad hoc and inconsistent exercises.

3.18. The reason for this is straightforward. While Ofcom professes to use the hypothetical monopolist framework to organise its analysis and test evidence, such statements are in fact hollow. Ofcom’s – well-founded – concern about the Cellophane fallacy essentially leads it to abandon use of the hypothetical monopolist test as the organising framework for its analysis. Yet its failure to recognise that it has in fact abandoned that analytical framework means that Ofcom is unaware of the need to consider carefully how it should, instead, structure its analysis.

3.19. The hypothetical monopolist test was developed to counter a number of adverse tendencies in relation to the analysis of competition cases which meant there was a risk of reaching false conclusions about firms’ market power, notably:

- undertaking analysis in an ad hoc way;
- the gathering of evidence being governed by ‘prior inferences’ about the scope of relevant markets;
- the gathering of evidence being governed by a desire to establish jurisdiction in a competition case – particularly dominance cases;
- an undue emphasis on differences in product characteristics being determinative of the boundary of relevant markets; and
- an undue reliance on introspection or ‘gut feeling’ as the basis for conclusions as to the scope of relevant markets.

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29 This point is made, for example, in both the Commission’s Notice on Market Definition, and the OFT’s guidance on market definition.

30 For example, at paragraph 4.38, Ofcom states: “As in the December Consultation we use the Hypothetical Monopolist (HMT) framework to analyse the competitive constraints faced by undertakings in a systematic way.”
3.20. There are numerous references in the literature relating to the hypothetical monopolist test that attest to its intended role in inhibiting such tendencies. For example:

- the OFT’s 2001 Discussion Paper on the role of market definition in market power and dominance inquiries states:

  “As a soundly based conceptual framework [the hypothetical monopolist framework] can move the debate beyond a process of ad hoc introspection and focus it more clearly on the key concepts of demand and supply-side substitution.”

  and:

  “the requirement to assess demand-side and supply-side competitive constraints that market definition provides [is] a useful back-stop to guard against ad hoc competitive assessments”

- a recent US Department of Justice publication states:

  “The market-definition requirement brings discipline and structure to the monopoly-power inquiry, thereby reducing the risks and costs of error.”

- and a LECG presentation on market definition states:

  “Why do we define relevant markets?...It is meant to impose discipline in the assessment of market power”

3.21. The OFT 2001 Discussion Paper also warns against the potential risk that may arise from the existence of the Cellophane fallacy, in terms of defining relevant markets too narrowly, as a result of an unsystematic analytical approach. It states:

  “in seeking unconsciously to compensate for the existence of the cellophane fallacy, one might tend to adopt overly narrow market definitions on the basis of a ‘gut feeling’.”

3.22. In Sky’s view, these types of arguments have a strong resonance in this case. In the absence of a proper consideration of how it should approach the analysis of evidence relevant to the assessment of market definition and market power in this case, Ofcom’s approach is unsystematic, comprising a largely ad hoc consideration of a variety of different types of evidence and arguments, which

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32 Paragraph 3.49, ibid.
35 Paragraph 3.48, op. cit.
bear the hallmarks of being selected according to a predetermined view that Sky has a dominant position.36

3.23. We discuss Ofcom’s failure adequately to consider the implications of the Cellophane fallacy for its analysis further below.

3.24. The unsystematic nature of Ofcom’s analysis is revealed by the fact that key elements of the environment in which Sky operates (such as competition among broadcasters for viewers, and supply-side differentiation), and frameworks for the analysis of competition that would appear to have direct relevance to Ofcom’s inquiry (such as the concept of ‘monopolistic competition’), are entirely absent from Ofcom’s analysis. (We also discuss these issues further below.) These are key indications that Ofcom’s analysis has taken a wrong turn, and that it fails in its principal objective of being a systematic examination of the competitive constraints faced by Sky.

(b)(ii) Inconsistencies in Ofcom’s analysis

3.25. Ofcom’s analysis is riddled with inconsistencies. The following examples are illustrative rather than exhaustive:

- Ofcom uses evidence of firms’ views principally in relation to one particular issue (“likely substitutes” for premium movie channels), but not in relation to anything else – in spite of large amounts of such evidence being available to it;

- Ofcom considers direct evidence of market power (for example changes in margins over time) in the context of market definition on some matters, but does not do so systematically;

- Ofcom takes into account changes in the quality of services provided in relation to price changes at the retail level, but does not do so at the wholesale level;

- Ofcom advances contradictory views in relation to the issue of whether it is necessary and/or important to reach determinative views on the precise boundaries of markets. In the majority of Ofcom’s Second Consultation Document, Ofcom argues that market definition is a means to an end (of identifying firms’ market power), and that it is important to avoid a spurious amount of weight being placed on the precise definition of market boundaries. For example, Ofcom states:

  “it would be over-simplistic to assume that products which are within the market all fully constrain each others’ prices, while products which are outside the market provide no constraint. This is certainly true for

36 See also Sky’s comments on this matter in Section B of Annex 2 of Sky’s Response to Ofcom’s First Consultation Document, and Annex 6 of Sky’s Response to Ofcom’s Second Consultation Document. As we note in those submissions, a key reason for this view is Ofcom’s repeated expressions of its view that the OFT’s findings in relation to market definition in 2002 should be regarded as being the appropriate market definitions in Ofcom’s own inquiry unless there is sufficient evidence to the contrary.
content markets such as those defined here, given the highly
differentiated nature of the products being sold in these markets, and
the resulting uncertainties in the precise market boundary.” 37
(Emphasis added.)

Yet, elsewhere, Ofcom argues that it is important to define boundaries of
relevant markets with precision. Ofcom states:

“It is not helpful to have a loose or vague market definition.” 38

3.26. In Sky’s view, the extent and nature of such inconsistencies cast significant
doubt on the reliability of Ofcom’s analysis of market definition and market
topower in this case.

(b)(iii) The maladroit nature of Ofcom’s analysis

3.27. As we have discussed in previous submissions, the specific circumstances of the
supply of pay TV channels in the UK mean that the analysis of market power in
this case raises very significant conceptual and practical difficulties. 39 This
means that reaching well-founded conclusions on this matter requires a skilful
and balanced examination of a range of relevant evidence, including direct
indicators of the presence, or absence, of significant market power. Ofcom’s
approach, however, falls well short of such a standard. In the following Section
4, we discuss a number of examples of significant conceptual and practical
issues that are dealt with in a highly inadequate manner in Ofcom’s analysis. In
Sections 5 to 7, we comment in more detail on a number of issues in which
Ofcom’s analysis is significantly deficient. 40

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37  Paragraph 4.3.
38  Paragraph 4.5, repeated in the Summary at paragraph 1.21. Ofcom offers no justification at all
for this rather unusual statement. As well as contradicting the predominant view throughout
Ofcom’s Second Consultation Document that it may not be possible to define market boundaries
with precision, this statement seems very odd given that Ofcom takes the view that different
formulations of the relevant market do not affect its conclusions as to firms’ market power,
which is the reason that Ofcom is seeking to define relevant markets.

39  See, for example, Section D of Annex 2 of Sky’s Response to Ofcom’s First Consultation
Document.

40  We have not commented on those parts of Ofcom’s arguments and analysis the meaning of
which is not discernible. For example, paragraph 5.98 states: “Note that the figures cited above
effectively treat these products as if there (sic) were all within the same relevant market; they
therefore overstate the extent to which Sky’s pricing is constrained by these packages.” It is not
possible to discern the meaning of that paragraph. Similarly, at footnote 72, Ofcom argues that
Sky could profitably increase its wholesale charges but does not do so. Ofcom’s explanation for
this counterintuitive belief is as follows: “Sky will simultaneously seek to set the profit maximising
retail and wholesale prices, and this means that the optimal wholesale price may be above or below
the profit maximising level that a stand-alone retailer would set, depending on the vertically
integrated entity’s retail and wholesale costs. (The precise approach to setting the optimal wholesale
price is likely to be one which leaves Sky indifferent between wholesaling and retailing.)” Again,
the meaning of this argument is not discernible.
4. **Examples of the inadequate nature of Ofcom’s analysis**

4.1. In this Section 4, we discuss the following elements of Ofcom’s analysis:

(a) Ofcom’s attempt to address the issue of product differentiation;

(b) the implications of the Cellophane fallacy;

(c) analysis of the relationship between two variables;

(d) Ofcom’s failure to consider monopolistic competition as a framework for analysis in this case;

(e) estimation of demand elasticities; and

(f) failure properly to consider the cumulative impact of a variety of substitutes.

4.2. Once again, these examples are not exhaustive.

(a) **Ofcom’s attempt to address product differentiation**

4.3. Ofcom attempts to deal with the implications of product differentiation for its analysis of relevant markets in this case by examining Sky’s market shares under alternative definitions of relevant markets.⁴¹

4.4. Ofcom states:

> “The differentiated nature of content markets means that there is some ambiguity over the precise boundaries of these premium channel markets, and this complicates the process of market definition.”⁴²

4.5. Ofcom then sets out its proposed approach to dealing with this ‘complication’ as follows:

> “In markets which contain a variety of differentiated products, such as some broadcasting markets, there may not be a clear-cut boundary between products that lie just inside the market and products that lie just outside the market. As we stated in paragraph 4.17, the assessment of market power does not rely on the precise drawing of market boundaries, as products just outside the market can exert a competitive constraint. We have therefore tested the sensitivity of our market power assessment to our market definitions by calculating market shares based on a variety of differing assumptions regarding the precise boundary.”⁴³ (Emphasis added.)

4.6. This paragraph contains two distinct propositions:

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⁴¹ See, for example, paragraphs 2.27 – 2.32 of Annex 7, where Ofcom tests the impact of including Champions League football in the relevant market for premium sports channels, and paragraphs 2.33 – 2.36 of that Annex, where Ofcom tests the impact of also including broadcasts of other types of football competitions (other than international football competitions).

⁴² Paragraph 4.21.

⁴³ Paragraph 4.43.
(a) that the problem caused by product differentiation is determining the precise location of the “clear-cut boundary” of the relevant market, with “ambiguity” as to that precise location caused (in Ofcom’s conception) by the fact products that “lie just outside the market” “can exert a competitive constraint [on products that fall within the relevant market]”; and

(b) that testing the sensitivity of market share estimates to alternative market definitions is a useful approach when there is uncertainty about the boundary of relevant markets.

4.7. We discuss each of these in the following sections.

**Ofcom’s erroneous conception of the problem caused by product differentiation for market definition**

4.8. In Sky’s view, the first of Ofcom’s propositions is a fundamentally flawed appreciation of the issues raised by product differentiation in relation to market definition.

4.9. As discussed above, the conventional view is that the implications of product differentiation for market definition go considerably beyond Ofcom’s view that the key issue is uncertainty as to the precise location of a “clear-cut boundary”. Instead, the relevant literature on this matter indicates that the central problem raised by product differentiation for market definition is that it is not possible to establish a “clear-cut boundary” for the market that is a meaningful basis for the calculation of firms’ market shares.

4.10. There is, moreover, no basis for Ofcom’s core proposition that it is only those products that “lie just outside the market” (emphasis added) that exert a competitive constraint on products within “the market”. Instead, the conventional view of the implications of product differentiation for market definition is that the cumulative constraint of a variety of different products, including those that are not, in any sense, “just outside the market”, may be sufficient to constrain a hypothetical monopolist of a supplier of the candidate product(s).

4.11. Finally, Ofcom’s conception that it is only products that “lie just outside the market” that exert a competitive constraint on products within the market relies implicitly on a series of further propositions, which themselves raise complications that Ofcom fails to consider – for example:

(a) “the market” that those products are said to lie outside must itself be a meaningful construct;

(b) it is possible easily to identify those products that “lie just outside the market”; and

(c) there is a distinct gap in the competitive constraint imposed by the products that “lie just outside the market” and more distant products, so
that no chain of substitution links relatively close substitutes and more distant substitutes.\footnote{This is a good example of where Ofcom’s abandonment of the hypothetical monopolist framework results in errors in its analysis. (See Sky’s comments on this matter below.) Had Ofcom considered this matter within an appropriate analytical framework, it would have recognised that it needs to consider the possibility of the existence of chains of substitution.}

**Ofcom’s proposition that the implications of product differentiation for evaluation of firms’ market power can be examined by testing the sensitivity of market share estimates to different definitions of the relevant market**

4.12. If undertaken appropriately and with due regard to arguments set out in Section 2 above (that market shares are an indirect and often highly imperfect indicator of market power), a process of testing the sensitivity of market share estimates to alternative formulations of the relevant market in principle is an instructive exercise in situations in which there is uncertainty about the substitutability of different types of products.

4.13. In particular, it is of assistance in a nuanced approach to competition analysis that recognises that boundaries of relevant markets are not always “clear-cut”, and therefore weights market share evidence accordingly.

4.14. The key problems with Ofcom’s application of this approach in this case, however, are that it is either (a) applied inconsistently, or (b) overly influenced by Ofcom’s erroneous conception that it is the influence of products considered to “lie just outside the market” that should be tested. For example, in relation to premium movie channels, Ofcom fails to consider the implications for estimates of Sky’s market share of including in the relevant market any of:

(a) DVD sales;

(b) movies on basic pay TV channels and free to air television channels; or

(c) other types of programming.

4.15. In Sky’s view, it is irrational to believe that these types of products impose no constraint at all on the supply of pay TV services that include premium movie channels; yet that is how, in effect, they are treated in Ofcom’s analysis.

4.16. It is notable that including only one of these alternatives (DVD sales) within the relevant market would reduce Sky’s estimated market share considerably. If the relevant market were, therefore, to be considered to be ‘ways of watching movies at home in windows prior to the expiry of the pay TV window’\footnote{We cite this definition by way of example only. In Sky’s view, the relevant market pertaining to Sky’s movie channels is wider than this.} it is evident that the conclusion drawn by Ofcom about Sky’s dominance in relation to movie channels would be fatally undermined. There is essentially no difference in the strength of Ofcom’s reasoning or conclusions as to whether DVD sales and rentals should be regarded as being in the same relevant market as Sky’s premium movie channels; accordingly, for Ofcom to test the sensitivity
of market share estimates to inclusion of one of those products, but not the other, is wholly inconsistent.

4.17. Finally, Ofcom fails to recognise that calculation of meaningful market shares can be particularly problematic when, as in this case, consumers pay for services that they consume in different ways. In the case of football programming, for example, Ofcom examines a number of different ways of measuring market shares – in terms of (a) amounts paid for rights, (b) number of football matches broadcast, and (c) audience share – each of which is a poor basis for calculating firms’ market shares. Calculating three different measures of a firm’s market share, each of which is a poor measure, does not ensure that the conclusions reached on the basis of those calculations are meaningful.

(b) The implications of the Cellophane fallacy

4.18. The problems created by the Cellophane fallacy for market definition in cases where the objective is to examine firms’ existing market power are well known. In short, it is difficult to use the standard framework used for the systematic analysis of evidence relevant to the assessment of the relevant market – the hypothetical monopolist test – in such cases.

4.19. As discussed above, in spite of the numerous references to the Cellophane fallacy in its consultation documents, Ofcom does not give any serious consideration to how it should approach its market definition analysis in this case, given that the objective of that analysis is the evaluation of Sky’s market power. Ofcom’s sole response to the Cellophane fallacy problem is to argue that it must take a cautious approach to evidence in relation to consumers’ propensity to switch to other products in response to price rises. This is wholly inadequate, particularly in view of the fact that such evidence comprises the core of the application of the hypothetical monopolist test.

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46 By way of example, audience share measures will be highly imperfect because programmes shown on free to air channels are available to a larger number of households than programmes shown on pay TV channels.

47 The source of this problem is the fact that the hypothetical monopolist test is based on an assumption that current prices are at ‘competitive levels’. It is clearly illogical to adopt such an assumption in an inquiry seeking to examine a firm’s market power; if firms do in fact have market power, then the assumption is likely to be erroneous and applying the test will produce erroneous conclusions. In theory, it might be possible to adapt the hypothetical monopolist test in non-merger cases by basing its application on an evaluation of what competitive prices would be for a particular product. As Bishop (2001), notes, however, this is equally illogical:

“If we could identify the competitive price level then we would not need to go through the whole process of defining relevant markets. In monopoly cases, the issue is whether prices are already too high. So if we could identify the competitive price level then the whole investigation would be straightforward. Simply identify the competitive price level and then compare it with the observed price level….There would be no need to even consider the definition of the relevant market….In practice one is normally unable to determine the competitive price level and this fact has profound implications for the application of the hypothetical monopolist test in the assessment of dominance.” (Simon Bishop, op. cit.)
4.20. While the implications of the Cellophane fallacy for market definition in competition cases in which the focus is firms’ existing market power are now generally recognised, there is no corresponding consensus on the appropriate way of dealing with it.

4.21. The most extensive discussion of this matter of which Sky is aware is the OFT’s 2001 Economic Discussion Paper entitled “The role of market definition in market power and dominance inquiries”\(^{48}\). The central theme of that Paper is the need to exercise caution about drawing conclusions about firms’ dominance, in light of the difficulties associated with establishing relevant markets in dominance cases, and to focus to a greater extent on investigation of the actions that have prompted a competition inquiry. The OFT Paper states:

“Given the existence of the cellophane fallacy and the inherent uncertainty that this introduces into the process of the identification of dominance, one should always be conscious of the potential weakness of the dominance analysis.”\(^ {49}\)

4.22. Such a recommendation is in stark contrast to the approach adopted by Ofcom in which Ofcom is cautious about the value of evidence that lies at the heart of the application of the hypothetical monopolist test, but has a high degree of confidence in its conclusion that Sky holds a dominant position in each of the two narrow markets that it has defined.

4.23. Whilst Sky recognises that the OFT’s Paper is a ‘discussion paper’, and does not therefore comprise official guidance on how to deal with the Cellophane fallacy, in Sky’s view the Paper is thoughtful and well-reasoned, and therefore there is considerable merit in its proposals. At a minimum, however, its fundamental point – that it is necessary for competition authorities to give careful consideration to how they propose to deal with the Cellophane fallacy – is, in Sky’s view, incontrovertible.

4.24. Others have argued that the Cellophane fallacy problem means that it is appropriate to adopt a more holistic approach to the assessment of market power - in particular avoiding a mechanical analysis in which the assessment of relevant markets and firms’ market power are sequential steps and wholly divorced from each other. For example, as Nelson (2007) has noted:

“A key lesson of the Cellophane Fallacy is that in some circumstances it may be sensible for economists to consider all of the elements of the monopolization case market power paradigm and to develop an internally consistent analysis that aligns with the available factual evidence before reaching a final conclusion about the scope of the relevant market.

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\(^{49}\) Paragraph 4.12, ibid.
In particular, in monopolization cases it can be important to consider “performance” evidence to understand how a market is structured and/or directly determine if a firm has market power.⁵⁰

4.25. As Sky has noted previously, this point has been recognised in UK case law in Chapter II cases.⁵¹ This is, therefore, a further reason for adopting a more integrated approach to the analysis of market definition and market power, in addition to the difficulties associated with product differentiation discussed in Section 2 above.

(c) Analysis of the relationship between two variables

4.26. It is a relatively straightforward matter that, when examining the relationship between two variables, it is not possible to make reliable judgments about that relationship if the affected variable (or ‘dependent variable’) is also affected by other factors at the same time. In more technical terms, when a variable of interest is potentially subject to influence from a variety of factors it is necessary to use multiple regression techniques in order properly to identify the specific influence of any single factor. In such circumstances, casual empiricism in the form of examining a graph of two variables plotted against each other will normally lead to spurious conclusions about the relationship between them.

4.27. Yet, in spite of Sky having made this point in previous submissions⁵², Ofcom continues to use this casual approach to examining evidence in its market definition analysis.

4.28. For example:

- in its analysis related to premium movie channels, Ofcom examines a chart of over-the-counter DVD rentals and DVD subscription services. The chart shows that, since 2004, annual revenue associated with over-the-counter DVD rental in the UK has been declining, while that associated with DVD subscription services has been increasing. Ofcom states:

  “Figure 22 suggests that while there has been a significant growth in the volume of DVD rental subscription packages, this has been at the expense of over-the-counter rentals.”⁵³

Even leaving to one side the fact that Ofcom has erroneously used a chart of revenues to draw inferences about volumes, it is plain that the ‘suggestion’ that Ofcom draws from this chart (which appears to influence significantly the conclusion in the subsequent paragraph: that DVD rentals are not in the

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⁵² See, for example, Appendix 5 to Annex 2 of Sky’s Response to Ofcom’s First Consultation Document.

same market as “Sky Movies packages”) is wholly simplistic and cannot form the basis for any reliable conclusion on either (i) the relationship between over-the-counter DVD rentals and DVD subscription services or, (ii) even less, the relationship between DVD rentals and pay TV services that include Sky’s movie channels; and

- in relation to premium sports channels, Ofcom compares the trend in the number of households who receive DTT services and the number of “Sky Sports households” (by which Ofcom appears to mean the number of Sky DTH satellite subscribers whose pay TV package include at least one Sky premium sports channel - thereby erroneously omitting cable “Sky Sports households”). On the basis of this comparison – and in spite of recognising that the appropriate counterfactual is “how numbers of Sky Sports subscribers would have grown were Freeview not available” – Ofcom concludes that “the massive growth in popularity of Freeview since 2002 does not seem to have had an impact on growth in Sky Sports subscriber numbers”. Clearly, such a conclusion is wholly simplistic and cannot be relied on. This is demonstrated by the fact that, when proper multivariate analysis is undertaken, the availability of DTT services is found to have a negative impact on subscriber numbers to packages containing Sky’s premium sports channels.

(d) Monopolistic competition

4.29. A recognition that product differentiation plays an important role in competition among firms is usually indicative of the possibility that competition may be of the form known as ‘monopolistic competition’. As noted in an important US case involving differentiated products:

“Competition in differentiated products markets...is often described as “monopolistic competition.” There is a notable and interesting literature on this subject commencing with the path-breaking and independent insights of two notable economists [Edward Chamberlin and Joan Robinson].... Under perfect competition, the individual seller faces a horizontal demand curve.... Differentiated products are imperfect substitutes representing as they do different features or characteristics that appeal variously to different customers. Because no product is a perfect substitute of another in a differentiated products market, each seller continues to face a downward sloping demand curve. Like a pure monopolist, the seller of a differentiated product, facing a downward sloping, or less than perfectly elastic, demand curve, maximises its profit by pricing above marginal cost...Like a seller in a perfectly competitive market, however, sellers in a “competitive” differentiated products market do not obtain monopoly rents...Differentiated products markets hence share some characteristics of both a pure monopoly and perfect competition in that “prices are above marginal costs

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54 Figure 16.
56 Paragraph 4.98.
57 See Annex 5 of Sky’s Response to Ofcom’s Second Consultation Document.
but economic profits have been driven down to zero."...Firms selling differentiated products have some “market power” in that they are able to exert some control over the prices they obtain although this does not rise to the level of “monopoly power”.

4.30. There is now a well-established body of economic literature that deals with models of competition among the suppliers of differentiated products which fit under the broad heading of models of ‘monopolistic competition’.

4.31. There are numerous indications that this might be an appropriate framework for analysis, some of which are recognised by Ofcom (such as the significantly differentiated nature of products supplied to consumers, and prices being above marginal costs), as well as those that are not recognised by Ofcom (such as the massive proliferation of new television channels that has occurred in the UK since the introduction of digital broadcasting, which effectively removed transmission capacity constraints as a barrier to entry to the sector).

4.32. Yet, in spite of such indications, Ofcom fails entirely to consider the possibility that the framework of monopolistic competition might be an appropriate one for analysing competition in this sector. Ofcom’s implicit benchmark model of competition appears to be one of perfect competition, which is clearly entirely inappropriate in this case. In Sky’s view, the analytical framework of monopolistic competition is the most appropriate one for examining competition among broadcasters of television channels, and it is a material flaw in Ofcom’s analysis of market definition and market power that it does not recognise this benchmark for analysis.

(e) Estimation of demand elasticities

4.33. One of the inputs into Ofcom’s assessment of relevant markets and market power is consumer research undertaken by Ofcom aimed at establishing the price elasticity of demand for pay TV services. Ofcom seeks to compare such estimates with “elasticities required to constrain a monopolist”\(^{59}\) – the demand elasticity above which an increase in prices for pay TV services would not be profitable for a hypothetical monopolist.

4.34. It is generally accepted that estimation of demand elasticities is a complex matter. Indeed, in other parts of its work, Ofcom itself accepts this. For example, Ofcom’s principal reason for rejecting the setting of mobile call termination rates using Ramsey pricing is the difficulty in estimating demand elasticities in relation to mobile call termination. Ofcom has recently stated:

“The amount of common cost recovery included in mobile termination rates set on a LRIC+ basis has been subject to debate, including extensive discussion of Ramsey pricing principles which require that common cost mark-ups on termination reflect the market price elasticity of demand for termination. Given the significant challenge in obtaining reliable estimates

\(^{58}\) Pages 30-33 of the judgment in United States of America et. al. v. Oracle Corporation, United States District Court, Northern District of California, Case No. C 04-0807 (VRW).

\(^{59}\) See, for example, Figure 30 in Annex 6.
of such elasticities and the high degree of uncertainty associated with such estimates, our current LRIC+ methodology is not based on Ramsey pricing.”

4.35. The “extensive discussion” referred to by Ofcom has involved many detailed and complex econometric analyses aimed at estimating these demand elasticities prepared by experts in this field. In Sky’s view, estimation of demand elasticities in relation to mobile call termination is likely to be considerably more straightforward than in relation to pay TV services, in view of the relative homogeneity in mobile call termination services, and the significantly greater availability of relevant data required for econometric estimation. It is therefore highly instructive that Ofcom rejects estimates of demand elasticities in relation to mobile call termination on the basis that they are unreliable.

4.36. Ofcom sets out a brief description of its approach to estimating demand elasticities in this case, and its results, in Annex 10 to the Consultation Document. It is evident from this brief description, however, that the methodology that underpins these results is so inadequate that no evidential weight can be placed upon Ofcom’s demand elasticity estimates. Ofcom’s approach does not appear to be based on an adequate knowledge of how such analysis should be conducted, and does not appear to have had any expert input which might have alerted Ofcom to its deficiency.

4.37. The approach that Ofcom has sought to apply is one of evaluating demand elasticities by estimating demand curves for a range of different services that include premium pay TV channels (among other things), with data provided by a Stated Preference consumer survey. As indicated in the discussion above, such an evaluation is complex to undertake properly, and requires a high degree of sophistication, both in the construction of appropriate surveys, and in the econometric analysis required to derive meaningful results from the data obtained.

4.38. Such studies have a reasonably long track record in certain industries – notably in the transport sector. Somewhat ironically, the only example of a study of this type in relation to pay TV services of which Sky is aware is one undertaken by the Radiocommunications Agency, one of Ofcom’s predecessors, published in

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61 We address a further, more technical reason for the unreliability of Ofcom’s elasticity estimates at Annex 5.
We have attached this study as an annex to this submission. A brief comparison of this study with the details of Ofcom's study set out in Annex 10 of its Consultation Document indicates clearly the inadequacy of Ofcom's own analysis.

4.39. Among the large number of faults of Ofcom’s analysis, based on the information presented in the Consultation Document, are the following:

- the methodology adopted is wholly simplistic and cannot produce meaningful results;
- the description of the survey method and results is wholly inadequate. Ofcom’s approach does not conform with commonly accepted standards for the presentation of consumer research in competition analysis;  
- Ofcom makes an arbitrary assumption about the functional form of the demand curve. No consideration is given to alternative functional forms;
- Ofcom converts categorical responses to probabilities of subscription using arbitrary assumptions, and does not test the sensitivity of results to those assumptions;
- Ofcom allocates some subscribers who subscribe to combined sports and movies packages to subscribing to either a ‘sports package’ or a ‘movies package’ for reasons that are unexplained, and on a basis that is likely to be highly unreliable;  
- there is no consideration at all of potential biases in responses. This is somewhat extraordinary, given the very significant weight that Ofcom has placed on ‘stated preference bias’ in both its pay TV consultations. For example, the product descriptions provided to survey respondents appear to give rise to a significant risk of framing bias.

4.40. The paucity of the explanation of the methodology and results of Ofcom’s analysis, however, means that it is difficult for consultees to be comprehensive as to the flaws in that analysis.

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63 The Radiocommunications Agency study differed in objective compared to Ofcom’s study (it did not seek to estimate demand elasticities). It did, however, use stated preference techniques to examine UK households’ willingness to pay for pay TV services.

64 See, for example, the criteria set out in Cristine Meyer, ‘Designing and Using Surveys to Define Relevant Markets’, Chapter 7 of Lawrence Wu (ed.), *Economics of Antitrust: Complex Issues in a Dynamic Economy*, NERA, 2007. These criteria have been developed by US courts, notably in *US v. Dentsply, Inc*.

65 Subscribers to sports and movies packages are allocated as subscribing to sports packages if they stated in Ofcom’s consumer survey that movie channels were “a secondary addition to their package” (see Figure A6.1), or were allocated as subscribing to movies packages if they stated that sports channels were “a secondary addition to their package” (See Figure A6.2). The reason for seeking to allocate subscribers in this way is wholly unclear, given that (a) Ofcom attempted to estimate a separate demand curve for packages that include both premium sports and movie channels, and (b) the types of consumers that Ofcom has allocated to other types of packages exhibit a demand for sports and movie packages. There is also likely to be an inherent degree of unreliability in consumers’ responses in relation to whether elements of their packages are ‘secondary additions’.

66 This is perhaps explained by the fact that Ofcom appears to have failed to recognise the implications of the elasticities that it has calculated for downstream market definition, believing them to support its case for narrow relevant markets.
4.41. A further significant reason for believing that the results of this analysis are likely to be unreliable is the significant errors in, or obvious unreliability of, other parts of Annex 10. By way of example, we cite figures 34 to 39 of Annex 10. These do not appear to have been subjected to a ‘common sense’ test. According to Figure 39, for example, only around half of existing Sky subscribers would subscribe to Sky’s Top Tier package, which currently costs £46 per month, if its charge was £5 per month. In Sky’s view, it is common sense that, were Sky to offer its Top Tier package at £5 per month – a charge that is substantially lower than the cheapest current monthly subscription charge for a basic-only package – all existing subscribers would be expected to switch to this package.

4.42. Similarly, Figure 39 indicates that Ofcom believes that only around 10% of Sky subscribers would subscribe to the Top Tier package at current charges, when the actual figure is over three times that level.

4.43. These observations suggest a high degree of unreliability in Ofcom’s analysis.

(f) Failure properly to consider the cumulative impact of a variety of substitutes

4.44. As discussed in Section 2, above, the standard approach to market definition is ill-suited to identifying the boundaries of a relevant market when the supply of a particular product is constrained by a variety of alternatives, none of which, individually, is a ‘close substitute’.

4.45. Ofcom’s failure properly to consider the cumulative impact of a variety of substitutes is most obvious in relation to its analysis of the constraints on Sky in relation to the supply of its premium movie channels. Despite its initial finding that “there is a wide and growing variety of potential substitutes for Sky Movies channels” Ofcom’s subsequent analysis comprises an evaluation of the constraint that each of a number of alternatives imposes on the supply of premium movie channels. In each case, Ofcom concludes that the alternative in question should not be considered to be supplied in the same relevant market as Sky’s premium movie channels. Other than in its testing of the implications of adopting alternative market definitions (which Ofcom does not undertake properly – see Section 4(a) above), however, Ofcom fails to consider whether the “wide and growing variety of potential substitutes for Sky Movies channels” collectively imposes an effective competitive constraint on the supply of those television channels.

4.46. Once again, this was a point that Sky made in its Response to Ofcom’s First Consultation Document, and Ofcom’s failure to have due regard to it is a material flaw in its market definition analysis in its Second Consultation Document.

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67 Paragraph 4.166.
5. Whether pay TV prices are “above the competitive level”

5.1. The issue of whether prices for pay TV services are “above the competitive level” has received a considerable amount of attention in the context of market definition in Ofcom’s two consultation documents.

5.2. Clearly, in order to determine this matter, it is necessary to consider relevant evidence as to whether prices are in fact currently (and indeed prospectively) above competitive levels.

5.3. Ofcom – correctly – takes the view that it is not possible to compare prices directly to some measure of what competitive prices should be (though, as discussed further in Annex 2, its reasons for this are understated). Instead, Ofcom adopts two approaches to considering whether prices are above such levels:

(a) it examines Sky’s profitability, both overall, and on a ‘line-of-business’ basis in relation to the supply of premium sports and movie channels; and

(b) it puts forward an argument to the effect that downstream prices should be regarded as being above competitive levels if firms’ input prices are above competitive levels. We discuss this argument further below.

5.4. Analysis of firms’ overall profitability in order to inform an assessment of whether prices are above competitive levels is fraught with conceptual and measurement difficulties. For the present discussion, however, we set those issues to one side.69

5.5. Ofcom’s evidence on Sky’s profitability is summarised in relation to its bearing on market definition under the heading of “evidence that prices are above competitive levels” (emphasis added) in Annex 6, which is derived from the analysis set out in Annex 9 of the Consultation Document. Ofcom’s conclusions can be summarised as follows:

(a) there is no conclusive evidence of excess profits being earned by Sky as a whole70; and

(b) a preliminary ‘line-of-business’ analysis provides some grounds for considering that profits earned by Sky’s notional channel supply business “appear high”71.

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69 Sky reserves the right to return to those issues in the event that Ofcom seeks to argue that profitability estimates indicate that prices for pay TV services are above competitive levels.

70 Ofcom states: “our assessment of whether Sky as a whole earned excessive profits was inconclusive.” Paragraph 1.12 of Annex 6.

71 At paragraph 1.13 of Annex 6 Ofcom states: “We have also examined margins on the wholesale supply of premium sports and movies channels. High margins, relative to relevant benchmark companies might be evidence that wholesale prices are above competitive levels. We found that gross margins could be in the region of [excised]% for the wholesaling of Sky Sports channels and [excised]% for the wholesaling of Sky Movies channels, and operating margins for Sky’s wholesale premium channel business (combining both sports and movies) may be around [excised]%,
5.6. Ofcom’s view in relation to margins earned by Sky’s notional premium pay TV channel supply business is fundamentally flawed and cannot be relied on. We discussed this analysis in Section 6 of our Response to Ofcom’s Second Consultation Document, and do not repeat that discussion here. Critically, however, despite acknowledging in Annex 6 that “high margins, relative to relevant benchmark companies might be evidence that wholesale prices are above competitive levels”72, Ofcom made no effort to compare its estimate of the margin earned by Sky’s notional premium pay TV channel supply business against estimates of margins earned by “relevant benchmark companies”. Accordingly, Ofcom had no proper basis73 for its view that the margins it calculated “appear high”. Sky provided evidence in its Response to Ofcom’s Second Consultation Document that the margins calculated by Ofcom are wholly in line with those earned by “relevant benchmark companies”.

5.7. Accordingly, it is evident that Ofcom has no basis for believing that prices are above competitive levels, derived from an analysis of Sky’s profitability.

Ofcom’s argument in relation to downstream operators’ prices

5.8. Ofcom has also developed an argument as to why firms’ prices may be considered to be above competitive levels even if they do not earn excessive profits. Ofcom argues that, if a downstream operator purchases an input from a supplier with market power, the downstream operator’s prices should be regarded as being “above the competitive level”, even if it earns no more than a reasonable return on its costs.74

5.9. Ofcom’s theory appears principally to relate to Sky’s sports channels. Ofcom’s argument appears to be that collective selling of sports rights, principally by the Premier League, raises the price of those rights “above the competitive level”.75

5.10. We discussed this proposition in Section 6 of our Response to Ofcom’s Second Consultation Document. It is wholly illogical. The relevant question is whether a firm operating at a downstream level has the power to set and maintain prices for the products that it supplies, which are substantially in excess of its own costs. Whether or not those costs are inflated as a result of the exercise of market power by its suppliers is irrelevant to this question.76

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72 Ibid.
73 Ofcom argued that these margins “appear high” (a) relative to the margin earned by the whole of Sky’s business, and (b) “for an asset-light business”. Both these bases for Ofcom’s statement are spurious.
74 This proposition occurs in a number of places in Ofcom’s Second Consultation Document – for example paragraphs 1.30 and 6.2 of the main part of Ofcom’s Consultation Document, and paragraph 1.16 of Annex 6.
75 See paragraph 1.16 of Annex 6. In relation to movie channels, Ofcom’s argument appears to be that inputs are priced competitively, and that Sky earns excess returns in the supply of movie channels because Sky bundles “substitutable” programming. See paragraph 1.18 of Annex 6.
76 As noted in Sky’s Response to Ofcom’s First Consultation Document, an observation that downstream prices would be lower if there were no upstream market power has no bearing at all on the issue of whether or not downstream firms have market power.
The role of Ofcom’s theory

5.11. Ofcom positions this matter as one related to market definition. Ofcom argues that, if upstream prices are above competitive levels, this may affect the analysis of relevant markets downstream (by again limiting the extent to which consumer switching evidence can be used in such an analysis). This proposition is unconventional, and Ofcom appears to attempt to provide it with credibility illegitimately by quoting selectively from OFT guidance on market definition.77

5.12. More importantly, however, whether or not Ofcom is correct in its argument is irrelevant to the more relevant issue – whether downstream operators are able in practice sustainably to set prices above competitive levels, as a conventional test of market power.

Theory is not evidence

5.13. As noted above, Ofcom positions its discussion of this matter under the heading of “Evidence that prices are above competitive levels”. Ofcom’s proposition, however, is theory, not evidence. It adds nothing at all to evidence that downstream prices for pay TV services (at either the wholesale or retail levels) are above competitive levels.

Ofcom produces no evidence that upstream prices are above competitive levels

5.14. Even if Ofcom’s theory were correct, which it is not, Ofcom has no evidence that the prices paid for sports rights are “above the competitive level”. This is indicated strongly by the title of the section in which Ofcom explains its theory: “Why upstream prices may be above ‘competitive’ levels” (emphasis added).

5.15. Ofcom has not, however, considered this matter in any meaningful way. Its evident belief that prices for sports rights “may be above ‘competitive’ levels” relies on a simplistic proposition that collective sale of sports rights raises prices for such rights above competitive levels. This is a complex matter, which is not amenable to assertion.78 Without proper analysis, no weight can be placed on any propositions that the prices charged by sports bodies for their media rights are “above the competitive level”.

Ofcom fails to consider other relevant evidence

5.16. Ofcom fails entirely to consider the implications of PwC’s analysis of prices for pay TV services in a wide range of European countries in relation to evidence as to whether prices for pay TV service in the UK are above competitive levels.79 PwC’s thorough analysis showed that prices for pay TV services in the UK are in line with those in other European countries. This is good evidence that prices for pay TV services in the UK are not excessive.

77 We discuss the unconventional nature of Ofcom’s proposition further at Annex 3.
78 Competition authorities’ attempts to argue that collective sale of sports rights by sports bodies is tantamount to cartelisation of sports rights have a poor track record when tested before the Courts. For example, the CAT was strongly critical of the OFT’s arguments to this effect in the Atheraces case (see paragraph 193 of Racecourse Association & Others v OFT, [2005] CAT 29).
79 See Annex 1 of Sky’s Response to Ofcom’s First Consultation Document.
6. **Ofcom’s flawed appreciation of the choices facing consumers and consumer decision making**

6.1. A central element of market definition is determining whether a particular product – the 'focal product' – represents a 'relevant product'; something that is 'worth monopolising'. Central to this issue is whether sufficient numbers of current consumers of that product would switch their consumption to other products if the price of the focal product rose or its quality deteriorated. Appraising this issue requires a good understanding of the choices facing consumers, and how they make decisions among the options available to them – for example, in terms of the trade-offs they are willing to make in relation to factors such as prices and product characteristics.

6.2. When products are differentiated, analysis of this issue becomes complex. In particular, consumers may make trade-offs along multiple dimensions of product characteristics, including price, so that, if the price of one product rises (or its quality diminishes), they may choose to switch to other products with different characteristics. Furthermore, heterogeneity in consumer tastes means that different types of consumers are likely to react differently to increases in prices, or diminutions in quality, of the products they currently purchase. In such circumstances it is likely to be difficult if not impossible to predict changes in consumers’ consumption decisions in response to relative price changes on the basis of introspection, and relevant evidence may be very difficult to interpret, particularly if products' characteristics are not stable (as is the case in relation to the provision of audiovisual services in the UK).

Ofcom's implicit model of consumer decision making is too simplistic to provide the basis for sound conclusions about the scope of relevant markets in this case

6.3. Even leaving aside the problems created by product differentiation, however, one of the key deficiencies in Ofcom’s market definition analysis is its lack of proper appreciation of the nature of choices faced by consumers, and the factors that motivate consumers’ decisions in relation to audiovisual services (both those that consumers pay for directly, and those financed entirely by the television licence or advertising revenues).

6.4. Ofcom's approach is based on an implicit model in which consumers’ decisions to subscribe to a service that includes pay TV channels, and to continue to subscribe to that service, are attributable to their preferences in relation to a small range of specific characteristics of the services available to them. In short, Ofcom’s model is that:

(a) consumers subscribe to pay TV packages that include Sky's premium sports channels principally in order to watch live football matches that involve teams currently in the Premier League; and
consumers subscribe to pay TV packages that include Sky’s premium movie channels in order to be able to watch a variety of movies produced by Hollywood studios during the pay TV window.\textsuperscript{80}

It remains entirely unclear what Ofcom considers motivates consumers’ choices in relation to pay TV services that include both types of channels.\textsuperscript{81}

6.5. Ofcom’s implicit model of the way in which consumers make choices in relation to such services is wholly divorced from the reality of such decision-making. It is particularly inappropriate when:

(a) services are provided to consumers in bundles – for example, pay TV services may be bundled with other services, and pay TV packages that include premium sports and movie channels both (i) include a wide variety of other types of channels, and (ii) in the case of sports channels, carry a wide variety of other types of content in addition to that which Ofcom believes to be determinative of subscription decisions. Contrary to Ofcom’s monocausal approach to consumers’ subscription decisions, it is likely that a range of the elements of those bundles contribute towards consumers’ subscription decisions;
(b) consumers have heterogeneous preferences; and
(c) subscription is a household level decision, rather than an individual decision.

6.6. The reality is that consumption decisions are far more complex than in Ofcom’s implicit model – and becoming more so over time. They involve a large number of potential substitution margins – including choices with respect to:

- delivery platforms (including non-television platforms, such as DVDs, PVRs and the internet);
- pay TV packages (of which a large variety are available);
- non-TV services (such as telephony and broadband);
- service providers; and
- viewing.

6.7. In principle, consumers’ decision-making in such an environment might be represented in a standard ‘tree structure’ approach\textsuperscript{82}, in which consumers (a)

\textsuperscript{80} In some parts of its consultation documents it appears that the ability to pay for movies on a subscription basis (as opposed to an individual basis) is also considered by Ofcom to be a key reason why households choose to take up pay TV subscriptions to services that include premium movie channels.

\textsuperscript{81} Ofcom appears to take the view that consumers are either primarily interested in the movies available via such a package, and choose to includes sports channels as an ‘add-on’ to their preferred package, or vice versa. This is an erroneous characterisation of consumer decision making in relation to bundled services, and is contradicted by basic economic theory as to how consumers make choices among alternatives.

\textsuperscript{82} For a discussion of such approaches, see Section C4 of Daniel L Rubinfield, ‘Market Definition with Differentiated Products: the Post/Nabisco Cereal Merger’. Chapter 1 of Global Competition Policy – Economic Issues and Impact, LECG, 2004. This approach is commonly used in relation to modelling of consumers’ choices in relation to travel (using nested logit models) which has distinct similarities to choices in relation to audiovisual services.
first select the equipment and/or service providers they wish to use, and (b) then allocate their desired viewing among the programming then available to them. In practice, the range of different choices faced by consumers means that these decisions are not amenable to simplification in this way.

6.8. For example, a household which has a TV, DVD player, a subscription to Virgin Media’s XL pack, together with a V+ set top box, is then able to watch programmes (including movies):83:

- on over 150 linear television channels, including those in Figure 1 below;
- on purchased DVDs;
- on rented DVDs;
- stored on their V+ box, recorded from linear television channels;
- on a wide range of on-demand services, including:
  - Virgin Central – a free on-demand service which provides a selection of hit television series, such as Spooks, CSI, Nip/Tuck, Lost;
  - Free Catch-Up TV – a service which offers access to programmes for 7 days after broadcast including programmes from the BBC, Channel 4 and Virgin Media TV channels;
  - the BBC’s iPlayer service, which offers access to a vast range of TV programmes broadcast on BBC channels on an on-demand basis;
  - the Film Flex movie service, which offers over 500 movies for a 24 hour rental at a cost of between £2.00 and £3.50; and
  - free access to over 1000 music videos.

Figure 1.

A sample of the television channels available to subscribers to Virgin Media’s XL Pack84

<table>
<thead>
<tr>
<th>Channel</th>
<th>Animal Planet</th>
<th>BBC Four</th>
<th>BBC News</th>
<th>BBC One</th>
<th>BBC Parliament</th>
<th>BBC Three</th>
<th>BBC Two</th>
<th>Blighty</th>
<th>Bloomberg</th>
<th>Boomerang</th>
<th>Bravo</th>
<th>Cartoon Network</th>
<th>CBBC</th>
<th>CBeebies</th>
<th>Channel 4</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Discovery Shed</td>
<td>Discovery Turbo</td>
<td>Disney Channel</td>
<td>E4</td>
<td>Eurosport</td>
<td>Extreme Sports</td>
<td>FilmFour</td>
<td>Five</td>
<td>Five USA</td>
<td>Fiver</td>
<td>FX</td>
<td>G.O.L.D.</td>
<td>Hallmark</td>
<td>HISTORY</td>
<td>ITV1</td>
</tr>
<tr>
<td></td>
<td>MTV ONE</td>
<td>Nat Geo Wild</td>
<td>National Geographic</td>
<td>Nick Jr</td>
<td>Nick Replay</td>
<td>Nickelodeon</td>
<td>NickToons TV</td>
<td>Playhouse Disney</td>
<td>Sci-Fi Channel</td>
<td>Setanta 1</td>
<td>FX</td>
<td>Setanta Golf</td>
<td>Setanta Sports News</td>
<td>Sky 1</td>
<td>Sky 1</td>
</tr>
<tr>
<td></td>
<td>UKTV Food</td>
<td>UKTV Gardens</td>
<td>UKTV Style</td>
<td>VH1</td>
<td>VH1 Classic</td>
<td>Virgin 1</td>
<td>Watch</td>
<td>Zone Horror</td>
<td>Zone Reality</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

83  We have used the example of a Virgin Media XL pack subscriber simply for illustrative purposes. Other examples could easily be adopted to demonstrate the reality of the complexity of choices faced by consumers.

84  As noted above, this is a sample of the full range of channels available. Channels were available as at 29 April 2009.
<table>
<thead>
<tr>
<th>CITV</th>
<th>ITV2</th>
<th>Sky 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>CNBC</td>
<td>ITV3</td>
<td>Sky Arts</td>
</tr>
<tr>
<td>CNN International</td>
<td>ITV4</td>
<td>Sky News</td>
</tr>
<tr>
<td>Comedy Central</td>
<td>Jetix</td>
<td>Sky Real Lives</td>
</tr>
<tr>
<td>Crime &amp; Investigation</td>
<td>LIVING</td>
<td>Sky Sports News</td>
</tr>
<tr>
<td>Dave</td>
<td>More4</td>
<td>TCM</td>
</tr>
<tr>
<td>Discovery Channel</td>
<td>Movies 24</td>
<td>The Box</td>
</tr>
<tr>
<td>Discovery Knowledge</td>
<td>MTV Base</td>
<td>TMF</td>
</tr>
<tr>
<td>Discovery Realtime</td>
<td>MTV Dance</td>
<td>Travel &amp; Living</td>
</tr>
<tr>
<td>Discovery Science</td>
<td>MTV Hits</td>
<td>True Movies</td>
</tr>
</tbody>
</table>

6.9. The household’s initial decision to (a) use Virgin Media, (b) take out a pay TV subscription (c) choose the ‘XL’ package, and (d) obtain a V+ PVR set top box will have been influenced by a large range of factors, including:

- the household’s preferences in relation to:
  - programming;
  - ‘time-shifting’ (e.g. whether they are content to rely on broadcast schedules, or whether they have a demand for being able regularly to record programmes for later viewing);
  - other services offered as part of packages provided by Virgin Media, including telephony and/or broadband services;
- the initial charge for the V+ PVR, and any installation charges;
- the monthly subscription charge for their chosen package;
- costs over time of other audiovisual services (such as VOD movies);
- the expected monthly cost of alternative services, from both Virgin Media and other suppliers;
- introductory deals;
- brand perception; and
- location (e.g. whether they face constraints on installing a satellite dish, or live in an area with poor DTT reception).

6.10. Having made their initial decision, in addition to the daily choice of which programming to watch – which is a critical influence on competition among television broadcasters – such a household makes ongoing decisions about matters, such as whether to:

- continue to subscribe to their existing service from Virgin Media;
- switch to a different Virgin Media service. Such switching options might include:
  - downgrading to take a cheaper pay TV service (such as Virgin Media’s L pack);
  - adding premium channel packages to their service, such as the Sky Sports package;
  - switching to a different Virgin Media broadband and/or telephone service;
- cancel their Virgin Media subscription and switch to:
  - an alternative pay TV provider (in which case, they would need to choose a new hardware option, and new pay TV package);
an alternative provider of broadband and/or telephony services (either separately from, or as part of, a package that includes pay TV services);

- relying on a combination of free to air television services, DVDs and on-demand programming for example recorded from TV channels onto a PVR, or via the BBC's iPlayer. In relation to free to air linear television channels, the household may:
  - choose to simply watch the five analogue terrestrial television channels;
  - be able to receive Freeview via their television set (if it has a built-in DTT tuner), or if they have (for example) a DVD player with a built-in DTT tuner, or buy a Freeview set top box (at a modest one-off cost);
  - choose to adopt a FTA DTH satellite service – either the BBC/ITV ‘Freesat’ service, or by purchasing a Sky set top box without a pay TV subscription (‘freesat from Sky’).

6.11. The contrast between the reality of such a market environment, and the simplistic framework in which Ofcom evaluates consumers’ choices, could not be starker, and the result is that Ofcom’s analysis fails entirely to capture any of the reality of competition among the providers of audiovisual services in the UK. As a result, Ofcom’s analysis of relevant markets and market power is devoid of merit in comprising a “systematic analysis of the constraints that firms face in a market”.

What counts as switching?

6.12. An important principle underlying the issue of consumers’ choices among the alternative products and services available to them, however, is that, in order to count as genuine ‘switching’ in a market definition analysis, the alternatives in question must be relevant products in the sense of fulfilling similar consumer demands. A situation in which, in the face of a price rise for magazines, consumers buy fewer magazines and spend the money saved on food instead, is not regarded as relevant switching in this context.

6.13. This raises an issue of central importance to the questions at the heart of this case: at what level should audiovisual programmes (including movies) be considered to fulfil the same consumer demand?

6.14. If a very narrow perspective on this question is adopted, then the differentiated nature of programming points to all broadcasters having dominant positions (in fact normally ‘monopoly’ positions) in an extremely large number of narrowly defined product markets. Almost every broadcast television programme, and every movie, would be considered to comprise a relevant product market on the basis that no other television programme or movie has exactly the same characteristics as another. Indeed, there may well, on this basis, also be a myriad of different temporal markets. If a consumer wants to watch Mamma Mia within six months of its cinematic release, or a live broadcast of Manchester United versus Liverpool on 14 March 2009, no other broadcast programme or movie will meet that consumer’s specific demand. Even programmes in specific
genres – for example celebrity chef-based cooking programmes – are highly differentiated from each other. Jamie Oliver’s cooking shows have little in common with those of the ‘Two Fat Ladies’, other than the fact that they are cooking programmes, and from this point of view each would, on this basis, be regarded as comprising a separate relevant product market.

6.15. In Sky’s view, such propositions are absurd, and lead directly to overly narrow market definitions. They lose sight of the fact that products’ characteristics do not need to be identical for them to fulfil the same consumer demand.

6.16. In Sky’s view, the relevant underlying consumer demand relating to the supply of premium sports and film channels is a demand for audiovisual entertainment. Sky considers that such a conception of demand does not fall into the category of the example cited above - of consumers spending money on food instead of magazines as a result of a rise in the price of magazines.

6.17. Broadcasters who do not adequately serve viewers’ demands risk losing viewers to other suppliers intent on serving those same demands. The fact that broadcasters compete by providing viewers with programming that is different to that of other broadcasters does not mean that the products are so dissimilar in nature that any switching among them should be considered to be irrelevant, or of minor relevance, from the point of view of the examination of competitive constraints on a broadcaster.

6.18. Once this is recognised, the central importance of competition among broadcasters for audiences’ viewing as a key dimension of competition at this level becomes clear. In such a context, confining a consideration of switching solely to consumers’ preferences in relation to narrow programming types is, clearly, a far too narrow conception of switching. In Sky’s view, this is self-evidently the case in relation to movies, where other types of programmes are likely to be substitutable, and we submit evidence on this matter in Annex 4. Yet Ofcom simply dismisses this possibility out of hand85, and consideration of the role of competition among broadcasters for audiences is entirely absent from Ofcom’s analysis.

6.19. Sky discussed this aspect of competition among broadcasters in its October 2007 Response to the Complainants’ complaint to Ofcom. It is of considerable surprise that Ofcom appears to have had no regard at all to these arguments in its consideration of these matters in its Second Consultation Document.

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85 The two references to this possibility are at paragraphs 4.192 and 4.195. In the first of these paragraphs, without considering the matter, or considering any evidence on this issue, Ofcom states: “This suggests that older library movies (or non-movie content) found on FTA or basic-tier TV are likely to be a less good substitute (sic) for the consumers who value access to new movies.” (Emphasis added.) In the second paragraph, Ofcom asserts: “Other content found on TV is likely to be a weaker substitute for the broad range of movies, including new movies, found on premium movie channels”. This is in spite of the following statement being among the small number of observations drawn by Ofcom from internal documents provided by Sky and Virgin Media: “Films on TV are an interesting proposition in that their competition is not just other windows, but all other TV programmes that happen to be on (including first run drama etc.)” See paragraph 4.164.
7. Differences among players operating in the UK audiovisual sector

7.1. One of the outcomes of Ofcom’s narrow and mechanical approach to market definition is that the interplay between very different types of players operating in the UK audiovisual sector is omitted entirely.

7.2. One of the unique characteristics of the UK audiovisual sector is the highly differentiated nature of the supply-side of that sector: firms that compete directly with each other in meeting consumers’ demands for audiovisual programming differ significantly from each other in terms of a wide variety of factors such as:

(a) ownership (public or private);
(b) business strategy – which covers issues such as:
   • firms’ objectives;
   • choice of methods of funding their services;
   • technology choices;
   • choices as to which lines of business to operate in; and so on
(c) legal rights and obligations – for example, in relation to issues such as Public Service Broadcaster status, prominent listings in electronic programme guides, and access to reserved analogue and digital terrestrial spectrum;
(d) attractiveness to rights owners;
(e) brand image; and
(f) longevity (i.e. the length of time that they have been operating, which has a key bearing on their accumulated knowledge and expertise).

7.3. These types of factors have extremely important bearings on the nature and intensity of competition among operators in the UK audiovisual sector, particularly at the retail level, which is a key determinant of upstream competition. Yet, they do not appear, at all, in Ofcom’s assessment of relevant markets and market power; all the colour that these differences impart to the sector – which is recognised in a wide range of other Ofcom publications, and the Competition Commission’s analysis in the BSkyB/ITV case86 – is omitted entirely in Ofcom’s analysis in this case. This is a key reason for Sky’s view that it is clear that Ofcom’s analysis has taken a wrong turning, and has not, as a result, achieved its objective of providing a “systematic analysis of the constraints that firms face in a market”.

86 The Competition Commission’s report to the Secretary of State (BERR) on the Acquisition by British Sky Broadcasting Group plc of 17.9 per cent of the shares of ITV plc. 14 December 2007.
Annex 1

A review of the evidence relied on by Ofcom as the basis for its conclusions about the scope of relevant markets in Ofcom’s Second Consultation Document

1. Introduction

1.1. As with the analysis of relevant markets in its First Consultation Document, the errors in Ofcom’s market definition analysis fall into two categories:

(a) failure to have regard to relevant considerations; and
(b) errors in the analysis that Ofcom has conducted.

1.2. The focus in this annex is on the latter of these issues.

1.3. The somewhat disorganised nature of Ofcom’s discussion of these issues – including the fairly unsystematic division of discussion of relevant issues among the main body of the Consultation Document and Annex 6 to the Consultation Document – makes it difficult for consultees to comment properly on it.

1.4. In the following sections we demonstrate that each of the pieces of analysis or evidence that Ofcom seeks to rely on in support of its conclusions in fact offers no such support. Accordingly – even setting to one side the issues to which Ofcom has failed to have due regard – this means that the conclusions that Ofcom has reached about the scope of relevant wholesale markets are unsafe and cannot be relied on.

2. Ofcom’s analysis of relevant markets in relation to premium sports channels

2.1 It is helpful first to set out a brief overview of the evidence and arguments considered by Ofcom in relation to its conclusions on the relevant wholesale market in relation to premium sports channels.

2.2 Ofcom’s analysis and evidence is arranged under the following four headings:

- indirect constraints;
- wholesale supply-side substitution;
- direct wholesale demand-side substitution; and
- changes in wholesale prices.

2.3 The first of these (indirect constraints) is divided into:

- consumers’ estimated responses to price changes;
- observed responses to price changes;
- the popularity of FTA TV; and
- survey of consumer preferences and characteristics of premium sports channels.

87 Ofcom’s analysis in its First Consultation Document also suffered from this flaw. See paragraph 1.72 of Annex 2 of Sky’s Response to Ofcom’s First Consultation Document.
2.4 Ofcom takes the view that the evidence available to it in relation to the first three “indirect constraints” (i.e., “consumers’ estimated responses to price changes”, “observed responses to price changes”, and “the popularity of FTA TV”) is sufficient to establish that premium sports channels comprise a separate relevant market. Ofcom states:

“we believe that the overall evidence on consumer switching behaviour in response to changes in quality, price and availability of products indicates that premium sports channels are indeed likely to be in a separate economic market.”

2.5 Ofcom then states that its analysis of the characteristics of premium sports channels ‘reinforces’ that conclusion (although, having considered the characteristics of premium sports channels, Ofcom then contradicts the above conclusion, by concluding that consideration of this matter indicates that the relevant market may be somewhat wider). Its consideration of the remaining three factors (wholesale supply-side substitution, direct wholesale demand-side substitution, and changes in wholesale prices) appears to play a similar role - i.e. being evaluated against a preliminary conclusion that “premium sports channels are indeed likely to be in a separate economic market”.

Indirect constraints

(i) “Consumers’ estimated responses to price changes”

2.6 Ofcom’s analysis under this heading comprises an application of ‘Critical Loss Analysis’, which is an empirical approach to implementing the hypothetical monopolist test. Ofcom calculates the elasticity of demand that would need to be observed in order to conclude that it would not be profitable for a hypothetical monopolist supplier of premium pay TV sports channels to raise the prices for such channels above their competitive level, and seeks to compares this with ‘observed’ (i.e., actual) demand elasticities for pay TV services that include such channels.

2.7 Even leaving to one side the “somewhat theoretical” nature of this analysis, no reliable conclusions can be drawn from it because Ofcom’s estimates of actual demand elasticities are wholly unreliable. Ofcom cites two sources of estimates of the elasticity of demand for services that include Sky’s sports channels: Ofcom’s own study, and research undertaken by Sky.

2.8 The unreliability of the elasticity estimates that Ofcom has calculated is discussed in detail in Section 4 above, and in Annex 5. The elasticity estimates derived from Sky’s own research are similarly unreliable for the purpose for which Ofcom has used them. The research in question was a minor part of a broader piece of research aimed at examining options for changing the structure of pricing and packaging of Sky’s services. Accordingly, it provides

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88 Paragraph 4.106.
89 Ibid.
90 Paragraph 4.126.
91 Paragraph 4.87.
only a partial view of the potential impact of price changes – for example, it did not seek to examine spin-down by subscribers to packages that do not include premium sports and movie channels in response to price increases. Sky is also acutely aware of the significant margins of error in such consumer research and views such research as an input into business decision making, rather than a perfect predictor of consumers’ behaviour. In this respect, Sky considers that it is instructive that it did not increase prices by the amounts that, if taken at face value, this research indicated would have been profitable for Sky.

2.9 Accordingly, no weight can be placed on this evidence as support for the conclusion reached by Ofcom in relation to the scope of relevant markets for premium sports channels.92

(b) “Observed responses to price changes”

2.10 Under this heading, Ofcom in theory attempts to examine consumers’ actual responses to increases in prices for pay TV services that include premium sports channels. (Ofcom contrasts its analysis in this section with its “somewhat theoretical”93 analysis in the previous section, and states that it has “examined subscribers’ actual responses to actual price increases.”94)

2.11 In practice, however, Ofcom’s evaluation of consumers’ actual responses to increases in prices for packages of services that include (among other things) premium sports channels, is an attempt to evaluate the following two propositions:

“if we observed that firms were unwilling to impose price rises on their customers, or that large numbers of consumers would switch in response to price rises, we might infer that firms’ pricing was constrained and markets were broad.”95

2.12 Although Ofcom does not make the point explicitly, it is evident from the analysis that follows these propositions that Ofcom considers that it is appropriate to focus on real, quality-adjusted prices to consumers in evaluating them. Accordingly, in order to evaluate these propositions, Ofcom first needs to establish whether or not there have been increases in real, quality-adjusted prices for pay TV packages that include Sky’s premium sports channels.

2.13 Ofcom, however, does not reach a conclusion as to whether prices for such packages have increased in real, quality-adjusted terms. Ofcom appears to accept that (a) “prices have remained relatively stable in real terms since 2004”96, and (b) that the quality of services delivered to consumers that include Sky’s

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92 In view of the fact that the unreliability of the estimates of the elasticity of demand for the relevant services fatally undermines the value of Ofcom’s analysis, we have not commented on the flaws in Ofcom’s estimates of the “critical elasticities”.

93 Paragraph 4.87.

94 Ibid.

95 Ibid.

96 Paragraph 4.88.
premium sports channels has increased over time.\(^\text{97}\) On the other hand, Ofcom also, erroneously, believes that price increases were effected via the removal of discounts during the period it examined.\(^\text{98}\) Ofcom reaches no conclusion, however, on the overall movement in real, value-adjusted prices over time.

2.14 Accordingly, Ofcom has no means of evaluating the two propositions that it seeks to examine in this section, and no weight can be placed on Ofcom’s analysis of “observed responses to price changes” as support for the conclusion reached by Ofcom in relation to the scope of relevant markets for premium sports channels.

2.15 It is, however, notable that once Ofcom’s erroneous analysis of the impact of removal of discounts is taken into account, the evidence strongly suggests that Sky has been “unwilling to impose” increases in real, quality-adjusted prices on its subscribers, thereby, according to Ofcom’s own test, providing good evidence that “pricing [is] constrained and markets [are] broad”. In fact, rather than being “unwilling to impose” increases in real, quality-adjusted prices on its subscribers, there is strong and compelling evidence that Sky has in fact reduced prices (evaluated in these terms) over time.

(c) “The popularity of free to air TV”

2.16 Ofcom’s proposition in this section – put forward under the unusual heading of “the popularity of FTA TV” – is that the growth in the number of households who receive free to air television services via DTT, “has not had an observable impact on subscriber numbers to packages containing Sky Sports”.\(^\text{99}\)

2.17 This is a further example of Ofcom drawing false inferences from a simplistic comparison of the trend in two variables over time in circumstances where multivariate analysis is required. In the Response to Ofcom’s First Consultation, Sky commented a number of times on the likely unreliability of impressionistic analysis of this type.\(^\text{100}\) Ofcom does not appear to have had due regard to those submissions.

\(^{97}\) At paragraph 3.68 of Annex 6 Ofcom states: “It is difficult to assess the impact of changes to the quality of programming but a greater number of live FAPL games, new programming such as UEFA Champions League, darts and snooker, have probably more than offset the loss of key rights. Additionally the increase in the number of channels in the basic package have (sic) improved the quality of the package offered.”

\(^{98}\) See, for example, paragraph 4.94.

\(^{99}\) Paragraph 4.105. Ofcom is wholly unclear as to why it might be expected that such an impact might be observed, and its analysis in relation to this matter is highly confused – referring both to free to air channels, and “a greater number of basic channels featuring sport” (which are available only to pay TV subscribers). Ofcom appears to consider that an impact of take-up of multichannel free to air services (and potentially basic pay TV services) might be expected because this has resulted in “increased availability of sports and other programming” (paragraph 4.97) or a “greater range and quality of available sport” than ten years ago (paragraph 4.103). Once again, however, there is no supporting analysis for these propositions – they are impressionistic. Neither the reference to “other programming”, nor why a comparison with the situation “ten years ago” is relevant, is explained further.

\(^{100}\) See paragraphs 5.9 – 5.11 of Appendix 5 to Annex 2. We comment further on this matter at Section 4 of this submission.
2.18 The econometric study carried out by Professor Seabright and his colleagues, which uses such multivariate analysis, demonstrates clearly the risk arising from Ofcom’s continued use of the approach of attempting to draw conclusions by comparing trends in two variables over time. Professor Seabright et al.’s study provides strong and compelling evidence that DTT free to air television services have an “observable” negative impact on subscriber numbers to packages containing Sky’s premium sports channels.101

2.19 Accordingly, Ofcom’s argument under this heading provides no support for the conclusion reached in relation to the scope of relevant markets for premium sports channels. On the contrary, there is strong and compelling evidence available to Ofcom that supports a view that relevant markets are wider than those which Ofcom has defined.

Conclusion on (a), (b) and (c)

2.20 Ofcom argues that the three types of evidence discussed above on their own are sufficient to establish that there is a relevant wholesale market for the supply of premium sports channels. Clearly, that proposition is fundamentally flawed and cannot be relied on. To the extent that other evidence is relied on as reinforcing this conclusion, such evidence cannot, therefore, play the role claimed for it by Ofcom.

(d) “Survey of consumer preferences and characteristics of premium sports channels”

2.21 The final type of “indirect evidence” cited by Ofcom comprises an examination of (a) consumer survey evidence related to the preferences of subscribers to services that include premium sports channels, and (b) a comparison of the availability of live coverage of football matches involving Premier League teams on pay TV and free to air television.

2.22 This is a key area of Ofcom’s analysis in its Second Consultation Document where the somewhat unsystematic division of analysis and argumentation between the main body of the Consultation Document, and the accompanying Annex 6, makes it very difficult for consultees to comment effectively on Ofcom’s analysis. For example, Annex 6 includes specific arguments and discussion of types of evidence that are not referred to in the main body of the Consultation Document, even though they appear to be of considerable importance to Ofcom’s overall argument.102

2.23 Perhaps the most remarkable element of Ofcom’s analysis of this issue is the brief mention in Annex 6 that, despite the fact that Ofcom has undertaken new, conjoint-based consumer research, it has had to rely on old consumer research in order to identify consumers who would switch away from pay TV services

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101 See Annex 5 of Sky’s Response to Ofcom’s Second Consultation Document.
102 For example, the discussion in the main body of the Consultation Document appears to be focused entirely on infra-marginal consumers, thereby raising issues of the ‘toothless fallacy’. In Annex 6, however, Ofcom explains that it considers that the preferences of marginal consumers are sufficiently similar to those of infra-marginal consumers for this problem not to arise.
that include premium sports channels in the event of a SSNIP.\textsuperscript{103} This is remarkable because (a) such evidence is of central importance to the issues at hand, whereas those investigated in Ofcom’s new consumer research are somewhat tangential issues, and (b) Ofcom has stressed at length the unreliability of its earlier research (due to a concern that it is tainted by stated preference bias), and does so again in citing this research in Annex 6. Accordingly, it is highly unusual that Ofcom has sought to commission new consumer research into relatively tangential issues, rather than to seek to remedy the faults of its old consumer research via new research directed at a more important issue.

2.24 In Sky’s view this is strong evidence of Ofcom seeking to adduce evidence to support its ‘gut feeling’ in relation to premium sports channels, or its view that the conclusions reached by the OFT in 2002 on market definition comprise a valid starting point for Ofcom’s own analysis\textsuperscript{104}, rather than seeking proper evidence on the matters that should be central to a market definition exercise.

2.25 Ofcom’s argument in relation to “consumer preferences and characteristics of premium sports channels” comprises the following elements:

(a) around 75\%\textsuperscript{105} of existing subscribers to services that include premium sports channels consider the ability to watch football matches involving Premier League teams on television to be “very important”;

(b) the preferences of ‘marginal subscribers’ do not differ significantly from those of ‘infra-marginal subscribers’;

(c) being able to watch such matches regularly throughout the football season are “critical” factors; and

(d) there is a smaller number of such football matches on free to air television channels than pay TV channels and the matches on free to air channels do not occur regularly throughout the year, whereas those on pay TV channels do.

2.26 The conclusion derived by Ofcom from this set of arguments is described in Annex 6 as follows:

“On balance we consider the relatively low number of matches featuring FAPL teams featured on FTA TV compared with premium sports channels mean (sic) that it is likely to be regarded as a weak substitute for live football featuring FAPL teams on premium sports channels.”\textsuperscript{106}

\textsuperscript{103} See paragraph 5.36 of Annex 6.

\textsuperscript{104} See, for example, Sky’s comments in Section B of Annex 2 to Sky’s Response to Ofcom’s First Consultation Document.

\textsuperscript{105} Ofcom indicates that 75\% of the pay TV subscribers surveyed who watch sport at least once a week consider Premier League football matches to be “very important”, 73\% regard Champions League football matches to be “very important”, and 71\% regard FA Cup matches to be “very important”. See paragraphs 4.113 – 4.114.

\textsuperscript{106} Paragraph 5.40 of Annex 6.
2.27 This conclusion is somewhat amplified in the main body of the Consultation Document as follows:

“We therefore consider that while some other football events found on FTA TV might be comparable to live FAPL in terms of the attractiveness of each individual match, they cannot match programming found on premium sports channels in terms of quantity and regular availability of matches throughout the season, even when considered in aggregate. The constraint from live football featuring FAPL teams on FTA TV is weak – it is likely to lie outside the relevant economic market.”107 (Emphasis added.)

2.28 We assess the key components of this conclusion in the sections below.

Ofcom’s finding that around 75% of existing subscribers to services that include premium sports channels consider the ability to watch football matches involving Premier League teams on television to be “very important”

2.29 As in Ofcom’s First Consultation Document, Ofcom’s use of consumer survey data is highly questionable.108 In particular, Ofcom’s argument that around 75% of existing subscribers to services that include premium sports channels consider the ability to watch football matches involving Premier League teams on television to be “very important” is drawn from the following question in Ofcom’s survey:

“Can you please tell me how important each sport is to have included as part of your sports subscription?”109

2.30 Respondents to this questionnaire may have been confused by the fact that a significant number of the ‘sports’ with which they were then presented are not “part of [their] sports subscription”, given that those ‘sports’ (or sports competitions) are shown on free to air television channels – such as FA Cup matches, Wimbledon, rugby union’s World Cup, many international football matches and Champions League matches. As a result, caution must be applied in interpreting the results of this question. Instead, however, there is a considerable lack of precision in the way that responses to this question are interpreted throughout Ofcom’s Consultation Document (including its annexes). For example, Ofcom states variously:

- “We asked consumers who watch sport at least once a week about their preferences for up to 25 sports or events typically shown on TV.”110
- “Football is by far the most important component of TV sports packages among weekly viewers of sport in general.”111
- “Importance of sports included in the package”112

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107 Paragraph 4.120.
110 Paragraph 5.9 of Annex 6.
111 Paragraph 5.32 of Annex 10.
112 Heading prior to paragraph 5.29 of Annex 10.
• “we asked these respondents to rate 25 sports/sporting events in terms of how important it was that each of these should be included as part of a sports package subscription.”113

2.31 Similarly, it is important to bear in mind the fact that Ofcom directed this question at interviewees who watch sport on TV “at least once a week”. Such consumers might be regarded as relatively heavy sports viewers (in part, this depends on how much sport people watch each week), thereby raising the possibility that the responses are unrepresentative of the preferences of marginal subscribers to pay TV services that include premium sports channels.

2.32 The reason provided by Ofcom for focusing its analysis in this way – that it wished to “ensure that individuals who have no interest in sport but who live in a household that pays for Sky Sports channels were not included in the research”114 is wholly unconvincing. It would, for example, have been entirely straightforward to have included in Ofcom’s research people who are interested in sport, but watch sport less frequently than once a week – this is an entirely standard matter of research design. The fact that Ofcom’s new consumer research is potentially focused on relatively heavy sports viewers is therefore an important further reason for treating its findings with a significant degree of scepticism.

Ofcom’s proposition that the preferences of marginal and infra-marginal consumers are not “radically different”115

2.33 Ofcom argues that the preferences in relation to the importance of football of ‘marginal subscribers’ and ‘infra-marginal subscribers’ are not “radically different”116. Ofcom seeks to argue that because a similar proportion of marginal consumers and infra-marginal consumers consider football to be important, free to air television is unlikely to be an effective substitute because it does not provide a sufficient quantity of Premier League matches, with sufficient regularity, to meet the demands of marginal subscribers.

2.34 Such a proposition is illogical for a number of reasons.

2.35 First, it is illogical that, having identified a significant group of marginal consumers – those who should be at the centre of analysis in a market definition exercise – the focus of Ofcom’s analysis is attempting to prove that they are “not radically different” to infra-marginal consumers in terms of their preferences for football. Instead, the focus of Ofcom’s analysis should have been on what distinguishes marginal from infra-marginal consumers – i.e. what services they do regard as substitutes, given that they have been identified as

113 Paragraph 5.31 of Annex 10.
114 Paragraph 5.30 of Annex 10.
116 Ibid. Ofcom’s presentation of the evidence related to this matter is opaque. Ofcom does not set out its analysis in sufficient detail for consultees to be able judge its reasonableness. In particular, Ofcom presents none of the types of information about its consumer survey evidence that would be required in order to judge the reliability of its estimates. See footnote 64, above.
those consumers who would switch to alternative services in the event of a SSNIP.

2.36 Second, it is wholly unclear that simply because a consumer regards something as being ‘important’ in some undefined sense, this means that they are unlikely to switch to alternatives in the event of an increase in the price of a particular product, or a reduction in its quality. This is particularly relevant in this case, where consumers are asked general questions about the importance to them of “football”, for example, or a variety of different types of football. Ofcom appears to be extrapolating illegitimately from consumers’ general expressions of interest in football, to strong preferences for watching numerous matches involving Premier League teams, regularly throughout the football season.

2.37 Above all, however, Ofcom’s estimates of the numbers of marginal and infra-marginal subscribers who regard football (or particular football events) to be “very important” appear to be fundamentally flawed.

2.38 Ofcom states:

“It was assessed preferences for football among marginal and infra-marginal subscribers. We found that football was important for about 79% of infra-marginal subscribers and for about 81% of marginal subscribers. We do not therefore consider that the preferences of marginal subscribers for football are radically different from those of infra-marginal subscribers”

2.39 The percentages of 79% and 81%, however, do not appear to be, as Ofcom states, the percentages of marginal and infra-marginal subscribers for whom “football was important”

The following hypothetical example illustrates this flaw: if there were 100 marginal subscribers, due to the structure of Ofcom’s consumer survey only 70 were asked questions about their preferences in relation to football, or particular types of football. If, for example, 80% of such subscribers regarded football as being ‘important’ in some sense, the percentage of marginal subscribers who held that view would be 56% (70% x 80/100). Instead, Ofcom cites the 80% figure as representing the preferences of all marginal subscribers. We have had to set out a hypothetical example because Ofcom has not provided sufficient transparency of its own calculations to base our example on Ofcom’s analysis.

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118 Ibid.
119 The following hypothetical example illustrates this flaw: if there were 100 marginal subscribers, due to the structure of Ofcom’s consumer survey only 70 were asked questions about their preferences in relation to football, or particular types of football. If, for example, 80% of such subscribers regarded football as being ‘important’ in some sense, the percentage of marginal subscribers who held that view would be 56% (70% x 80/100). Instead, Ofcom cites the 80% figure as representing the preferences of all marginal subscribers. We have had to set out a hypothetical example because Ofcom has not provided sufficient transparency of its own calculations to base our example on Ofcom’s analysis.
2.40 The same criticism applies to Ofcom’s estimate of the number of infra-marginal subscribers who regard football, or particular types of football, as being ‘important’; the figure of 81% appears to be the percentage of a sub-group of infra-marginal subscribers who hold such a view, not the percentage of the total number of infra-marginal subscribers.

2.41 This also means that the figures of 79% and 81% are not directly comparable because it may be the case (and indeed, seems likely to be the case), that the relevant sub-groups (i.e. the respondents who were asked their views about the importance of football) may comprise different percentages of the total number of infra-marginal subscribers and marginal subscribers respectively.120

2.42 Accordingly, even if there were merit in Ofcom’s approach of comparing the preferences of marginal and infra-marginal subscribers (rather than simply focusing on the preferences of marginal subscribers), which there is not, Ofcom’s evidence on this matter is wholly unreliable.

The ability to watch football matches involving Premier League teams in a sufficient quantity and regularly throughout the football season

2.43 It is clear that Ofcom’s conclusion on this matter also rests to a very significant extent on arguments about the importance of being able to watch such matches ‘regularly throughout the season’, and in a sufficient quantity.

2.44 Two points about these arguments are notable:

(a) Ofcom’s framework of ‘four factors’121 that are important to those with an interest in watching football matches involving teams currently in the Premier League on TV, which include the criteria of being able to watch such matches ‘regularly throughout the season’, and in a sufficient quantity, appears to be of Ofcom’s own devising, wholly as a product of introspection. It does not appear to be derived from an analysis of relevant evidence; and

(b) Ofcom fails entirely to consider the possibility that the ability to switch to an alternative of ‘lower quality’ (in terms of the number and regularity of viewing opportunities) at a cheaper price might be considered sufficiently attractive to a sufficient number of existing pay TV subscribers to induce

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120 For example, the relevant sub-groups may comprise 70% of the population of marginal subscribers identified in the survey, and 85% of the infra-marginal subscribers. If, for example, identical percentages (say 80%) of both sub-groups said that football was important to them (in some sense), the respective percentages of the total populations of marginal and infra-marginal subscribers would be 56% and 68% respectively.

121 Ofcom’s ‘four factors’ are: (a) the regularity of viewing opportunities, (b) the number of matches available during a particular football season, (c) the aggregate quality of matches available, and (d) whether football competitions are annual or occur less frequently. As with much of Ofcom’s analysis, its analysis of differences in the aggregate quality of football matches involving Premier League football teams broadcast on pay TV channels and free to air channels is wholly impressionistic.
them to cancel their subscription in the event that charges for their pay TV services increased (or the quality of those services deteriorated).122

For example, Ofcom’s analysis shows that during 2007/08 there were 63 matches involving Premier League teams broadcast free to air, and 184 such matches broadcast on pay TV channels. Even within Ofcom’s own restrictive framework of analysis, there is no way of telling from this comparison whether the possibility of watching 63 matches involving Premier League teams, unevenly spread over a football season, at no additional charge to the compulsory television licence fee would be sufficiently attractive to a sufficient number of existing pay TV subscribers to induce them to cancel their subscription in the event that charges for their pay TV services increased (or the quality of those services deteriorated).

2.45 The extent to which Ofcom’s propositions as to the importance of the regularity and quantity of football matches involving Premier League teams are based on supposition on Ofcom’s part, rather than evidence, is indicated clearly by the way in which they are put by Ofcom. For example, Ofcom states:

- “we believe that the extent to which a pay TV retailer would see alternative competitions as a substitute for live FAPL in assembling a consumer proposition is determined by four (closely related) factors"123 (Emphasis added); and

- “The critical factor for consumers appears to be the ability to watch FAPL teams play high quality fixtures on a regular basis.”124 (Emphasis added.)

2.46 Accordingly, it is clear that no weight can be placed on this evidence as support for the conclusion reached by Ofcom in relation to the scope of relevant markets for premium sports channels.

(e) Wholesale supply-side substitution

2.47 The purpose of examination of the concept of supply-side substitutability is to determine whether a relevant market that has been defined by reference to demand-side factors should be widened by reference to supply-side factors.

2.48 In this case, given that Ofcom’s conclusion on the scope of the relevant market reached on the basis of its demand-side analysis is unreliable, it follows that there is little merit in examining Ofcom’s analysis of the potential for supply-side substitution, and therefore we do not consider this issue further here.

122 This point is a fairly standard one in market definition. For example, the OFT’s guidance on market definition states: “Substitute products do not have to be identical to be included in the same market….Similarly, the products’ prices do not have to be identical. For example, if two products perform the same purpose, but one is of a higher price and quality, they might be included in the same market. The question is whether the price of one sufficiently constrains the price of the other. Although one is of a lower quality, customers might still switch to this product if the price of the more expensive product rose such that they no longer felt that the higher quality justified the price differential.” Paragraph 3.5 in ‘Market Definition’, OFT, 2004.
123 Paragraph 4.118.
124 Paragraph 5.12 of Annex 6. No evidence is cited in support of this statement.
(f) Direct wholesale demand-side substitution

2.49 Ofcom’s analysis of this matter is nugatory, amounting to two short paragraphs.\(^{125}\) In one of them, Ofcom essentially states that direct wholesale demand-side substitution is impossible because “there are no close substitutes for FAPL content found on premium sports channels”.\(^{126}\) In the second, Ofcom states that cable companies have not ceased to carry Sky’s sports channels when their wholesale prices have increased.

2.50 Even leaving to one side the unsustainableness of a view that these two flawed assertions comprise clear evidence on this matter, they fail to have regard to Sky’s submission on this issue in its Response to the First Consultation Document,\(^{127}\) to which Ofcom is referred. In short, it would not be expected that, in relation to a wholesale/retail relationship where retailers are not capacity constrained, ‘switching’ would take the form of ceasing to carry a particular channel in the event that its carriage fee increased, and replacing it with an alternative. Instead, ‘switching’ is likely to occur via changes in the allocation of sales effort on the part of retailers among the range of products that they supply to consumers.

2.51 Accordingly, they cannot be relied on as support for the conclusions reached by Ofcom in relation to the scope of relevant markets for premium sports channels.

(g) “Changes in wholesale prices”

2.52 Finally, Ofcom examines changes in wholesale charges over time for packages of pay TV channels that include Sky’s premium sports channels. It is critical to note that this analysis comprises rebuttal of an argument put by Sky in relation to Sky’s market power, as opposed to positive evidence adduced by Ofcom in support of its analysis of market definition.\(^{128}\)

2.53 As Ofcom notes, in Sky’s Response to the First Consultation Document Sky cited flat or falling wholesale charges for packages that include Sky’s premium sports channels as evidence of market outcomes that contradict the proposition that Sky has significant market power in the supply of packages of pay TV channels that include Sky’s premium sports channels.

2.54 In seeking to rebut this proposition, Ofcom observes that wholesale charges for the two “most popular” of Sky’s packages that include its premium sports channels (Sky Sports Mix, and the Sky Sports and Movies Mix package) have increased in real terms since 2002, but that the charge for one of those packages (the Sky Sports and Movies Mix package) has decreased in real terms since 2005. In its conclusion, Ofcom ignores the latter and simply states:

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\(^{125}\) Paragraphs 4.137 and 4.138.

\(^{126}\) Paragraph 4.137.

\(^{127}\) See paragraphs 3.120 – 3.126.

\(^{128}\) See paragraph 6.1 of Annex 6, where Ofcom states: “In this appendix we examine evidence presented by Sky on changes to the wholesale prices for Sky’s premium channels”.
“We note that the wholesale price for Sky Sports Mix packages has (sic) increased considerably since 2002, indicating that these packages do not face a strong competitive constraint.”

2.55 Such a conclusion is simplistic in the extreme. First, increases in prices cannot be taken as evidence that firms do not face strong competitive constraints; price rises occur in highly competitive markets. Second, Ofcom fails to consider changes in the quality of the services the prices of which it is examining – in stark contrast to the lengthy discussion of this issue in relation to services provided at the retail level. Given that Ofcom appears to accept that the quality of Sky’s sports channels has improved over time, as Sky has noted previously, the likelihood is that charges for both packages examined by Ofcom have fallen in real, quality adjusted terms since 2002.

2.56 Accordingly, it is evident that Ofcom’s analysis in this respect provides no reliable positive evidence on the scope of relevant markets in relation to the supply of premium sports channels.

3. **Ofcom’s analysis of relevant markets in relation to premium movie channels**

3.1. Again, it is helpful first to set out a brief overview of the evidence and arguments considered by Ofcom in relation to its conclusions on wholesale market definition in relation to premium movie channels.

3.2. Ofcom’s analysis and evidence is arranged under the following four headings:

- indirect constraints;
- wholesale supply-side substitution;
- wholesale demand-side substitution; and
- changes in wholesale prices.

3.3. The first of these (indirect constraints) is divided into:

- firms’ views on likely substitutes;
- consumers’ estimated responses to price changes;
- consumers’ observed responses to price changes;
- consumer preferences and features of premium movie packages;
- the potential constraint from DVDs; and
- the potential constraint from content downloaded over the internet.

3.4. No explanation is provided by Ofcom for the divergence in approaches used in relation to the two types of channels – for example, the omission of consideration of firms’ views on likely substitutes in relation to premium sports

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129 Paragraph 6.11 of Annex 6. We believe that Ofcom intended this statement to mean that wholesale charges for the two most popular packages that include Sky’s premium sports channels have increased in real terms since 2002.
channels, or the consideration of particular substitutes in relation to premium movie channels.

3.5. The structure of Ofcom’s analysis in relation to premium movie channels appears to differ from that in relation to premium sports channels in that Ofcom does not consider that evidence on consumer switching behaviour in response to changes in quality, price and availability of products is sufficient to determine the scope of the relevant market in relation to premium movie channels, with other evidence playing a confirmatory role.

Indirect constraints

(a) “Firms’ views on likely substitutes”

3.6. Ofcom’s analysis set out under this heading appears to comprise a brief review of documents obtained by Ofcom from Sky and Virgin Media in response to information requests.

3.7. The conclusion that Ofcom draws from examining these documents is simply that:

“There is a wide and growing variety of potential substitutes for Sky Movies channels.”\(^{130}\)

3.8. As Ofcom notes, however, that observation is relatively uninformative in determining the scope of the relevant market. What matters is the extent to which “the wide and growing variety of potential substitutes” identified in Ofcom’s review of internal documents imposes a competitive constraint on Sky as a supplier of premium movie channels. Accordingly, Ofcom’s review of “firms’ views on likely substitutes” does not comprise evidence in support of its conclusion on the scope of the relevant market in relation to the supply of premium movie channels. On the face of it, however, the observation that there is “a wide and growing variety of potential substitutes for Sky Movies channels”, appears out of line with Ofcom’s conclusion that Sky’s movie channels are supplied in a “narrow market”.

3.9. It is important to note, however, that Ofcom does not have proper regard to the findings of its brief review. In particular, one of the small number of documents cited by Ofcom states:

“Films on TV are an interesting proposition in that their competition is not just other windows, but all other TV programmes that happen to be on (including first run drama etc.)”\(^{131}\)

3.10. Yet the possibility that “other TV programmes” form part of the constraint faced by suppliers of premium movie channels is, later, simply dismissed out of hand by Ofcom.

\(^{130}\) Paragraph 4.166.

\(^{131}\) Paragraph 4.164.
(c) “Consumers’ estimated responses to price changes”

3.11. As in the case of services that include Sky’s premium sports channels, Ofcom’s analysis under this heading comprises an application of ‘Critical Loss Analysis’, which is an empirical approach to implementing the hypothetical monopolist test. Ofcom calculates the elasticity of demand that would need to be observed in order to conclude that it would not be profitable for a hypothetical monopolist supplier of premium pay TV movie channels to raise the prices for such channels above their competitive level, and compares this with ‘observed’ (i.e., actual) demand elasticities for pay TV services that include such channels.

3.12. Ofcom’s analysis under this heading suffers from the same key flaw as the equivalent analysis in relation to premium sports channels: Ofcom’s estimates of demand elasticities for pay TV services that include premium movie channels are wholly unreliable, and the demand elasticities derived from Sky’s own consumer research are not fit for the purpose to which Ofcom puts them.

3.13. Accordingly, no weight can be placed on this evidence as support for the conclusion reached by Ofcom in relation to the scope of relevant markets for premium movie channels.

(d) “Consumers’ observed responses to price changes”

3.14. Ofcom’s analysis under this heading comprises a somewhat ad hoc consideration of a variety of different points. In light of this, rather than attempt to discern the points that it appears to be seeking to make, we have focused on the conclusions that Ofcom appears to draw from its analysis. Ofcom states:

“Overall, it is not clear to us that the decline in subscriber numbers is evidence of a binding competitive constraint from other products.”

(Emphasis added.)

and:

“On balance, we therefore consider that the evidence of changes to prices, subscriber numbers and quality for Sky Movies suggests a somewhat greater constraint from other products than is the case for Sky Sports, but it is not clear from this evidence alone whether that constraint is sufficient to broaden the market.”

(Emphasis added.)

132 In fact, in the case of the Sky Movies Mix package, Ofcom failed in its consumer research to include a sufficient number of subscribers to such a package to calculate an elasticity of demand. As far as Sky can ascertain the research was carried out for the specific purpose of estimating demand elasticities (among other things), so not to reach a large enough sample is a considerable failing.

133 The key focus appears to be a variety of efforts to reconcile the observations that (a) the number of subscribers to Sky’s movie channels is declining, and (b) prices for such services have declined, with a belief that there is a narrow relevant market for the supply of such services in which Sky is dominant.

134 Paragraph 4.184.

135 Paragraph 3.73 of Annex 6.
3.15. It is apparent, therefore, that, notwithstanding the merits of evidence examined by Ofcom under this heading, Ofcom concludes that it is not able to draw any clear conclusion on the scope of the relevant market from that evidence. Accordingly, this evidence and analysis does not support – let alone provide clear support for – Ofcom’s conclusion on the scope of relevant markets in relation to premium movie channels.

(e) “Consumer preferences and features of premium movie packages”

3.16. The analysis set out under this heading is of a particularly poor standard. It comprises a series of irrelevant considerations, non-sequiturs, assertions\(^{136}\), and errors.

3.17. Again, in view of the difficulty in discerning the structure of Ofcom’s argument under this heading, and the evidence on which it is seeking to rely, it is more straightforward to address Ofcom’s conclusion. Ofcom states:

“In conclusion, the evidence from consumer surveys points to consumers valuing a subscription service with access to a wide range of films including new movies. However, the evidence suggests that PPV offers a close substitute for some price sensitive subscribers as it offers convenient access to a wide range of new movies. Other content found on TV is likely to be a weaker substitute for the broad range of movies, including new movies, found on premium movie channels.”\(^{137}\)

3.18. It is abundantly clear, therefore, that Ofcom’s analysis of “consumer preferences and features of premium movie packages” does not comprise clear evidence in support of Ofcom’s conclusion on the scope of relevant markets in relation to premium movie channels:

- the first sentence of this conclusion is unremarkable – it simply states that consumers value the types of movie channels that Sky offers, the best evidence of which is that many households choose to subscribe to services that include such channels. Such an observation is wholly uninformative in terms of defining the market relevant to the supply of such television channels;

- the second sentence indicates that pay per view services are viewed as a “close substitute” by “some price sensitive subscribers”; again, such a proposition is both (a) entirely unremarkable, and (b) wholly uninformative in terms of defining the market relevant to the supply of such television channels; and

- the final sentence (which appears to be asserted rather than being based on relevant evidence) simply states that “other content found on TV is likely

\(^{136}\) For example, at paragraph 4.191, Ofcom baldly asserts: “Packages showing films from the library window, including films on FTA and basic channels are likely to be a relatively weak substitute for packages containing newer films.” (This statement comprises the entirety of paragraph 4.191.) No evidence is cited to support this assertion.

\(^{137}\) Paragraph 4.195.
to be a weaker substitute for the broad range of movies, including new movies, found on premium movie channels". The observation that a particular type of product is a "weaker substitute" than another product clearly does not rule it out as being an important competitive constraint on the supplier of the focal product in question.

3.19. Accordingly, it is entirely clear that the evidence and analysis set out by Ofcom under this heading does not support its conclusion on the scope of the relevant market in relation to premium movie channels.

(f) The potential constraint from DVDs

3.20. Ofcom's analysis of the potential constraint from DVDs considers DVD sales and DVD rentals separately.

(i) DVD sales

3.21. Ofcom's examination of the impact of the ability to purchase films and other types of programming on DVDs comprises two pieces of analysis.

3.22. The first of these pieces of analysis simply notes the different characteristics of purchasing films on DVD, compared to subscribing to a pay TV service that includes premium movie channels. Ofcom draws no conclusion from this comparison and therefore it is clear that this analysis does not support its conclusion on the scope of the relevant market in relation to premium movie channels. If Ofcom intended this comparison to be evidence that DVD purchases are in a separate relevant market to services that include premium movie channels, this fails to recognise that differences in product characteristics are not good evidence that they are supplied in different relevant product markets.138

3.23. The second piece of analysis comprises an examination of “retail prices and sales of DVDs and premium movie subscriptions”139. The hypotheses put forward by Ofcom that form the basis of this examination are as follows:

(a) similar patterns of price changes among two products which are considered to be potential substitutes is consistent with them being in the same relevant market; and

(b) divergence in prices among two products which are considered to be potential substitutes without substitution between them is consistent with the two products being in separate markets.

3.24. On the basis of a brief analysis that comprises the examination of trends in (a) prices for DVDs, (b) subscription charges for services that include Sky’s movie

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138 See footnote 122, above.
channels, and (c) the number of DTH satellite subscribers to services that include Sky’s movie channels.\footnote{See the comments in Section 4, above, as to the inadequacy of such an approach to empirical analysis.} Ofcom states:

“Although not conclusive, the widening price differential without significant switching is evidence that retail DVDs and premium movie packages are in separate markets.”\footnote{Paragraph 4.203.}

3.25. This is an unusual conclusion because:

(a) it is entirely unclear from Ofcom’s brief analysis that there is in fact a widening price differential, particularly once changes in the quality of services provided to consumers are taken into account; and

(b) even if there has been a widening price differential, Ofcom’s statement that this has not been accompanied by “significant switching” is simply asserted. Given that Ofcom recognises that the number of subscribers to packages that include premium movie channels has been declining, it is surprising that Ofcom does not consider at all whether at least part of the reason for that decline is attributable to a widening in the price differential between the two products.

3.26. Given this, it is clear that no weight can be placed on Ofcom’s ‘inconclusive’ statement on this matter in support of Ofcom’s definition of the relevant market in relation to premium movie channels.

(ii) DVD rental

3.27. Ofcom undertakes only a very brief analysis of evidence related to the competitive constraint that the availability of DVD rental places on the supply of services that include premium movie channels. Ofcom’s analysis comprises:

(a) a description of some of the differences between DVD rental and services that include Sky’s movie channels. If Ofcom intended this comparison to be evidence that DVD rental is in a separate relevant market to services that include premium movie channels, this fails to recognise that differences in product characteristics are not good evidence that they are supplied in different relevant product markets; and

(b) the provision of a chart of the total value of UK over-the-counter and subscription DVD rentals between 2000 and 2007. As discussed in Section 4, above, this appears wholly uninformative in relation to whether DVD rental should be considered to be in the same relevant market as services that include premium movie channels.

3.28. Yet, on the basis of this very cursory analysis Ofcom states:
“Our view is that while DVD rentals are a closer substitute to Sky Movies packages than DVD sales are, they are not in the same market.”142 (Emphasis added.)

3.29. Clearly, Ofcom’s analysis does not permit it to draw this conclusion, and, accordingly, no weight can be placed on Ofcom’s analysis in relation to DVD rental in support of its conclusions about the scope of the relevant product market in relation to premium movie channels. It appears, more than anything, to be a statement of belief based on ‘gut feeling’, rather than a proper, evidence-based conclusion.

(d) **“The potential constraint from content downloaded over the internet”**

3.30. Ofcom appears to agree that the ability to access audiovisual programming via the internet143 potentially comprises a significant constraint on the provision of premium movie channels. Ofcom states:

> “We agree that downloading content to watch from the internet offers consumers a wide range of content that can be accessed relatively easily and viewed at their convenience.”144

(It is notable that Ofcom does not confine its focus in this statement to movies.)

3.31. Ofcom’s focus in its subsequent analysis is on the number of consumers who currently access content via the internet. Ofcom argues that “relatively few consumers currently download content”145 legally, and that a “relatively small number of subscribers ... are likely to have illegally downloaded content”146. While acknowledging that the constraint on the supply of the provision of premium movie channels from the ability to access programming via the internet “is likely to grow”147, and “could be a significant constraint in the future”148, Ofcom concludes that “the current indirect constraint [from content accessed via the internet] is relatively weak.”149

3.32. Again, while this may indicate that the ability of large numbers of UK households to view a wide and growing range of content via the internet on its own does not comprise an adequate substitute for services that include premium movie channels, the evidence is consistent with it being part of the aggregate constraint on the provision of such services, and one that is growing rapidly in importance.

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142 Paragraph 4.211.
143 Ofcom refers erroneously to “downloading content to watch from the internet” (paragraph 4.213), ignoring the fact that much content accessed via the internet is streamed rather than downloaded.
144 Paragraph 4.213.
145 Paragraph 4.214.
146 Paragraph 4.218.
147 Paragraph 4.219.
148 Ibid.
149 Ibid.
(e) Wholesale supply-side substitution

3.33. Again, given the numerous failings in the analysis and evidence which underpin the relevant markets defined by Ofcom based on consideration of demand-side factors, it is not productive to examine Ofcom's view on whether the relevant market it has defined for the supply of premium movie channels should be widened by reference to supply-side factors, and we do not consider it further here.

(f) Wholesale demand-side substitution

3.34. Ofcom's consideration of this issue potentially represents the nadir of its significantly flawed analysis of market definition and market power. Ofcom's conclusion from its brief analysis of this matter is that:

“It does not appear therefore that there are likely to be any wholesale products to which a retailer could substitute in the event of a small but significant increase in the carriage fee [for premium movie channels].”150

(Emphasis added.)

3.35. Again, Ofcom’s proposition appears to be based on a false premise that ‘switching’ on the part of a pay TV retailer would take the form of ceasing to carry premium movies channels, and replacing them with an alternative service. As discussed in the equivalent section in relation to premium sports channels, above, (and Sky’s Response to Ofcom’s First Consultation Document), ‘switching’ is, instead, likely to occur via changes in the allocation of sales effort on the part of retailers among the range of products that they supply to consumers.

3.36. Ofcom’s assertion that there are unlikely to be “any wholesale products to which a retailer could substitute” is particularly ill-founded in relation to premium pay TV channels because it overlooks entirely the value to retailers of on-demand film services as substitutes for linear pay TV movies channels – especially as on-demand services include films in a window prior to the pay TV window.

3.37. In its brief analysis of this issue Ofcom focuses entirely on services that only include films in the library window, and dismisses these as being potential demand-side alternatives on the basis that “few subscribers would be willing to switch to a service with fewer films or only older films”151. The only evidential support for this proposition cited by Ofcom is the observation that the Picturebox movie service has fewer subscribers than Sky Movies, which appears to overlook entirely the fact that it is accessible by only a very small proportion of the number of households that are able to subscribe to Sky Movies152.

150 Paragraph 4.225.
151 Paragraph 4.226.
152 Ofcom appears somewhat confused as to the platforms on which the Picturebox service is available. In paragraph 4.225, Ofcom describes it as being available: “on the Tiscali, DTT and BT Vision platforms”, failing to recognise that “DTT” is not a “platform”. Ofcom then states that the service “has about [excised] subscribers on Top Up TV and Tiscali”. In the accompanying footnote, Ofcom then states “[Picturebox] is now also retailed by BT Vision”.

58
3.38. Ofcom fails entirely to consider the possibility that a service that offers a small range of high quality films from the library window may be a sufficient substitute for premium movie channels for significant numbers of consumers, particularly if the cost of such a service is lower than the cost of subscribing to a service that includes premium movie channels.

3.39. Most importantly, however, Ofcom appears not to recognise the existence of on-demand film services provided by other pay TV retailers which carry films prior to the pay TV window, such as Virgin Media’s Film Flex service. Such an apparent lack of familiarity with relatively straightforward matters of industry background at this stage in Ofcom’s inquiry is of significant concern, particularly given that Sky referred Ofcom to such services in its Response to the First Consultation Document.153

3.40. It is, therefore, evident that no weight can be placed on Ofcom’s analysis of this issue in support of its conclusion that direct “demand side substitution is unlikely to be sufficiently significant to broaden our market definition.”154

(g) “Changes in wholesale prices”

3.41. Again, Ofcom’s arguments in relation to wholesale charges for pay TV packages that include Sky’s premium movie channels comprise rebuttal of points made by Sky in its Response to Ofcom’s First Consultation Document, rather than evidence relied upon by Ofcom in support of its proposed market definitions. Ofcom acknowledges that wholesale charges for packages that include Sky’s movie channels have fallen, but concludes that:

“the fall in wholesale prices of packages containing Movies Mix and Sports and Movies Mix does not necessarily imply a binding competitive constraint [on the supply of premium movie channels].”155 (Emphasis added.)

3.42. Clearly, therefore, Ofcom’s analysis of “changes in wholesale prices” does not provide robust evidence that supports Ofcom’s proposed market definition in relation to premium movie channels.

4. Conclusion on Ofcom’s analysis of the relevant market relating to the supply of premium sports channels and premium movie channels

4.1. It is clear from the foregoing analysis that there is no firm evidential basis for the conclusion reached by Ofcom as to the scope of the relevant market for either premium sports channels or premium movie channels.

155 Paragraph 4.233.
Annex 2

It is not possible to compare actual prices for pay TV services with “the competitive level” for such services

1.1 As we noted in Sky’s Response to Ofcom’s Second Consultation Document, Ofcom adopts an unreasonable benchmark for determining whether a particular potential substitute constrains the price of the focal product\textsuperscript{156}, namely whether the potential substitute constrains the price of the focal product to “the competitive level”.\textsuperscript{157} That test is unreasonable because Ofcom also appears to believe that it is difficult to establish what constitutes “the competitive level” of prices for pay TV channels. Ofcom states:

“In broadcasting markets it can often be difficult to identify the competitive price. In economic models, the competitive price is often equated with marginal cost. However, in broadcasting markets, a large proportion of production costs are fixed, and marginal costs are very low. We would therefore expect competitive prices to be well above marginal cost, but it is very difficult to assess just how much higher they will be.”\textsuperscript{158}

1.2 While Sky agrees with this reasoning, we consider that it is not possible, rather than simply “difficult”, to establish “the competitive price” for pay TV channels for the following reasons (in addition to the ‘difficulties’ cited by Ofcom).

1.3 First, such services do not have unique prices and, in many circumstances, particular types of pay TV services (for example, specific pay TV channels) do not have observable prices. Efficient pricing of pay TV services involves selling them in various combinations, at a range of different prices. For example, at the wholesale level, the ratecard charge for Sky Movies 1 is [CONFIDENTIAL] per subscriber per month on a standalone basis, but the channels in the Sky Movies 1 package can also be purchased in conjunction with other channels, at prices that range between [CONFIDENTIAL] per subscriber per month. In the latter cases, the Sky Movies 1 ‘component’ of these packages does not have a separate, identifiable charge.

1.4 Second, competitive pricing of services of this type would not be expected to result in uniquely determined charges. Instead, standard economics indicates that charges would lie within a range between incremental cost and standalone cost. In this sense references to a singular “level” for prices for such services are misplaced.

1.5 Third, the differentiated nature of pay TV services means that the concept of “the competitive price” for such services is highly problematic. For example, Vickers and Hay (1987) state:

\textsuperscript{156} See, for example, paragraph 1.27, which states: “While we acknowledge that other means of watching movies, such as the ability to purchase a DVD of a recent movie, or watch an older movie on free-to-air TV, will provide some constraint on the prices which can be charged for Core Premium Movies channels, we do not believe this constraint is likely to be sufficient to ensure prices are at the competitive level.” (Emphasis added.)

\textsuperscript{157} See Annex 6 of Sky’s Response to Ofcom’s Second Consultation Document.

\textsuperscript{158} Paragraph 4.47.
“The analysis of pricing in markets with differentiated products is less straightforward than the standard homogeneous good case. Demand for the product(s) of the firm then depends to some extent on the prices charged by producers of ‘neighbouring’ products as well as its own price(s). The question of which product varieties are produced becomes relevant. For example, does the market produce too few or too many varieties? Are they the ‘right’ ones? What difference does dominance make? Unfortunately, but not surprisingly, there is no simple answer to these questions.”  

1.6 As noted in Sky’s response to Ofcom’s Second Consultation Document, the difficulty of identifying “the competitive price” in relation to television services arising from their differentiated nature was recognised explicitly in the judgment of the Restrictive Practices Court in the Premier League case. That judgment stated:

“One consequence of the view that competition in Pay-TV depends on differentiation is that some aspects of economic theory dealing with competition cannot readily be applied to this case. If products or services in a market place are homogeneous it may be possible to identify a competitive level of price and so determine whether a competitor in that market place is extracting excess profits by its strength in the market or by a monopoly position. In a market place where products are differentiated and thus heterogeneous both in nature and price, such conclusions cannot reliably be drawn.”

1.7 Finally, the concept of a readily identifiable “competitive price level” has little meaning in a sector that combines the types of considerations set out above with significant, continuous change over time. For example, not only are the products offered by firms differentiated, they are also changing continuously in nature - in terms of what is offered to consumers - and how they are provided to consumers, and there is considerable uncertainty about the nature of consumer demand. In markets with such characteristics, the usual expectation would be that prices would be non-equilibrium prices, and there would be little reason to expect that firms would be able to set and maintain prices at “the competitive level”.

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Annex 3

Ofcom’s argument that OFT guidance supports its theory that if upstream prices are above competitive levels there is likely to be a downstream Cellophane fallacy problem

1.1 Ofcom argues that, if upstream prices are above competitive levels, there is a risk of downstream markets being defined too widely due to a Cellophane fallacy problem. In Sky’s view, this proposition is unconventional. We are not aware of any other cases in which this argument has been made, and Ofcom does not cite any previous examples in which this theory has been applied.

1.2 Ofcom argues that this proposition is supported by OFT guidance on market definition. This argument is erroneous. Ofcom states:

“The OFT market definition guidelines state that “the prices of products outside the hypothetical monopolist’s control are held constant at their competitive levels” (emphasis added).”

1.3 The full passage from which Ofcom has extracted its quotation, however, states:

“When carrying out the test, we assume that the hypothetical monopolist is not subject to economic regulation that would affect its pricing behaviour and that the prices of products outside of the hypothetical monopolist’s control are held constant at their competitive levels. However, while not considered as part of the test, the issues of regulation and the pricing strategies of competitors would be considered as part of the overall competitive assessment.” (Emphasis added.)

1.4 The emphasised words make it clear that the products for which prices are “held constant at their competitive levels” are those provided by “competitors” of the hypothetical monopolist, not suppliers of inputs to its business.

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161 See paragraph 1.8 of Annex 6.
162 Ibid.
163 Ibid.
Annex 4

Evidence that consumers replace viewing of films in the pay TV window with other types of television programming if they cancel a subscription to pay TV packages that include premium film channels

1.1 As discussed in Section 6 above, Ofcom dismisses the proposition that “non-movie programming” might comprise a substitute from the point of view of consumers for watching films in the pay TV window without any consideration of relevant evidence.

1.2 In order to examine the extent to which consumers are willing to replace viewing of films in the pay TV window, which are broadcast on premium movie channels, with other types of programming, we have examined data available to Sky on the behaviour of subscribers who ‘spin down’ from a pay TV package that includes premium film channels. (For convenience, we refer to this group as ‘downgraders’.)

1.3 The analysis was carried out using Skyview data. Skyview records the amount of viewing to the main television set of each household in the Skyview panel.165

1.4 We identified 434 households on the Skyview panel that:

(a) were subscribers to a package including Sky Movies in the twelve month period from April 2006 to March 2007 (‘Year 1’);
(b) downgraded to a package that did not contain Sky Movies at some point in the twelve month period from April 2007 to March 2008 (‘Year 2’); and
(c) did not subsequently restore Sky Movies to their subscription in the following twelve months (‘Year 3’).

1.5 We examined the viewing of this set of households by quarter for the four quarters in Year 1, when all of the sample households subscribed to a package containing Sky Movies, and for Year 3, when none of them did. Comparing the corresponding quarters in these years ensures that comparisons are not affected by seasonal differences in viewing.

1.6 The results are clear and consistent across all four quarters. First, although overall viewing of movies fell from Year 1 to Year 3, viewing of movies on channels other than Sky Movies increased – see Figure 1. In other words, these downgrading households replaced some of their viewing of Sky Movies with viewing of movies on other channels. Viewing of movies on the free to air terrestrial channels and other free to air channels increased markedly.

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165 The Skyview panel comprises around 33,000 households.
1.7 Second, the downgraders’ overall television viewing increased when they dropped Sky Movies. As Figure 2 shows, total TV viewing increased for all Sky households between Year 1 and Year 3, but it increased slightly more amongst the downgraders in two of the quarters. This indicates that the downgraders also replaced viewing movies with viewing of non-movies programming.

1.8 The analysis set out above provides strong evidence based on consumers’ actual behaviour of the substitutability of movies outside the pay TV window, and other types of programming, with viewing movies in the pay TV window. Clearly, it is not possible to consider the extent to which downgraders also increased viewing of movies and other programmes via methods such as pay per view services\textsuperscript{166}, DVDs or the internet using Skyview data. To the extent that, following their decision to drop Sky Movies, downgraders also increased their consumption of movies and other programming via these methods, however, the analysis above will understate the constraint that other types of services impose on the supply of premium movie channels.

1.9 Downgrading by dropping Sky Movies channels from a subscription comprises only one switching option in the event of a rise in the charge for such a subscription, or a reduction in the quality of the service provided – the other main option being to cancel a subscription entirely. It would, therefore, also be desirable to undertake an analysis of changes in viewing of households who cancel their pay TV subscription entirely. There are, however, insufficient numbers of households who cancel their pay TV subscriptions and remain in the Skyview panel to be able to use the Skyview data for this purpose.

\textsuperscript{166} We attempted to examine the history of pay per view purchases for the households in the downgrader sample. We were unable reliably to do so.
1.10 The fact that it has not been possible to examine this group of switchers does not, in Sky’s view, mean that the evidence in relation to downgraders has no value; in Sky’s view, it is important evidence about the actual behaviour of consumers who cease to subscribe to Sky’s premium movie channels.\textsuperscript{167}

Figure 2.
Comparison of total TV viewing of Sky subscribers before and after downgrading from a Sky movies package

Average minutes of TV viewing per quarter

\textsuperscript{167} In Sky’s view, it is also likely that very similar findings would result from such an analysis. In particular, we consider that it is implausible that the overall level of television viewing of households who cancel pay TV subscriptions declines significantly.
Annex 5

Further errors in Ofcom’s approach to estimating demand elasticities

1.1. For each type of pay TV package, Ofcom has calculated estimates of a range of elasticities amongst different groups of consumers, including ‘all adults’ and current subscribers to the relevant package, based on its consumer research. In every case, the demand elasticity calculated for all adults is higher than that for current subscribers to the relevant package, and in many cases substantially higher. For example, for a package containing Sky Sports and Sky Movies, Ofcom appears to report an elasticity of -1.11 for current subscribers to such a package (see Figure A6.3), whereas the corresponding elasticity estimated for all adults is -2.05.

1.2. Economic theory, however, indicates that, at the current price of a package, these elasticities should be the same. The price elasticity of demand is defined as the percentage change in demand divided by the percentage change in price. For a given price increase, starting from the current price level, the number (and percentage) of consumers who stop buying a product should be the same for (a) all consumers and (b) current subscribers to that product, because only current subscribers can stop buying it.

1.3. Accordingly, the fact that Ofcom calculates different elasticities for these two groups indicates that there are material flaws in its analysis. Ofcom does not appear to have considered the reason for, or implications of, these discrepancies.

1.4. The most likely cause of these discrepancies is straightforward. It is apparent that in Ofcom’s consumer research some non-subscribers say that they would subscribe to pay TV services at current prices, while some current subscribers say that they would not subscribe at current prices.

1.5. There are at least two ways of treating respondents whose stated response differs from their actual behaviour:

   (a) exclude them from the analysis; or

169 This table is somewhat confusing, as it includes one row labelled “subscribers to sports and movies with basic” and another labelled “Sky Sports & Sky Movies”. The difference between these two rows is entirely unclear. Figure 20 of the main Consultation Document implies that the latter is the elasticity estimated for current subscribers to a package containing Sky Sports and Sky Movies.
170 The concept of demand elasticity does not apply to current subscribers for a price decrease, because all of them already subscribe and so there can be no increase in quantity.
171 Another way to see this is to recall that the elasticity of demand is derived from the demand curve, which shows how many consumers would be willing to purchase the product at any given price. At the current price, and all higher price points, the demand curve for current subscribers and the demand curve for all adults should be exactly the same because anyone who is not a current subscriber, i.e. would not purchase at the current price, would not purchase at a higher price either, and so all demand at higher prices comes from current subscribers.
172 Ofcom does not describe its approach, but from the material presented in Annex 10 this appears the most likely source of the discrepancies.
(b) use their stated responses rather than actual behaviour when classifying them, i.e. ‘Sky Sports subscribers’ are defined as those who say they would subscribe to a package containing Sky Sports at current prices (whether or not they actually do so).

1.6. The problem with Ofcom’s analysis appears to be that it adopts an inconsistent approach to this matter when dealing with the responses of (a) current subscribers and (b) both subscribers and non-subscribers (i.e. all adults):

- when calculating demand curves and elasticities for current subscribers, it appears that Ofcom’s approach includes current subscribers who say they would not subscribe at current prices, but excludes non-subscribers who say they would subscribe at current prices;
- when calculating elasticities for all adults, however, Ofcom includes both groups.

1.7. This approach is clearly inconsistent. Respondents should be classified either by their stated responses or their actual behaviour.

1.8. The result of this inconsistent approach is that Ofcom’s demand curves for current subscribers include neither (a) those who actually subscribe but say they would not, nor (b) those who do not currently subscribe but say they would. As a result, the demand curves estimated for current subscribers are too low at every price point and the resulting elasticities will tend to be underestimated.

1.9. By contrast, the demand curves for all adults include all respondents and their behaviour is classified entirely by stated responses, meaning that they are at least internally consistent. While this means that the elasticities for all adults are likely to be more reliable than those estimated by Ofcom for current subscribers, it remains the case that Ofcom’s analysis is flawed to such an extent that it would be impossible to rely on the estimated demand elasticities for all adults.

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173 See figures 34, 36 and 37 of Annex 10, all of which appear to show that no more than around 60% of current subscribers would subscribe to their current package at a price of £5 per month.

174 Those respondents who currently subscribe but say they would not are, in practice, likely to be marginal subscribers who would drop their subscription in response to a price increase – but Ofcom treats them as if they would not subscribe at current prices, hence they cannot stop subscribing in response to a price increase.
Annex 6

Survey to determine the consumers’ surplus accruing to TV viewers and radio listeners,
Final Report

Prepared for the Radiocommunications Agency by MVA in association with Aegis Systems Ltd