Terms of reference, background to the reference and conduct of our investigation

Terms of reference

1. On 4 August 2010, Ofcom sent us the following reference:

Ofcom, in exercise of its powers under sections 131 and 133 of the Enterprise Act 2002 (the Act) hereby makes a reference to the Competition Commission for an investigation into the supply and acquisition of Subscription Pay TV Movie Rights and into the wholesale supply and acquisition of packages including Core Premium Movies channels.

Ofcom has reasonable grounds for suspecting that a combination of features of the market or markets in the UK in which the Subscription Pay TV Movie Rights and packages including Core Premium Movies channels are supplied and acquired prevents, restricts or distorts competition in connection with the supply of these rights and the supply of packages including Core Premium Movies channels in the UK.

(signed) STUART MCINTOSH
Ofcom Competition Partner and Executive Board member
4 August 2010

Definitions

For the purposes of this reference:

'Core Premium Movies channels' means Sky Movies channels.

'Major Hollywood Studios' means the members of the Motion Picture Association of America and their wholly owned or controlled subsidiaries.

'Subscription Pay TV Movie Rights' means the intellectual property rights licensed by the Major Hollywood Studios, which:

i) permit the exhibition of movies on broadcast channels and/or Subscription Video on Demand Services in the UK; and

ii) relate to the first period during which movies are licensed for exhibition on subscription broadcast channels or Subscription Video on Demand Services.

'Subscription Video on Demand Services' means video on demand services for which a subscription fee is levied.

'Ofcom' means The Office of Communications.

'Packages including Core Premium Movies channels' are packages including at least one 'Core Premium Movies channel' and which may include other products or services, including but not limited to subscription video on demand services.

'Sky Movies channels' means those television broadcast channels offered by Sky for wholesale and retail, which wholly or mainly comprise movies, and for which a subscription fee is levied that is not associated with the provision of channels wholly or mainly comprising non-movies content.

Background to the reference

Ofcom's investigation into pay TV

2. The process leading to the reference began over five years ago. In January 2007, BT, Setanta, TUTV and Virgin Media made a submission to Ofcom which stated that competition in the pay-TV industry was not working properly. The parties asked Ofcom to refer the industry to the CC for investigation. In March 2007, Ofcom announced that it was opening an investigation into the pay-TV industry and, in December 2007, Ofcom published its First Pay TV Consultation,[1] setting out its preliminary views on the operation of the industry.

3. In September 2008, Ofcom published its Second Pay TV Consultation.[2] In this document, Ofcom said that Sky, as a vertically integrated firm with market power in a key upstream market, was likely to distribute its premium content (including recent movies from the six largest Hollywood studios) in a manner that favoured its own retail business and platform. Ofcom also expressed concern about Sky having limited incentives to exploit its rights to offer recent movies by SVOD, due to the effects on its linear broadcast service. Ofcom proposed to tackle its concerns about the access to premium movies content by putting in place a WMO obligation, using its sectoral competition powers under section 316 of CA 2003. However, Ofcom invited views on this remedy, and other possible forms of remedy.

4. In June 2009, Ofcom published its Third Pay TV Consultation, which considered premium sports and movies content.[3] In relation to premium movies content, Ofcom argued that Sky had an incentive to restrict the exploitation of its rights to offer recent movies to consumers by SVOD, as, in Ofcom's view, a compelling rival SVOD movies service could have threatened Sky's pay-TV business more generally. Consequently, Ofcom was concerned that innovation in the development of SVOD services could be stifled. This concern led Ofcom to believe that there could be a case for targeted intervention in the sale and purchase of SVOD rights, and it suggested that making the SVOD rights available separately from the linear rights could allow other companies to acquire SVOD rights and establish new services for consumers.

5. In March 2010, Ofcom concluded its investigation into pay TV by publishing its Pay TV Statement.[4] In this document, Ofcom made a decision to require Sky to offer its Sky Sports 1 and Sky Sports 2 packages to other pay-TV retailers at prices set by Ofcom (a WMO remedy).[5] However, in June 2010, Sky appealed this decision to the CAT.[6] A number of interested parties intervened in the Sky appeal and BT, Virgin Media and the Football Association Premier League separately appealed aspects of

---

[1] http://stakeholders.ofcom.org.uk/binaries/consultations/market_invest_paytv/summary/pay_tv.pdf.
[2] http://stakeholders.ofcom.org.uk/binaries/consultations/second_paytv/summary/condoc.pdf.
[3] http://stakeholders.ofcom.org.uk/binaries/consultations/third_paytv/summary/paytv_condoc.pdf.
[4] http://stakeholders.ofcom.org.uk/binaries/consultations/third_paytv/statement/paytv_statement.pdf.
[5] Ofcom also, in principle, approved Sky and Arqiva's request for Sky to offer its own pay-TV services on DTT ('Picnic'). This approval was conditional on a WMO obligation on Sky Sports 1 and 2 being in place and was conditional on any movies channels included in Picnic being offered to other DTT retailers. Ultimately, Sky/Arqiva did not pursue the Picnic proposal and Sky has not yet introduced a pay-TV service on DTT.
[6] *British Sky Broadcasting Limited v Office of Communications (Case No. 1158/8/3/10)*. www.catribunal.org.uk/237-6549/1158-8-3-10-British-Sky-Broadcasting-Limited.html.

Ofcom's Pay TV Statement. At the time of publishing our report, judgments in respect of all of these appeals were still awaited.

Ofcom's consultation on a market investigation reference

6. At the same time as publishing its Pay TV Statement, Ofcom also published a consultation document,[7] which set out its proposals to make a market investigation reference to us with regard to movies on pay TV. Ofcom said that it had decided it would not be appropriate to impose a similar WMO obligation on Sky with regard to its movies packages as, although it had concerns over the restricted distribution of Sky's movie channels, its main forward-looking concern related to the supply of SVOD services. Ofcom said that it could not adequately address this concern under section 316 of CA 2003.

7. In the consultation document, Ofcom identified a number of features which, in combination, it believed gave rise to an AEC. Ofcom said that the competition issues manifested in three ways: *(a)* the limited exploitation of SVOD rights; *(b)* the restricted distribution of Sky's movie channels; and *(c)* high prices for Sky's movie channels. Ofcom said that SVOD services had become an increasing focus through the course of its pay-TV investigation and it considered that there was a reasonable prospect that we would be able to address any competition problems associated with the limited exploitation of SVOD rights and high prices for premium movie channels, given our powers under the Act.

Ofcom's market investigation reference

8. On 4 August 2010, following its consultation process, Ofcom published its decision to make a market investigation reference to the CC.[8] Ofcom said that a combination of features of the markets referred (see paragraph 1) gave rise to an AEC.

9. Ofcom said that it was concerned that Sky would maintain and exploit its market power by restricting the distribution of its movies channels and exploitation of SVOD rights. Ofcom said that, in the longer term, as Sky developed its SVOD services, its current market power in relation to linear channels could be transferred across to these new services. Ofcom said that it was unlikely that, absent intervention, competition would develop and consumers would benefit in terms of choice and innovation.

10. Ofcom said that it had explored whether the studios' existing commercial plans were likely to result in the wider availability of premium movie services but its discussions with the studios gave it a 'clear view' that change was unlikely. Ofcom concluded that it was appropriate to make a market investigation reference to the CC.

Conduct of our investigation

11. On 4 August 2010, we published on our website an invitation to express views to us, and on 3 September 2010, we published an administrative timetable (since revised) for our investigation.

12. Following the reference from Ofcom, we gathered a wide range of information from relevant parties. In the period between August 2010 and August 2011, we:

---

[7] http://stakeholders.ofcom.org.uk/binaries/consultations/movies_reference/summary/moviescondoc.pdf.
[8] http://stakeholders.ofcom.org.uk/binaries/consultations/movies_reference/statement/pay-tv-movies-decision.pdf.

- published an issues statement and invited submissions on this document;[9]
- held hearings with a number of parties;[10]
- attended 'site visits' with some parties;
- consulted on and commissioned a consumer survey from GfK NOP;[11]
- issued a number of information requests to parties;
- published various working papers (see paragraphs 13 and 14); and
- held staff-level meetings with some parties on specific topics.

13. During January and February 2011, we published on our website a number of working papers, including setting out our 'theories of harm', together with an accompanying note. These working papers addressed the following topics:

- Concentration in the upstream market.
- Background to pay TV and movies on pay TV.
- Consumer offerings of the principal pay-TV providers.
- Market developments.
- International comparisons: market structure in the USA.
- Market definition.
- Review of the Seabright report.
- Results of the CC survey.
- Retail competition between pay-TV providers.
- Profitability of Sky.
- Effectiveness of retail competition.
- Significance of movies to the pay-TV market.
- Comparison of Sky's retail and wholesale prices.
- The supply, acquisition and aggregation of movie content in the FSPTW on pay TV and the supply of products with this content.
- The availability to other pay-TV retailers of movie content in the FSPTW and of Sky's movie products.

[9] See: www.competition-commission.org.uk/our-work/movies-on-pay-tv/evidence/responses-to-issues-statement.
[10] See: www.competition-commission.org.uk/our-work/movies-on-pay-tv/evidence/summaries-of-hearings-held-with-parties.
[11] See: www.competition-commission.org.uk/our-work/movies-on-pay-tv/evidence/cc-commissioned-research-and-surveys.

- Barriers to creating new linear movie channels or SVOD services on pay TV with content in the FSPTW.

- Implications of any monopsony power Sky may hold.

- International comparison of value to the studios from the FSPTW.

14. During May and June 2011, we published on our website further working papers, which addressed the following topics:

    - The role of paragraph 17(c) in the theory of harm and the appropriate comparative scenario.[12]

    - The future TVOD plans of Google, Apple, Microsoft and LOVEFiLM.

    - The growth of TVOD and EST services.

    - Competition between movie studios in the upstream market.

    - Demand-side substitutes for FSPTW movies.

    - Analysis of Sky's prices.

    - Revised evaluation of the evidence in relation to circumstance *(c)* of the theory of harm.

    - Sky's incentives to carry another product showing FSPTW movie content.

15. In August 2011, we published on our website our provisional findings and invited submissions on this document.

16. Following the consultation on our provisional findings, we gathered further information from relevant parties. In particular, we observed a number of developments occurring in the market which were relevant to our inquiry, and we investigated them further. In the period between September 2011 and April 2012, we:

    - held hearings with a number of parties;[13]

    - issued a number of information requests to parties;

    - commissioned and published the results of a further consumer survey from GfK NOP;[14]

    - published a further working paper (see paragraph 17); and

    - held staff-level meetings with some parties on specific topics.

17. In March 2012, we published on our website a further working paper, which addressed the following topic:

    - Market developments since our provisional findings.

[12] The availability to other pay-TV retailers of movie content in the FSPTW and of Sky's movie products.
[13] See: www.competition-commission.org.uk/inquiries/ref2010/movies_on_pay_tv/party_hearing_summaries.htm.
[14] See: www.competition-commission.org.uk/our-work/movies-on-pay-tv/evidence/cc-commissioned-research-and-surveys.

18. In May 2012, we published on our website our revised provisional findings and invited submissions on this document.

19. We also published on our website throughout the course of our inquiry non-confidential versions of submissions we received, including those made in response to our August 2011 provisional findings and our May 2012 revised provisional findings, and non-confidential summaries of our hearings with parties.[15]

20. We would like to thank all those who have assisted in our inquiry.

[15] See: www.competition-commission.org.uk/our-work/movies-on-pay-tv.

Consumer offerings with movie content of the principal subscription pay-TV providers

Sky

Service	*Nature of service*	*Delivery mode*	*Quality*	*Content*	*Price*	*Studios*	*Window*
Sky Movies channels[1]	Linear pay-TV channels	DTH satellite	SD & HD	More than 850 titles per month. 35–50 titles introduced per month, of which 16–25 are new titles to Sky Movies Premiere.	£28.00–£53.00 per month depending on package. It is an additional £10.25 per month for an HD pack.	All majors; range of non-major studios	FSPTW, library
Sky Movies channels	Linear pay-TV channels	Broadband via Sky Go (11 Sky Movies channels—excludes Premiere +1)	Depends on user's speed and broadband connection and hardware.	More than 850 titles per month. 35–50 titles introduced per month, of which 16–25 are new titles to Sky Movies Premiere.	Stand-alone subscription: £32.00–£41.50 per month depending on package. Sky Movies channels are available via Sky Go at no additional charge to subscribers to a package including Sky Movies via DTH satellite.	All majors; range of non-major studios	FSPTW, library
Sky Movies channels	Linear pay-TV channels	TalkTalk's IPTV network (5 Sky Movies channels)[2]	SD	More than 850 titles per month. 35–50 titles introduced per month, of which 16–25 are new titles to Sky Movies Premiere.	£22 per month	All majors; range of non-major studios	FSPTW, library

[1] See the annex for a list of all Sky Movies channels.
[2] TalkTalk is not currently offering TV products to new customers.

Service	*Nature of service*	*Delivery mode*	*Quality*	*Content*	*Price*	*Studios*	*Window*
Sky Movies on Sky Go (previously SkyPlayer)	Linear channels and SVOD service (and TVOD (see below))	Broadband via Sky Go to: computers (PCs, laptops, Macs) which may be connected to TV sets; Xbox 360; Fetch TV STBs; iPads, iPhones and some Android devices	Depends on user's speed and broadband connection and hardware	Linear channels: around 300–400 titles per month. More than 16–30 new titles per month. VOD service: around 600 titles available. 30–80 new titles per month.	Stand-alone subscription: £32.00–£41.50 per month depending on package. Sky Movies channels and movies on a VOD basis are available via Sky Go at no additional charge to subscribers to a package including Sky Movies via DTH satellite.	All majors; range of non-major studios	FSPTW, library
Sky Movies on Now TV	Linear channels and SVOD service (and TVOD (see below))	Broadband to subset of devices as Sky Go	Depends on user's speed and broadband connection and hardware	Linear channels: around 300–400 titles per month. More than 16–30 new titles per month. VOD service: around 600 titles available. 30–80 new titles per month.	£15 per month	All majors; range of non-major studios	FSPTW, library
Sky Box Office (via satellite)	NVOD PPV	DTH satellite	SD & HD	30–60 titles available per month, of which 15–30 are introduced each month	Generally £3.49 for 24-hour access. 50p extra for HD content (£3.99). Do not need to be a Sky Movies subscriber.	All majors; range of non-major studios	PPV, library
Sky Store	Push TVOD	DTH satellite	SD & HD	2–4 'Now on DVD' titles pushed per week	48- or 24-hour access dependent on distributor. £3.49 for SD, £3.99 for HD.		TVOD, library

Service	*Nature of service*	*Delivery mode*	*Quality*	*Content*	*Price*	*Studios*	*Window*
Sky Store (previously Sky Box Office via broadband)	TVOD	Broadband via Sky Go or Now TV	Depends on user's speed and broadband connection and hardware. Capable of being equivalent to SD quality.	1,000 current and library titles. 15–30 new 'Now on DVD' titles introduced each month. Library titles introduced on an ad hoc basis. Also includes TV programming.	£3.49 for 'Now on DVD' content. £1.99 for Movie Library. 99p Special Offers section offered on library titles. No HD offering. No need to subscribe to any services from Sky to access Sky Store via Sky Go	All majors; range of non-major studios	TVOD, library
Sky Store (previously Sky Box Office via broadband)[3]	TVOD	Broadband via Sky Anytime+	SD & HD	1,000 current and library titles. 15–30 new 'Now on DVD' titles introduced each month. Library titles introduced on an ad hoc basis. Also includes TV programming.	48- or 24-hour access dependent on distributor. £3.49 for 'Now on DVD' content. £1.99 for Movie Library. 99p Special Offers section offered on library titles. 50p extra for HD 'Now on DVD' (£3.99). £2.49 for HD Movie Library.		TVOD, library
Sky Anytime	Push SVOD—available to Sky DTH satellite subscribers with a Sky+ STB	DTH satellite	SD & HD	Around 5–10 titles available at any one time	No additional charge to monthly subscription	All majors; range of non-major studios	FSPTW, library
Sky Anytime+	SVOD—available to Sky DTH satellite subscribers with a Sky+ HD STB	Broadband	SD & HD	Around 600 titles available at any one time. New titles introduced are similar to those introduced to the Sky Movies channels.	No additional charge to monthly subscription	All majors; range of non-major studios	FSPTW, library

[3] Includes world cinema and foreign language titles, including European art house films, titles shown at cinema festivals and Bollywood movies.

BT Vision

Service	*Nature of service*	*Delivery mode*	*Quality*[4,5]	*Content*	*Price*	*Studios*	*Window*
Vision Box Office	TVOD	DTT/IPTV hybrid	SD & HD	Current titles = 90–100 movies available each month. Refresh rate = 30 movies per month. Library titles = 250 movies available each month. Refresh rate = approx 25 movies per month.	New release = • SD between £3.50 and £4.00[6] • HD between £4.00 and £5.00 Library titles = • SD between £1.00 and £3.00 • HD between £3.00 and £4.00	All majors; range of other studios	TVOD, library
Vision Film[7]	SVOD	DTT/IPTV hybrid	SD	Approx 230 movies available each month. Refresh rate = approx 80 movies per month.	Free with BT Unlimited pack or £7.20 per month stand-alone with other packages	Warner, PictureBox (Universal), Sony Pictures, Miramax, Film4, Disney	SSPTW, library

[4] Download speeds will vary according to a number of factors. BT's broadband packages allow up to 20MBits/s (its new 'Infinity' package claims speeds up to 40MBits/s). Speeds via the local copper loop will be affected by a number of factors including distance from the local telephone exchange. BT told us that it was technically necessary for customers to have a BT broadband connection with a line speed of at least 2MBits/s.
[5] BT told us that a 2 MBits/s home broadband connection speed was adequate for SD streaming and for HD movies, if downloaded to the STB (around an 8 MBits/s speed would be necessary for a streamed HD service).
[6] Depends on specific arrangements applicable to individual providers and titles.
[7] Vision Film includes PictureBox and Warner Films and other content (eg from Sony Pictures, Miramax, Film4 and Disney). Consumers can purchase each of PictureBox and Warner Films separately (£5.10 each).

Virgin Media

Service	*Nature of service*	*Delivery mode*	*Quality*	*Content*	*Price*	*Studios*	*Window*
Sky Movies—full package of channels,[8] including Sky Movies Premiere	Linear pay-TV channels[9]	Cable	SD & HD	More than 850 titles licensed at any time. 40–70 titles introduced per month, of which 20–30 are new titles to Sky Movies Premiere.	From £19.50 per month[10] (£7 extra per account per month for HD)	All majors; range of titles from non-major studios	FSPTW, library
Movies on Demand (FilmFlex)	TVOD	Cable	SD & HD	~550 movies. Refresh rate = 40–70 movies per month.	From 99p SD film (from £1.50 for HD). New releases average ~£3.95 SD, £4.50 HD.	All majors; range of titles from non-major studios	TVOD, library
PictureBox	SVOD	Cable	SD & HD	28 movies available each month. Refresh rate = 7 movies per week.	£5 per month (no additional cost for HD)	Universal, with other titles from Paramount and some non-major studios	SSPTW, library
Virgin Media online	TVOD[11]	Open Internet[12]	SD & HD	~700 movies. Refresh rate = 40–70 movies per month.	From 99p SD film (from £1.50 for HD). New releases average ~£3.95 SD, £4.50 HD.	All majors; most non-major studios	TVOD, library

[8] 12 SD, 10 HD.
[9] Virgin Media also offers a bonus SVOD service equivalent to that provided via Sky Anytime+.
[10] For Sky Movies 1 and Sky Movies 2 (ie all the Movies channels plus Sky Movies Premiere: Disney Cinemagic included also). Virgin told us that [✂] per cent of premium movies customers took this package. Customers may also purchase Disney Cinemagic on a stand-alone basis.
[11] Virgin Media may also offer a bonus SVOD service equivalent to that provided via Sky Go.
[12] Streaming-only, with an immediate viewing experience available irrespective of the size of the Virgin broadband package taken. Virgin Media offers packages with downloads of up to 100MBits/s. Access to the Virgin Media online service is not limited to customers with a Virgin Media broadband package. Customers of other broadband providers may also gain access to the service.

Top Up TV

Service	*Nature of service*	*Delivery mode*	*Quality*	*Content*	*Price*	*Studios*	*Window*
PictureBox	Push SVOD	DTT[13]	SD	7 movies available per week; on average one of these movies will be new to PictureBox that week	£7 for ‘stand-alone’ customers (ie customers who do not take any other subscription service from TUTV) and £5 for customers who take one or more other services from TUTV	Universal, with other titles from Paramount and some non-major studios	SSPTW, library

[13] To receive PictureBox, TUTV’s customers must have a TUTV PVR manufactured either by Thomson or Vestel, and containing bespoke TUTV software.

TalkTalk TV

Service	*Nature of service*	*Delivery mode*[14]	*Quality*	*Content*	*Price*	*Studios*	*Window*
Movies Now	Pull and Push TVOD	IPTV	SD (by Pull VOD) & HD (by Push VOD)	~500 movies per month	Current release = £3.95	Sony Pictures, Disney & Fox	TVOD, library
PictureBox	SVOD	IPTV	SD	28 movies available each month. Refresh rate = 7 movies per week.	£5 per month	Universal, with other titles from Paramount and some non-major studios	SSPTW, library
Sky Movies	Linear pay TV channels	SkybyWire via IPTV	SD	Sky Movies Premiere plus some (not all) genre channels[15]	£22 a month as part of Sky Movies pack	All majors; range of non-major studios	FSPTW, library
Disney Cinemagic	SVOD	IPTV	SD	Disney premieres and animated library titles	£5 per month	Disney	FSPTW, library

[14] Download speeds will vary according to a number of factors.
[15] These are Sky Movies Comedy, Family, Classics, Modern Greats and Drama & Romance.

LOVEFiLM

Service	*Nature of service*	*Delivery mode*	*Quality*	*Content*	*Price*	*Studios*	*Window*
LOVEFiLM	DVD rental and streaming	DVDs and Blu-ray discs by post and streaming content on open Internet	DVD is SD/Blu-ray is HD	~70,000 titles	Depends on package: from £7.99/month	All majors; and range of non-major studios	DVD
LOVEFiLM streaming only (SVOD)	SVOD	Open Internet, currently available through PC, PS3, Xbox, Samsung, Sony Electronics Bravia and LG Internet-connected TVs, Samsung Blu-ray players, etc	SD	Varies depending on whether content is PPV VOD (~1,100 movies) or SVOD (~4,500 feature films and 4,000 TV episodes)—no SVOD content available from majors in FSPTW or FTA window	Streaming only product currently £4.99/month. TVOD (usually £2.49 or £3.49). Streaming also available as part of package with DVD rental by post	Warner, Sony Pictures, Universal and Fox; and range of non-major studios, including E1 and Studiocanal	FSPTW, SSPTW, library, TVOD

Netflix

Service	*Nature of service*	*Delivery mode*	*Quality*	*Content*	*Price*	*Studios*	*Window*
Netflix	SVOD (unlimited streaming)	Via Internet protocol, currently available through PC, PS3, Samsung and Sony Electronics Bravia Internet-connected TVs, Samsung Blu-ray players, etc	SD and HD	Thousands of movies, US and UK TV series and documentaries	£5.99 per month	Disney, Universal, Paramount and Sony Pictures; and range of non-major studios, including MGM, Lionsgate, and Momentum	FSPTW, SSPTW, TSPTW, library

List of all Sky Movies channels

Sky's linear movie channels

1. Sky currently broadcasts 11 SD movie channels. Movies on these channels are broadcast without advertising breaks. As explained further below, since 2007 the majority of Sky's movie channels have been dedicated to particular genres of movies. The current channel line-up is set out below.

   Sky Movies Premiere
   Sky Movies Showcase
   Sky Movies Action & Adventure
   Sky Movies Crime & Thriller
   Sky Movies SciFi & Horror
   Sky Movies Classics
   Sky Movies Comedy
   Sky Movies Family
   Sky Movies Drama & Romance
   Sky Movies Modern Greats
   Sky Movies Indie

2. Sky also broadcasts HD versions of all the above channels.

3. Sky Movies Premiere typically broadcasts five new titles per week, and two titles from the previous week, in a variety of genres. It also broadcasts a small amount of 'magazine' programming. Sky Movies Premiere +1 broadcasts the same content as the Sky Movies Premiere channel but 1 hour later.

4. Sky Movies Comedy, Sky Movies Action & Adventure, Sky Movies Family, Sky Movies Crime & Thriller, Sky Movies Drama & Romance, and Sky Movies Sci-Fi & Horror are genre-based channels. Sky Movies Showcase shows movies from a range of genres, including 'seasons' of movies linked by a common theme. Sky Movies Indie shows titles from non-major studios, and Sky Movies Modern Greats and Sky Movies Classics show selections of library movies.

5. Customers who subscribe to all Sky's movie channels (dual movies customers) also receive the Disney Cinemagic channel. Customers may also subscribe to Disney Cinemagic on a stand-alone basis.

The growth of TVOD and EST services

Introduction

1. Prior to our August 2011 provisional findings, we considered whether market and technological developments might, in the foreseeable future, increase the adoption of TVOD and EST services.

2. As part of this analysis, in early 2011, we asked the six major studios for their TVOD and EST revenues in the last three years and for their forecasts for 2011. In this appendix we present their responses to this request.[1]

Studio data

3. We asked the studios to provide us with TVOD and EST sales data, broken down by release window, in both absolute terms and as a proportion of their total UK movie distribution revenues.

TVOD and EST revenues prior to the FSPTW

4. Figure 1 shows the aggregate UK TVOD and EST revenues generated prior to the FSPTW by the six major studios between 2007 and 2010, with an estimate for 2011. The figure shows that these revenues grew slightly over the period, but a faster rate of growth was expected for 2011.[2]

FIGURE 1

Total UK TVOD and EST revenues (prior to the FSPTW) for the six largest studios

[✂]

Source: The six major studios.

5. Tables 1 and 2 show, separately, each studio's UK TVOD and EST revenues prior to the FSPTW for the periods 2007 to 2010, and their forecasts for 2011.[3]

[1] In several cases, studios told us that they did not collect the data in the categories that we had requested. As a result, there are some gaps in the data.
[2] We did not receive 2011 estimates from [✂].
[3] Not all studios were able to supply all the data requested.

TABLE 1 **Studio TVOD revenue pre-FSPTW, 2007 to 2011**

$'000

	Fox	*Warner*	*Universal*	*Disney*	*Sony Pictures*	*Paramount*	*Total*
2007	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2008	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2009	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2010	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2011	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: The six major studios.

TABLE 2 **Studio EST revenue pre-FSPTW, 2007 to 2011**

$'000

	Fox	*Warner*	*Universal*	*Disney*	*Sony Pictures*	*Paramount*	*Total*
2007	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2008	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2009	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2010	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2011	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: The six major studios.

6. The data suggested that, prior to the FSPTW, TVOD sales had generated significantly more revenue for the studios than EST sales. However, the studios' TVOD revenues had not changed much over the last four years, whereas their EST sales were growing rapidly, albeit from a small base.

7. The studios' responses suggested that the growth in EST sales up to 2011 had been driven by [✂]. For example, Sony Pictures said that [✂] accounted for [✂] per cent of its UK EST sales, [✂] via the PlayStation Network.

8. Universal told us that the main drivers of its DTR sales were [✂]. We noted that the volume of TVOD sales [✂] has fallen in the last few years, but the studios' forecasts for 2011 included some growth from other Internet-distributed TVOD services. In particular, one studio (Warner) told us that it was forecasting significant growth (around [✂] per cent) in its [✂] TVOD sales in 2011, based on the assumptions that existing TVOD services would develop and new ones would come to market, for example those seeking to reach Internet-connected TVs, games consoles and tablet computers.[4] This studio said that, for these reasons, it expected consumers' consumption of VOD to continue to increase. As an example of the developing nature of this sector, we noted that Tesco, through its acquisition of a majority stake in Blinkbox, appeared to be expanding its TVOD and EST services.[5]

9. Disney told us that it thought TVOD usage would increase substantially once it could be viewed on TV, and indicated that the launch of YouView could be important in enabling this change. Disney predicted significant growth in two to five years, depending on the performance of projects like YouView. Sony Pictures said that it expected Internet-based viewing to grow and cited both YouView and Netflix as potentially significant new enablers of this growth. Paramount also said that this sector of the market was undergoing a process of accelerated change through opportunities like YouView. In contrast, a non-major studio told us that technology

[4] Warner told us that its total TVOD/EST unit sales of movies and TV programming grew by approximately [✂] per cent between 2010 and 2011.
[5] www.ft.com/cms/s/2/f13f2c28-6b55-11e0-9be1-00144feab49a.html#axzz1LNfsVrcy.

adoption tended to be slower than many observers anticipated, citing the adoption of DTH services and DVDs as historic examples of technologies which took a long time to become established.

10. We asked the studios whether the increase in EST sales was reducing the demand for other ways of watching movies and, in particular, whether it was reducing DVD sales. However, none of the studios said that they had any evidence to indicate this was the case.

TVOD sales during and post-FSPTW and EST sales post-FSPTW

11. There are no TVOD sales of movies of the major studios in the FSPTW (or for a short blackout period immediately prior to the FSPTW) due to [✂]. EST sales occur during the FSPTW but one studio estimated that only about 15 per cent of EST sales took place during the FSPTW, with the majority taking place earlier.

12. Figure 2 shows the aggregate UK TVOD and EST revenues generated post-FSPTW by four of the six major studios between 2008 and 2010, with an estimate for 2011. The figure shows that these revenues grew significantly in the period and were expected to increase further in 2011.[6] However, the value of TVOD and EST revenues post-FSPTW were significantly lower than pre-FSPTW.

FIGURE 2

Total VOD revenue post-FSPTW—four studios

[✂]

Source: Four of the six major studios.

13. Tables 3, 4 and 5 show each studio's actual UK TVOD revenues post-FSPTW and their UK EST revenues during the FSPTW and post-FSPTW for the periods 2007 to 2010, together with their forecasts for 2011.[7]

TABLE 3 **Studio TVOD sales post-FSPTW, 2007 to 2011**

$'000

	Fox	*Warner*	*Universal*	*Disney*	*Sony Pictures*	*Paramount*	*Total*
2007	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2008	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2009	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2010	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2011	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: The six major studios.

[6] We have excluded 2007 EST data for all studios and all the data relating to two studios as these data sets were incomplete.
[7] Not all studios were able to supply all the data requested.

TABLE 4 **Studio EST sales during the FSPTW, 2007 to 2011**

$'000

	Fox	*Warner*	*Universal*	*Disney*	*Sony Pictures*	*Paramount*	*Total*
2008	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2009	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2010	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2011	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: The six major studios.

TABLE 5 **Studio EST sales post-FSPTW, 2007 to 2011**

$'000

	Fox	*Warner*	*Universal*	*Disney*	*Sony Pictures*	*Paramount*	*Total*
2007	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2008	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2009	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2010	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2011	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: The six major studios.

14. The data indicated a similar pattern to that seen in the period prior to the FSPTW, with little overall change over the last four years in TVOD revenues but rapid growth in EST revenues, albeit again from a small base. The revenue generated from both TVOD and EST sales after the FSPTW was much smaller than prior to the FSPTW, indicating that most sales tended to take place early in a title's release cycle.

TVOD revenues as a proportion of the studios' overall UK revenues

15. We asked the six major studios to tell us the proportion of their total UK distribution revenues accounted for by TVOD between 2007 and 2010, and their forecasts for 2011. Table 6 shows their responses.[8]

TABLE 6 **The significance of TVOD revenues to the studios**

per cent

	Fox	*Warner*	*NBCU*	*Disney*	*Sony Pictures*	*Paramount*
2007	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2008	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2009	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2010	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2011	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: The six major studios.

16. We noted that, in making the calculation, two studios excluded DVD/Blu-ray sales and cinematic exhibition and, as a result, the proportion of their revenues attributable to TVOD appeared higher relative to the other studios. The data submitted by the other four studios, which based their calculations on all UK distribution revenues, suggested that TVOD represented less than 5 per cent of the studios' overall revenues in the UK.

[8] Not all studios were able to supply all the data requested.

17. Sony Pictures told us that [✂]. Sony Pictures said that, in 2008, TVOD represented [✂] per cent of its total UK TV distribution revenues and, by 2010, [✂]. Sony Pictures forecast that, in 2011, TVOD would represent [✂] per cent of its total UK TV distribution revenues.

Overall assessment

18. The six major studios' UK sales of TVOD have not changed much in recent years. Although, in early 2011, the studios forecast some growth in 2011, driven in particular by the adoption of Internet-connected devices, the studios did not forecast significant growth.

19. The major studios' UK sales of EST have increased rapidly over recent years, driven largely by demand for movie content through [✂]. In early 2011, the studios expected this growth to continue, although at that time the absolute value of sales remained small relative to the studios' sales of TVOD and their other channels of distribution.

20. However, since gathering this evidence, more TVOD and EST services have launched in the UK and some existing services have expanded (eg KnowHow (from Dixons) and YouTube). In addition, the stand-alone SVOD services of LOVEFiLM, Netflix and Sky's Now TV have launched. Therefore, we noted that the results and forecasts presented in this appendix may not reflect the studios' current expectations. Following the entry of the OTT SVOD services of LOVEFiLM and Netflix, we asked the major studios about the effect they expected these services to have on the number of subscribers to Sky Movies and the value to them of their licensing agreements with Sky, and we present the results of this analysis in Appendix 4.2.

Technology adoption in other sectors

1. We considered whether the adoption of technology in other sectors could be informative about the likely rate of adoption of technology which would enable consumers to view VOD content distributed over the Internet on a TV. We considered the experience of Freeview and the growth of Internet-distributed recorded music.

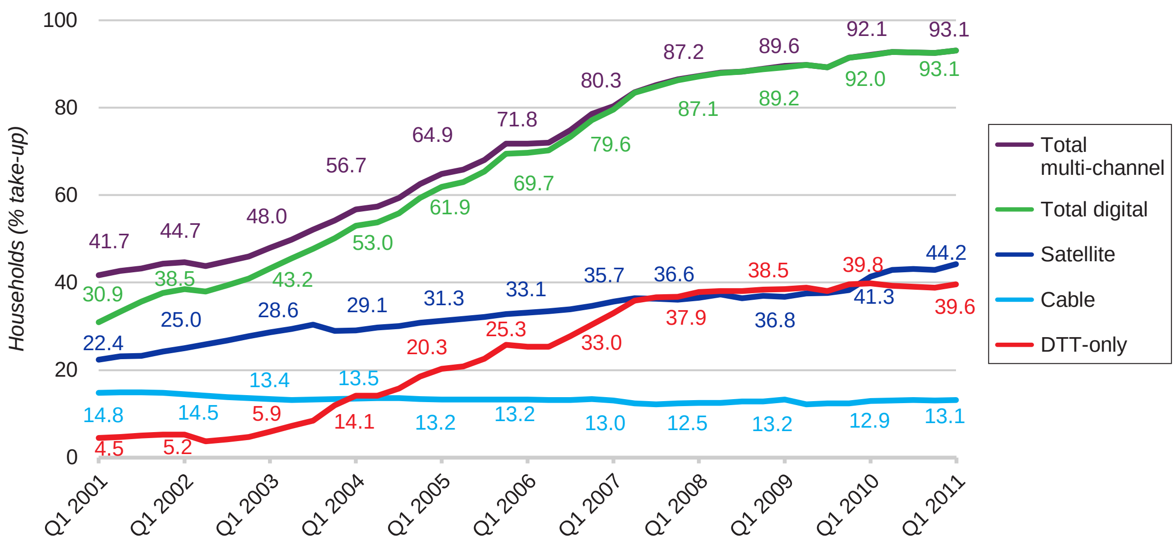
Freeview

2. We looked at the adoption pattern of Freeview (DTT) to see if it could tell us anything about the adoption of other technologies and services which would enable consumers to view VOD content distributed over the Internet on a TV, in particular YouView. We noted that there were some similarities between Freeview and YouView as both enabled consumers to access the linear channels broadcast over DTT and neither required consumers to purchase a subscription. However, there were also differences as consumers of YouView would need a broadband Internet connection to access the range of on-demand services available.

3. Figure 1 shows the rate of adoption of Freeview (shown as DTT-only) in comparison with the adoption of other digital-TV platforms.

FIGURE 1

Digital/multi-channel TV progress, 2001 to 2011



Source: Ofcom, GfK NOP research from Q1 2007, previous quarters include subscriber data and Ofcom market estimates for DTT and free satellite.
Note: Data from Q1 2007 is based on consumer research.

4. Figure 1 shows that Freeview took over three years from its launch in 2002 to achieve 20 per cent penetration of UK households (ie around 5 million households). We noted that Freeview also benefited from the prospect of digital switchover, while no equivalent deadline exists to encourage the adoption of YouView. On the other hand, we noted that, when Freeview launched, neither ITV nor Channel 4 were

partners in the project and it was their additional investment, from 2005, which made significant marketing of the service possible.[1] Furthermore, we noted that consumers now upgrade their TV sets more frequently, which may enable new services, such as YouView, to achieve a faster rate of penetration than past services had achieved.[2]

Recorded music

5. We also looked at the adoption of technology relevant to the electronic distribution of recorded music. We looked at sales of digital music downloads and the extent to which they had replaced CDs. Although there were some obvious differences between recorded music and movies (in particular, recorded music is not marketed for rental), we thought this sector might provide an additional perspective on the likely rate of adoption of Internet-distributed VOD content.

6. Table 1 shows the value of recorded music sales in different formats for the three years 2008 to 2010.

TABLE 1 **Retail sales of music**

£ million

	2008	*2009*	*2010*	*% change*
Singles				
Physical	13.2	9.5	6.9	–27.0
Digital*	87.7	119.3	133.9	12.2
Total	101.0	128.7	140.8	9.4
Albums				
Physical†	1,097.6	1,010.0	863.2	–14.5
Digital	76.3	119.1	146.8	23.3
Total	1,173.9	1,129.1	1,010.0	–10.5
Music video	49.6	55.9	49.9	–10.7
Total	1,324.4	1,313.7	1,200.7	–8.6

Source: OCC (www.eraltd.org/downloads/stats/MusicMarket.pdf).

*Combines single track and bundle sales.
†Upweighted by 5 per cent from OCC numbers to reflect 100 per cent of market.

7. Table 1 shows that, in 2010, combined digital revenues across singles and albums accounted for 23 per cent of the value of the recorded music market, compared with 18 per cent in 2009 and 12 per cent in 2008, indicating a rapid switch in consumer behaviour. However, given that iTunes launched in the UK in 2004, it appeared to us that the switch to digital downloading took a few years to become established.[3] We noted that the development of digital music downloading in the early 2000s was limited to some extent by the low rate of broadband Internet penetration in the UK at that time, which had increased substantially since.

[1] www.independent.co.uk/news/business/news/itv-and-c4-invest-in-freeview-stake-510733.html.
[2] Communications Market Report 2010, p113, Ofcom, and http://stakeholders.ofcom.org.uk/binaries/broadcast/reviews-investigations/psb-review/psb2010/overview1.pdf.
[3] http://news.bbc.co.uk/1/hi/entertainment/3805565.stm.

Premium movie content on pay-TV services in the USA

Introduction

1. Several parties told us that the US pay-TV market was different from the UK pay-TV market. BT, for example, told us that arrangements in the UK between Sky and the six major studios precluded the development of stand-alone SVOD services with FSPTW content (ie services without the requirement to subscribe to a linear channel showing the same content). BT contrasted this situation with that in the USA where stand-alone SVOD services were available. Sky told us that the standard model, worldwide, was for licensees of pay-TV rights to enable subscribers to their services to view programming on both linear channels and via complementary VOD services. Sky said that the principal exception of which it was aware was Netflix in the USA, but Sky described this situation as an anomaly.

2. In this appendix we describe the supply of premium movie content on pay-TV services in the USA.

Movie content on pay-TV services in the USA

Suppliers of premium movie content on pay TV

3. In the USA, rights to show movies from the six major studios in the FSPTW are split between three movie channel providers, each of which has exclusive rights to the content from the studios with which they have contracted, as indicated in Table 1.

TABLE 1 **Suppliers of premium movie content on pay TV in the USA**

Rights owner	*Channel provider*	*Parent company of channel provider*
20th Century Fox Universal Studios Warner Bros	HBO	Time Warner
Walt Disney Studios Sony Pictures Entertainment	Starz	Liberty Media
Paramount	EPIX	Joint venture between Paramount/ Viacom, Lionsgate and MGM

Source: Screen Digest.

4. Of these pay-TV movie channel providers, HBO has the largest subscriber base (28.3 million) and Showtime the next largest (20.5 million) followed by Starz (almost 19 million).[1] The channels of these providers, which include a mix of movie content and other content, are available to subscribers over cable and satellite platforms (called ‘networks’), and, with additional on-demand content, are available over the Internet (eg HBO On Demand and Starz Play).[2]

5. EPIX, a joint venture between Paramount, Lionsgate and MGM, was launched in October 2009. These three studios decided to form EPIX in 2008 after negotiations to

[1] www.variety.com/article/VR1118042241 (September 2011).
[2] www.hbogo.com/ and www.starz.com/.

extend their respective deals with Showtime[3] broke down.[4] EPIX offers movies in the FSPTW from the joint venture partners, as well as library movies, via a linear pay-TV service and, like HBO and Starz, via an Internet VOD service (EpixHD.com).[5]

6. Initially, EPIX found it difficult to negotiate carriage agreements with pay-TV distributors,[6] though, by spring 2010, it had entered into six carriage agreements, including with the DISH Network.[7] As a result of these deals, EPIX was available to approximately 33 million pay-TV households (ie about one-third of all pay-TV households in the USA). At the end of 2010, EPIX had [✂] million subscribers. At the time of our report, we understood that EPIX was still not available to subscribers of the two largest pay-TV distributors in the USA, Comcast and DirecTV.[8]

Netflix

7. Netflix, originally a provider of mail-order home video rental services, expanded its business to include an online SVOD streaming service. Netflix now has over 23 million subscribers.

8. In 2008, Netflix and Starz reached an agreement which enabled Netflix to stream the Starz Play service to its subscribers in a Starz-branded section of the Netflix website. This service provided Netflix subscribers with access to both Starz' on-demand and linear content, which included the FSPTW content of both Sony Pictures[9] and Disney.

9. In August 2010, EPIX and Netflix announced a deal to make EPIX content available as part of the Netflix SVOD service. Under the terms of the agreement, which was said to be worth around $1 billion over five years,[10] [✂].

10. The movies from EPIX are available in all of Netflix's subscription plans (though Netflix's lowest-priced plan limits subscribers to 2 hours of streaming per month). The EPIX content is not separately branded on the Netflix website. In addition, Netflix has reached direct agreements with several smaller studios,[11] which add to the range of recently-released movie content it is able to offer.

11. The Starz deal, valued at $20–$30 million a year, was seen widely in the industry as very good value from Netflix's perspective. The price it paid was described as 'a fraction of what cable operators had paid Starz'[12] and 'ridiculously cheap'.[13] We noted that several media commentators had suggested that the ability of Starz to

---

[3] An operator of pay-TV channels, www.sho.com/site/about.do.
[4] From 1997 to 2008 Paramount had an output deal with Showtime. The MGM and Lionsgate agreements with Showtime also expired in 2008.
[5] http://corp.EPIXhd.com/. This service also carries the linear EPIX channel.
[6] http://latimesblogs.latimes.com/entertainmentnewsbuzz/2009/03/studios-EPIX-ve.html.
[7] http://EPIXnews.tumblr.com/post/533727849/EPIX-goes-coast-to-coast-inks-first-nationwide and www.screendigest.com/news/EPIX-battle-for-carriage-yields-dish-deal/view.html.
[8] We noted that DirecTV had suggested that another premium movie service was not needed, given the decline in the popularity of pay-TV movie channels (www.multichannel.com/article/326722-DirecTV_Will_Pass_On_EPIX.php).
[9] In November 2010, Sony Pictures launched its own movie streaming service, available on its IETVs, PS3 games consoles and connected Blu-ray disc players: www.trustedreviews.com/home-cinema/news/2010/11/24/Sony-Launches-Movie-Streaming-Service/p1.
[10] www.bloomberg.com/news/2010-08-10/netflix-signs-deal-with-EPIX-to-put-studio-movies-available-on-internet.html.
[11] http://netflix.mediaroom.com/index.php?s=43&item=347;
http://netflix.mediaroom.com/index.php?s=43&item=361;
http://netflix.mediaroom.com/index.php?s=43&item=367;
http://netflix.mediaroom.com/index.php?s=43&item=377.
[12] www.reuters.com/article/idUSTRE6B754A20101208.
[13] www.nypost.com/p/news/business/netflix_wishing_on_starz_deal_eQnj155VqsKPJWf4dwJMwM.

exploit in this way the rights that it had obtained from the studios had not been foreseen by at least one of the studios concerned.[14]

12. Sky said that the arrangement between Netflix and Starz had enabled Starz to make its service available via a broad range of Internet-connected devices (such as Xbox360s and Sony Internet-connected TVs) without having to enter into agreements with the device platform providers.

13. However, in February 2012, Starz and Netflix were unable to agree terms for a new agreement[15] and, since then, the Starz content has not been available on Netflix. Netflix has indicated, though, that the loss of the Starz content, or any one content supplier, was not critical to its business.[16]

14. Sky told us that the deal between Netflix and EPIX was an anomaly, reflecting the particular circumstances that were facing EPIX. Sky said that the large amount that Netflix had been prepared to pay to obtain access to movies from EPIX was likely to have been very attractive to at least two of the partners in the joint venture, ie Paramount and MGM.[17] Sky told us that Paramount relied upon EPIX for the exploitation on pay TV of its movie content, and that EPIX had struggled to achieve a broad distribution of its content through carriage agreements. Sky told us that, for this reason, Paramount would have faced the prospect of a relatively limited future income stream from pay TV in the USA. Sky also told us that, as a new service with relatively narrow distribution, EPIX did not have a large existing subscriber base which was at risk of being cannibalized as a result of its deal with Netflix.

Comparison between the USA and the UK

15. We identified four principal differences between the movie services available in the UK pay-TV market and the movie services available in the US pay-TV market:

(a) In the USA, the rights to distribute the FSPTW movie content of the six major studios are split between three pay-TV providers (HBO, Starz and EPIX); whereas, in the UK, Sky holds all these rights.

(b) In the USA, two out of the three pay-TV providers of services with FSPTW content are (part) owned by one or more of the major studios and have access to the content of those studios (HBO and EPIX).

(c) Although HBO and Starz both hold the FSPTW rights of more than one major studio, EPIX holds the FSPTW rights of just one major studio (Paramount), though it also has content from significant non-major studios, including Lionsgate, MGM, Samuel Goldwyn Films and Roadside Attractions. Despite this, EPIX has appeared to find it challenging to increase its carriage on US traditional pay-TV platforms.

(d) Netflix, previously a subscription mail-order home video rental business, provides an Internet-distributed stand-alone SVOD service offering major studio FSPTW movie content from EPIX (and formerly also from Starz). Currently, no stand-alone SVOD service in the UK offers the FSPTW of any major movie studio.[18]

[14] http://mashable.com/2010/07/06/netflix-relativity-media/.
[15] The FSPTW content of Sony Pictures ceased being available on the Netflix service in mid-2011.
[16] www.multichannel.com/article/460859-Netflix_CEO_Starz_Renewal_Isn_t_Critical.php.
[17] We noted that, shortly after the deal with EPIX took place, MGM filed for Chapter 11 bankruptcy protection.
[18] Sky Movies on Now TV is not a stand-alone SVOD service as it also offers the Sky Movies linear channels.

Competition between movie studios in the upstream market

Introduction

1. In this appendix we explain which of the activities of the movie studios we were primarily interested in for the purposes of our inquiry and then set out our analysis of competition in relation to these activities. We undertook this analysis with a view to establishing whether there were any reasons to investigate a distinct theory of harm relating to ineffective competition at the upstream level.

The focus of our analysis of upstream competition

2. Given our focus on the 'supply and acquisition of subscription pay TV movie rights' (see Appendix 1.1), we were interested principally in the licensing of movies, ie the distribution activities undertaken by studios (or independent distributors) rather than their production activities. In many cases, the studio that distributes a given movie will also have produced it (either in-house or via an independent or affiliated production company).[1] However, in some cases, the studio or independent distributor that distributes a given movie does so on behalf of another entity. In particular, some of the smaller studios license some or all of the rights to distribute their movies to major studios or independent distributors.

3. In May 2011, we asked the six major studios, all of which have large distribution operations, to tell us the source of the films they distribute on pay TV in the UK. Table 1 summarizes their responses. Table 1 indicates that most of the major studios have participated in arrangements to distribute some content produced by other studios.

TABLE 1 **Agreements for the distribution of movies on pay TV in the UK between the major studios and other studios, May 2011**

Fox	Fox told us that the majority of the movies which it distributed on pay TV in the UK had been produced and financed at least in part by Fox. A limited number of movies produced by other parties were acquired by Fox for distribution in a limited number of territories, which may include the UK.
Disney	Disney told us that, pursuant to an agreement in 2009, it distributed on pay TV in the UK certain live action movies controlled by Dreamworks.
Sony Pictures	Sony Pictures told us that it [✂].
Paramount	Paramount told us that it acquired UK distribution rights to movies from a number of sources. Paramount said that it gained some distribution rights from co-financing movies and it also acted as distributor for some other studios, including Dreamworks Animation and Marvel Studios.
Universal	Universal told us that it had a [✂] agreement with [✂] to distribute its films in [✂], though this agreement was amended in [✂] and now excluded distribution in the UK (other than for a package of library titles).
Warner	Warner told us that it acquired occasional distribution rights to individual movies produced and/or licensed by other studios.

Source: Six major studios.

[1] When movies are produced by independent production companies, the movie studio commissioning the movie will typically play a central role in the development and financing of the project.

Competition between distributors of movie content

4. In considering the nature and extent of competition between the distributors of movie content, we considered the following evidence:

   (a) measures of concentration;

   (b) the nature and extent of rivalry between studios for pay-TV distribution;

   (c) trends in pricing;

   (d) trends in investment in new films; and

   (e) trends in advertising.

Measures of concentration

5. In working paper 3 we provided a high level analysis of box office shares for the period 2005 to 2009 based on data submitted to us by Paramount. In working paper 24 we supplemented this analysis by using data assembled by the UK Film Council on the distribution of movie distributors according to size (see Table 2) and the box office revenues for the top 10 distributors in the UK for 2009 and for the period 2004 to 2009 (since updated to 2011) (see Tables 3 and 4).[2]

6. There are two caveats associated with this data. First, it relates to theatrical distributors (ie the distributor of the movie to cinemas) and this might not always coincide with the distributor of the movie to pay TV. Second, box office revenues may be an imperfect measure of the degree to which a distributor is likely to have market power when selling rights to pay TV, though we have been told that it is a key factor in determining the value of FSPTW rights.

TABLE 2 **Size distribution of film distribution companies, 2009**

Turnover size band £'000	*Number*	*%*	*Turnover*	*%*
5,000+	30	7.1	2,709,356	94.3
1,000–4,999	50	11.9	98,396	3.4
500–999	45	10.7	29,854	1
250–499	50	11.9	15,815	0.6
100–249	85	20.2	11,826	0.4
50–99	75	17.9	5,448	0.2
0–49	85	20.2	1,660	0.1
Total	420	100	2,872,355	100

Source: UK Film Council Yearbook 2010.

7. Table 2 indicates that film distribution in the UK is dominated by a few very large firms, though there are many small firms. Table 3 sets out the distributor share data for 2009.

[2] We cross-checked the Paramount data against that supplied by the UK Film Council and there were some differences. We decided to use the UK Film Council data because the basis on which it had been prepared was more transparent.

TABLE 3 **Distributor share of total UK box office gross revenue, number of films by distributor and box office gross revenue by distributor, for the UK and Republic of Ireland, 2009**

Distributor	*Market share %*	*Films on release 2009*	*Box office gross £m**
20th Century Fox	16.6	24	178.7
Walt Disney Studios	12.4	22	133.3
Sony Pictures	11.3	28	122.2
Warner Bros	11.2	25	120.8
Paramount	10.8	19	116.6
Universal Pictures	10.5	29	113.4
Entertainment	8.6	24	92.4
E1 Films	4.9	11	53.1
Lionsgate	2.9	14	31.8
Pathé	2.9	5	31.7
Subtotal	92.2	201	994
Others (83 distributors)	7.8	374	83.5
Total	100.0	575	1,077.50

Source: UK Film Council Yearbook 2010.

*Box office gross = cumulative box office total for all films handled by the distributor in the period 2 January 2009 to 3 January 2010.

Note: Percentages do not add to subtotal due to rounding.

8. Table 3 indicates that, in 2009, the top ten distributors had a 92 per cent share of UK and Republic of Ireland box office revenues. The remaining 83 distributors handled a total of 374 titles, ie 65 per cent of the total number of titles, but gained only an 8 per cent share of box office revenues. The leading distributor for 2009 was Fox (17 per cent),[3] with the other five major studios all achieving a share of UK and Republic of Ireland box office revenues between 10.5 and 12.4 per cent. Together, the six major studios accounted for 73 per cent of UK and Republic of Ireland box office revenues.

9. Table 4 sets out the distributor share data for 2004 to 2011.

[3] The UK Film Council suggested that part of Fox's success in this year might be explained by the fact that it released Avatar, the highest-grossing film of all time in the UK at the point of Yearbook publication (even though the data only included box office data up until 3 January 2010 and at that point Avatar had not yet achieved this record).

TABLE 4 **Distributor share of total UK box office gross revenue, for the UK and Republic of Ireland, 2004 to 2011**

per cent

Distributor	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*
Fox	10.7	14.3	20.9	13.9	9.4	16.6	10.4	10.3
Disney	14.5	13.1	15.7	10.7	9.9	12.4	15.2	8.6
Sony Pictures	10.0	6.8	16.1	8.2	12.5	11.3	7.5	7.7
Warner	14.7	18.2	8.2	15.6	11.0	11.2	18.3	18.7
Paramount	-	-	-	14.7	16.9	10.8	16.6	16.2
Universal	-	-	-	13.9	18.5	10.5	11.2	12.1
UIP*	29.8	29.1	18.9	-	-	-	-	-
Major 6 total (including UIP)	79.7	81.5	79.8	77.0	78.2	72.8	79.2	73.6
Entertainment	7.9	9.4	7.9	9.5	8.0	8.6	2.2	6.9
E1 Films	-	-	-	-	-	4.9	5.9	5.0
Lions Gate	1.0	0.3	2.4	2.3	2.5	2.9	3.8	1.6
Pathé	2.8	3.4	3.2	1.3	2.1	2.9	-	-
Momentum	2.2	1.9	2.3	3.4	3.5	-	1.3	4.7
Top 10 total†	96.1	97.3	96.4	94.5	94.5	92.2	92.4	91.8
Others	3.9	2.7	3.6	5.5	5.5	7.8	7.6	8.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
HHI‡	1,620	1,710	1,460	1,170	1,210	1,080	1,240	1,160

Source: UK Film Council Yearbook 2010 and Rentrak, CC analysis.

*Until 2007 Paramount and Universal distributed jointly as UIP.
†Top 10 total refers to the top 10 distributors of that particular year. The table is ranked by the top 10 distributors in 2009.
‡Herfindahl-Hirschman Index. 'Others' are treated as one entity for purposes of calculating HHI figures.
Note: Percentages may not add to subtotals due to rounding.

10. Table 4 shows that the distributors' market shares fluctuate from year to year. In particular:

(a) No one major studio achieved a consistently higher market share than the other major studios during the period: in 2004 and 2005, UIP had the highest share; in 2006 and 2009 it was Fox; in 2007 it was Warner; and in 2008 it was Universal. The box office share of each studio varied by at least six percentage points over the period (2007 to 2011 for Universal and Paramount, 2004 to 2011 for the others).

(b) For most of the period (2004 to 2008), the total box office share of the six major studios was relatively constant at between 77 and 82 per cent. However, in 2009 their cumulative share of the box office fell to 73 per cent and in 2011 it was 74 per cent.

11. Using this data, we calculated the HHI index for each year from 2004 to 2009 (in doing so we treated 'others' as one entity which would slightly overstate the HHI). We found that the HHI index decreased significantly from around 1,600 to 1,700 in 2004 to 2005 to around 1,000 to 1,200 in 2007 to 2009.[4] The primary reason for the significant fall in the HHI between 2006 and 2007 appeared to be Universal and Paramount beginning to distribute separately (rather than via UIP). However, the later increase in the share of box office revenues attributable to non-major studios also contributed to reducing the HHI.

[4] By way of comparison, our current market investigation guidelines note that the OFT is likely to regard any market with an HHI in excess of 1,800 as highly concentrated, and any market with an HHI in excess of 1,000 as concentrated. *CC3, Market Investigation References: CC Guidelines*, paragraph 3.11. Our new draft market guidelines state (Annex A, paragraph 7) that we are likely to regard any market with an HHI in excess of 2,000 as highly concentrated and any market with an HHI in excess of 1,000 as concentrated (which is consistent with our approach in the joint CC/OFT Merger Assessment Guidelines and with the European Commission's guidelines on the assessment of horizontal mergers under the Council Regulation on the control of concentrations between undertakings—Commission notice (2004/C31/03).

Rivalry between movie studios for the sale of FSPTW rights

12. As further evidence of the extent of competition in the upstream market, we considered the process of rivalry between studios and, in particular, the process of rivalry to sell their FSPTW rights.

13. We reviewed internal documents submitted to us by Sky which concerned its negotiations with the studios for their FSPTW rights. These documents indicated that: [✂].

14. [✂]:

    (a) Sky's 'plan B' analysis [✂], which indicated Sky's belief that it could [✂].

    (b) Sky's 'plan B' analysis [✂] in case Sky did not renew its deal [✂]. This analysis also concluded that Sky could [✂].

    (c) Sky's 'plan B' analysis [✂] in case it did not renew its deal [✂].

    (d) [✂].[5]

15. With regard to the importance of any particular studio, [✂].

FIGURE 1

[✂]

Source: [✂].

[✂]

TABLE 5 [✂]

[✂]

Source: [✂]

[✂]

16. Overall, this evidence suggested that, at the point of contract renewal, each of the major studios faces competition, primarily from each other but also from non-major studios, such that none of the six major studios would be expected to hold significant unilateral market power.

Prices

17. We considered whether there were any trends in the prices Sky paid the studios for FSPTW movie content and, if so, what this might tell us about the degree of competition between the movie studios. We identified three sources of information:

    (a) data that Sky assembled in 2008 on trends in movie studio valuations ([✂]);

    (b) data on Sky's total payments to the major studios between 2007 and 2009; and

---

[5] [✂]

(c) estimates made by Screen Digest in 2007 of the share of revenues paid to the studios by Sky between 2001 and 2011.

18. With regard to paragraph 17*(a)*, Sky compared the value of its deal with Fox in [✂] with its later deals with Disney ([✂]), MGM ([✂]), Sony Pictures ([✂]) and its latest offer from Paramount (as well as two older deals with Warner and Paramount/ Universal). [✂], which is reproduced below as Figure 2. [✂]

FIGURE 2

[✂]

Source: [✂]

19. With regard to paragraph 17*(b)*, Figures 3 and 4 set out [✂].

20. [✂]

FIGURE 3

[✂]

Source: CC analysis of Sky data.

FIGURE 4

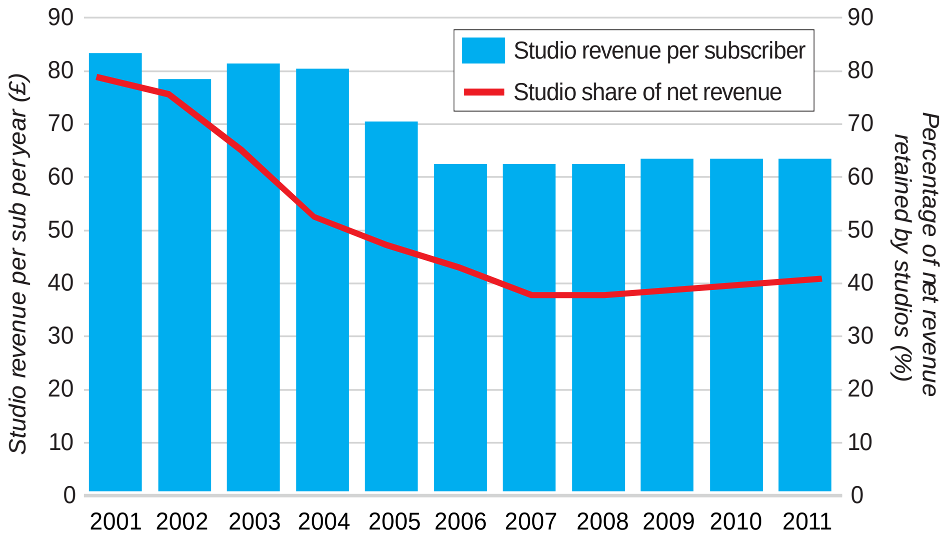
[✂]

Source: CC analysis of Sky data.

21. With regard to paragraph 17*(c)*, Screen Digest, in a 2007 report for Ofcom, provided actual (2001 to 2006) and estimated (2006 to 2011) payments to the studios per subscriber per year, and calculated the studios' shares of net revenue. Its results are shown in Figure 5. This analysis [✂] payments to the studios had declined over time. It also indicated that, over the period 2001 to 2007, the studios' share of net revenue declined significantly. It appeared to us that this trend in prices was consistent with increasing competitive pressure on the studios over this period, although it could have been caused by many other factors.

FIGURE 5

Premium movie channels, revenue sharing between BSkyB and movie rights-holders



Source: Screen Digest.

Notes:

1. Actual payments from Sky to the studios from 2001 to June 2006 sourced from Sky's annual report and accounts. Thereafter, the spending on movie rights per household (the total invested by Sky in film rights divided by the number of premium film channel subscriptions) remained broadly the same until 2011. Screen Digest noted that the total amount spent by Sky on film rights had declined in recent years because Sky had negotiated more favourable contract terms and the value of the US dollar had declined against the pound. Screen Digest took the view that because these contracts were negotiated recently (many of them in 2006), there would not be a significant worsening in terms from Sky's point of view.
2. The percentage of Sky subscribers taking Sky's premium,movies channels declined slightly as a percentage of overall subscribers. Screen Digest based this assumption on evidence on subscription data, DVD data, BARB data etc that pointed at that time to a decline in subscription rates for premium channels. Screen Digest noted that HD quality might act against this trend but not to the point of reversing it.

22. Subsequent to the point at which we conducted this analysis, we found that the amount paid by Sky to the six major studios in 2010/11 had fallen compared with 2009/10 (see paragraph 2.79). However, we noted that Sky forecast a significant increase in the cost of movie rights in 2011/12 (and for the next few years) due to increased competition for these rights. Although this evidence indicated that prices might vary depending on the number of interested buyers (see Appendix 9.1), we did not believe it to be informative about the extent of competition between movie studios.

Number and quality of new films

23. We also looked at box office release data to see whether there were any trends in the number or quality of movies released (measured in terms of box office success), which could provide a rough indication of investment levels over time. High levels of investment and innovation could be consistent with effective competition.

24. It appeared that there was significant volatility in the performance of individual studios in terms of both the number and quality of movies. However, in aggregate, the major studios appeared, over time, to be releasing fewer movies but with increasing box office success (as shown in Table 6).

TABLE 6 **Distributor's number of films and box office gross, 2006 to 2009**

	2006		2007		2008		2009	
Distributor	*Films on release*	*Box office gross (£m) per film*	*Films on release*	*Box office gross (£m) per film*	*Films on release*	*Box office gross (£m) per film*	*Films on release*	*Box office gross (£m) per film*
20th Century Fox	33	5.44	27	4.68	26	3.47	24	7.45
Walt Disney Studios	27	5.00	23	4.23	19	5.02	22	6.06
Sony Pictures	34	4.07	28	2.66	22	5.43	28	4.36
Warner Bros	25	2.83	32	4.42	21	5.01	25	4.83
Paramount			31	4.31	26	6.25	19	6.14
Universal Pictures			24	5.26	31	5.73	29	3.91
UIP	51	3.19						
Total	170	4.04	165	4.24	145	5.17	147	5.34

Source: UK Film Council Statistical Yearbook 2006/2007, 2008, 2009, 2010.

Advertising spend

25. Movie distributors are responsible for promoting their films and we considered that one indicator of effective competition could be high levels of advertising. According to data reported by the UK Film Council (see Table 7), the estimated total distributor advertising spend in 2009 was £168 million, down 2 per cent from £172 million in 2008. However, fewer films were released in 2009, and the average advertising spend per film in 2009, at £0.3 million, was very similar to the average in 2008.[6]

TABLE 7 **Estimated advertising spend, 2003 and 2007 to 2009**

£ million

	2003	*2007*	*2008*	*2009*
TV	61.2	74.1	79.3	74.3
Outdoor	46.6	65.3	56.2	57
Press	30.1	27	22.6	19.9
Radio	9.7	8.4	9.4	10.7
Internet	–	4.7	4.5	6.4
Total	147.6	179.5	172.0	168.3

Source: UK Film Council Yearbook 2010.

Conclusions

26. Overall, from the evidence we saw, we did not believe that there was reason to investigate a distinct theory of harm relating to ineffective competition between movie studios at the upstream level. Neither in response to our August 2011 provisional findings nor at any point subsequently did any party disagree with this conclusion.

[6] Although estimated release costs reported by the UK Film Council indicated that average release costs for the films with the widest releases (>500 sites at the widest point of release) had decreased from 2008 levels.

Demand-side substitutes for Sky Movies

Background

1. For the purpose of market definition, what matters is the total strength of the constraint exercised by all the substitutes for a product. Nonetheless, one of the steps in our market definition assessment was to consider whether other products were close demand-side substitutes for Sky Movies and we set out our analysis in this appendix. In this appendix, where we refer to 'substitute' we mean 'demand-side substitute' unless stated otherwise. The extent to which the OTT services of LOVEFiLM and Netflix are demand-side substitutes for Sky Movies is discussed separately in Appendix 4.2 (at the same time as considering whether these services are demand-side substitutes for traditional pay-TV more generally). Most of the evidence discussed in this appendix pre-dates the launch of these services but, when forming our views on market definition, we considered this evidence in the light of this entry.

2. In general, in our view, another product would be a close demand-side substitute for Sky Movies if the cross-elasticity of demand for Sky Movies with respect to the price of the substitute was high. That is, we would consider the other product a close substitute if a small reduction in its price relative to that of Sky Movies led to a significant reduction in subscriptions to Sky Movies.[1] If there were a close substitute for Sky Movies, the price of the close substitute would be a major determinant of the price of Sky Movies.

3. We were not aware of any econometric estimates on Sky Movies cross-elasticities, but considered that each of the following areas may be informative when assessing whether other products were close substitutes for Sky Movies (though none was without drawbacks):

   (a) Relative price levels. Another product would be more likely to be a close substitute if its effective price to the user was similar (though caution would be needed in dealing with quality differences). Sky charges its subscribers an incremental price per month for taking Sky Movies products[2] but, as discussed in Sections 4 and 6, [✂]. For these combined movies and sports products, there was no simple incremental price for Sky Movies. The incremental prices of the combined movies and sports products were considerably less than the sum of the incremental prices of the relevant Sky Movies and Sky Sports packs, and hence the position for any individual consumer depended on whether the consumer regarded the movies or sports element as marginal to package choice (or was somewhere in between these two possibilities).[3] Nevertheless, we could describe a range for the incremental price of Sky Movies, and Table 1 shows this range for the single

---

[1] Or, equivalently, if a small increase in the price of Sky Movies relative to the price of the substitute product led to a significant substitution from Sky Movies to the substitute product.

[2] We defined a Sky Movies product as any pack of channels with a separate incremental price that included Sky Movies channels (and for convenience we also aggregated the two single movies packs which had different constituent channels). Consequently, as shown in Table 1, there are six such products. We defined incremental price of a Sky Movies product as the difference between the price of a package including the Sky Movies product and the price excluding it.

[3] If Sky Movies was marginal to the consumer's subscription (that is, if the consumer subscribed to Sky Movies because they wanted Sky Sports and Sky Movies did not cost much extra) the incremental price would be given by the difference between the price of a package including Sky Movies and the price excluding Sky Movies (but including Sky Sports). On the other hand, if Sky Sports was marginal to the consumer's subscription (that is, if the consumer subscribed to Sky Sports because they wanted Sky Movies and Sky Sports did not cost much extra) the incremental price would be given by the incremental price of the Sky Movies pack (ie the difference between the price of a package including Sky Movies but not Sky Sports and the price of a package without Sky Movies as well as without Sky Sports).

and dual packs of Sky Movies channels (from hereon we refer in this appendix just to the ‘price’ of ‘single’ or ‘dual movies’).[4]

TABLE 1 **Incremental retail prices of Sky Movies products, March 2012**

			£ per month	
	Product price	*Implied single movies price**	*Implied dual movies price**	*UK subscribers ’000†*
Sky prices				
Single movies	8.00	8.00		[✂]
Dual movies	16.00		16.00	[✂]
Single movies/single sports	18.75	6.25–8.00		[✂]
Dual movies/single sports	24.00		11.50–16.00	[✂]
Single movies/dual sports	24.00	4.00–8.00		[✂]
Dual movies/dual sports	28.00		8.00–16.00	[✂]
Virgin Media prices‡				
Single movies	14.50	13.50		[✂]
Dual movies	19.50		19.50	[✂]
Dual movies/dual sports	29.50		7.00–19.50	[✂]

Source: CC calculations based on Sky data.

*The lower end of the implied price range assumed that the consumer regarded movies as marginal to package choice and was calculated by subtracting the relevant sports product price from the combined product price (for example, the lower end of the implied dual movies price for dual movies/dual sports was £7, calculated as dual movies/dual sports product price (£27) less dual sports product price (£20)); while the upper end of the range assumed that the consumer regarded sports as marginal to package choice and was therefore equal to the relevant movies product price (for example, the upper end of the implied dual movies price for dual movies/ dual sports was £16, ie the dual movies product price).
†October 2011.
‡Virgin Media’s prices are shown for the main Sky Movies products for subscribers to its XL pack of basic channels. [✂]

(b) Relative price trends. Another product would be more likely to be a close substitute if trends in its prices were similar to those for Sky Movies products (although similar trends might be explained by other factors, eg common costs even if the product was not a close substitute). In order to facilitate a comparison with other products, we made an approximate estimate of a weighted average price for Sky Movies (see Appendix 4.11) (we generally refer to this as the average Sky Movies price).[5]

(c) Simple evidence on the trend in Sky Movies subscribers[6] compared with the average price of Sky Movies relative to the average price of the potential substitute product (though, with limited data and approximate average prices, caution was needed in making inferences about causation).

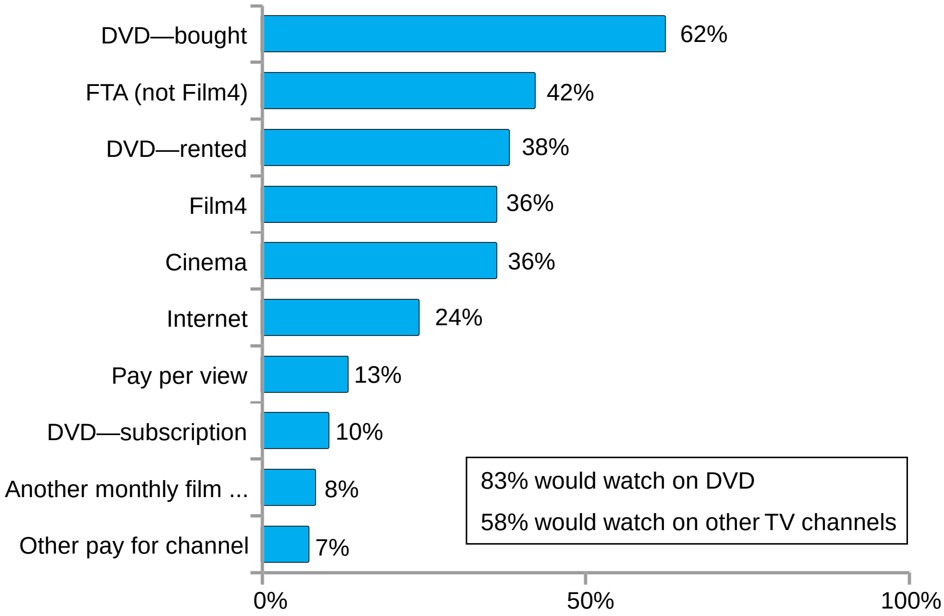
4. In Appendix 4.9, we summarize evidence on why people subscribe to Sky Movies. Most of the reasons related to wanting to watch movies. We saw no evidence that any specific non-movies product was a close substitute for Sky Movies. It therefore appeared to us that any potential close substitute product would include movies. Our December 2010 survey included a question asking Sky Movies subscribers in which ways members of their households would watch films if they did not have Sky Movies channels (see Appendix 4.10).[7] The results are shown in Figure 1. We noted that the

[4] Existing Sky customers at September 2011 benefited from a price freeze and thus paid incremental price £0.50 lower for combined movies and sports products (the price of the movies-only products did not increase in September 2011). Some subscribers of both Sky and Virgin Media may have benefited from discounts and special deals.
[5] Due to data limitations, this only reflected Sky’s prices to satellite subscribers and not those of Virgin Media or Sky Go or Sky by Wire prices.
[6] For consistency with our price index (see previous footnote), this reflected only trends in Sky Movies satellite subscribers with Sky and not Virgin Media, Sky by Wire and Sky Go subscribers.
[7] This question was not asked to those who would switch to another provider with Sky Movies if their current provider stopped offering Sky Movies. See Appendix 4.4.

results shown in Figure 1 seemed broadly consistent with other research reviewed below (see paragraphs 41 to 48).

FIGURE 1

Methods of watching films in the absence of Sky Movies



Source: CC's consumer research (December 2010).
Note: Responses were prompted and respondents could choose more than one way of watching films in the absence of Sky Movies (hence the percentage who would watch on DVD is less than the sum of DVD-bought, DVD-rented and DVD-subscription, and similarly for other TV channels). The base was Sky Movies subscribers who would not switch to another pay-TV provider offering Sky Movies (326).

5. Figure 1 provides an indication of the alternative products which Sky Movies subscribers would use if Sky Movies was not available. We considered that it also provided an indication of the products which might be close substitutes for Sky Movies, and we therefore assessed those products according to the popularity shown in Figure 1, starting with bought DVDs.

DVDs (purchase)

6. Within the general category of bought DVDs, we included SD DVDs, HD Blu-ray discs and analogous digital products bought over the Internet (referred to as EST purchases).[8]

7. It was not easy to compare the price of Sky Movies with the price of DVDs as the basis of charging was different. Sky Movies subscribers could see a large number of movies for a monthly subscription whereas purchasers of DVDs could see a small number of movies a large number of times over a long period (the length of the period would depend on how long the disc/digital download remained usable). Additionally, there were differences in convenience (though these to some extent depended on whether or not Sky Movies subscribers had full SVOD access) and

[8] All these methods of viewing movies are part of the home entertainment movie release window—see Appendix 4.8, Figure 1. In 2009, DVDs accounted for 92 per cent of total value of purchases, and Blu-ray and digital download for just over 6 per cent. and 1 per cent respectively (Source: *British Video Association Yearbook 2010*).

differences in the recency of the movies available, as movies were available on DVD around six to eight months before they were first shown on Sky Movies.[9] A price comparison for any individual household would depend on the number of movies viewed in the course of a month, though the information available to us suggested that this varied considerably between households.[10] There was also significant variation between households in the price of Sky Movies (see Table 1), and DVD prices varied considerably according to the length of time since release.[11]

8. Due to these factors, we did not attempt to make any comparison of Sky Movies and DVD prices. It appeared to us that the differences across consumers made it less likely that DVD purchases were close substitutes for Sky Movies (for example, subscribers whose households watched many movies on Sky Movies channels each month were less likely to see purchasing DVDs as a close substitute than subscribers watching few movies each month[12]), but we did not put much weight on this aspect.

9. It appeared to us that these difficulties did not arise to the same extent when comparing trends in prices, as described in the following paragraphs (though our comparison was nevertheless subject to some uncertainties).[13] As our comparison went back around ten years, we included the prices of video cassettes (VHS) as well as DVDs.[14]

10. Figure 2 shows a comparison between the average retail DVD/VHS price (average value per unit) and a weighted average incremental monthly subscription price for Sky Movies. The real average unit DVD/VHS price (in 2005 money) increased with the introduction of DVDs and reached its peak in 2002. After 2002, the real price declined significantly, with an average rate of decline of 5 per cent per year. The weighted average incremental price of Sky Movies remained broadly constant over time, though there was a spike in 2002. The main component prices of the weighted average incremental price of Sky Movies are shown in Appendix 4.11, Figure 1. With the exception of the single movies price (which declined, mainly due to a significant drop between 2002 and 2003),[15] these component prices also remained broadly constant over time.

---

[9] DVDs can be viewed at any time, but this is not the case for Sky Movies subscribers without full SVOD (eg through Sky Anytime+). There may also be convenience differences associated with DVDs being in physical format.

[10] Survey data reported in Ofcom's Pay TV statement (Figure 88, showing data from a survey carried out in November/ December 2006) suggested that 21 per cent of households with Sky Movies watched between one and four movies on the Sky Movies channels and 39 per cent watched ten or more (the data also suggested that 19 per cent of households were unable to respond or said that they watched on average less than one movie on the Sky Movies channels).

[11] Figure 90 in Ofcom's Pay TV statement suggests that average DVD prices drop from about £13 at release date to about £4 two years later.

[12] This would be the case unless the additional cost of purchasing more DVDs happened to be offset by other factors, such as paying a higher incremental price for Sky Movies or seeing a convenience benefit in viewing DVDs rather than Sky Movies.

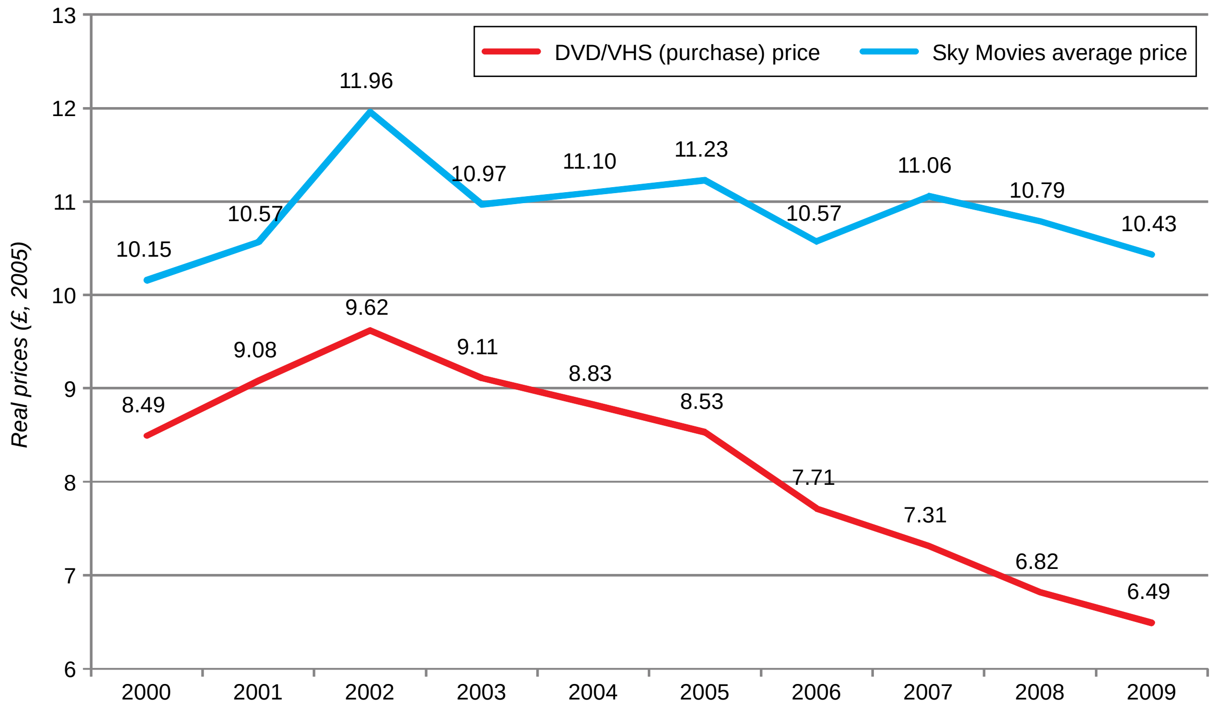
[13] Our indices were of average price paid per subscriber/DVD and thus reflected quality as well as price changes. (We discuss quality changes in paragraphs 12 & 13. Issues in calculating the price for Sky Movies are discussed in Appendix 4.11.)

[14] We also included universal media discs (UMD, for portable PlayStations) and another type of HD DVD, as well as Blu-ray and digital downloads.

[15] Over the entire period, the real subscription charge for single-movie packages declined overall at a rate of 2 per cent.

FIGURE 2

Annual average real prices of Sky Movies and DVD/VHS (purchases) in 2005 money



Source: CC calculations based on data from *UK Film Council Statistical Yearbook 2010*, *British Video Association Yearbook 2010* and Sky.
Note: Prices were adjusted for changes in the CPI and shown in 2005 money. DVD/VHS prices represented average real value per transaction for the number of movies sold on video. DVD/VHD (purchases) included all physical video formats, including DVD, VHS, Blu-ray, UMD, HD DVD and also digital downloads (movies-only data was not available for digital—we assumed that the movies proportion of digital was the same as the movies proportion for physical DVDs). The calculation of the average price of Sky Movies retailed by Sky is described in Appendix 4.11.

11. Figure 2 did not suggest a close correlation between changes in DVD/VHS prices and in the incremental price of Sky Movies packages. However, Sky pointed out that the quality of Sky Movies had improved, mentioning specifically:

(a) an improvement in the mix of titles broadcast, [✂];

(b) moving forward the FSPTW so that movies could be shown on Sky Movies sooner after cinematic release;

(c) the transformation in April 2007 of Sky's three movie channels (plus multiplexed versions of those channels) into nine new thematic channels; and

(d) the introduction of PIN protection for movie channels in January 2006, which meant that 12 certificate and 15 certificate movies could now be scheduled before 8pm.

12. However, we noted that the quality of DVD/VHS also improved over the period: DVD release dates were brought forward nearer to cinematic release, superior-quality DVDs replaced VHS cassettes and HD Blu-ray discs were to some extent replacing

conventional DVDs.[16] It was not obvious to us that the quality improvement was greater for Sky Movies than for DVD/VHS and, even if it was, it seemed implausible that the difference could be large enough to account for the divergence in price trends.

13. We also considered trends in the level of Sky Movies subscribers compared with Sky Movies prices relative to DVD/VHS prices (see Figure 3). [✄][17] the price of Sky Movies relative to DVD/VHS increased significantly between 2003 and 2008, due to the decline in DVD/VHS prices shown in Figure 2. The increase in the price of Sky Movies relative to the price of DVD/VHS might well have been one of the reasons for the decrease in the number of Sky Movies subscribers.[18] However, the size and timing ([✄]) of the drop in Sky Movies subscribers did not seem consistent with DVD/VHS being a close substitute. Figure 3 also shows trends in DVD/VHS volumes, which did not seem closely correlated with trends in the price of DVDs/VHS relative to the price of Sky Movies.

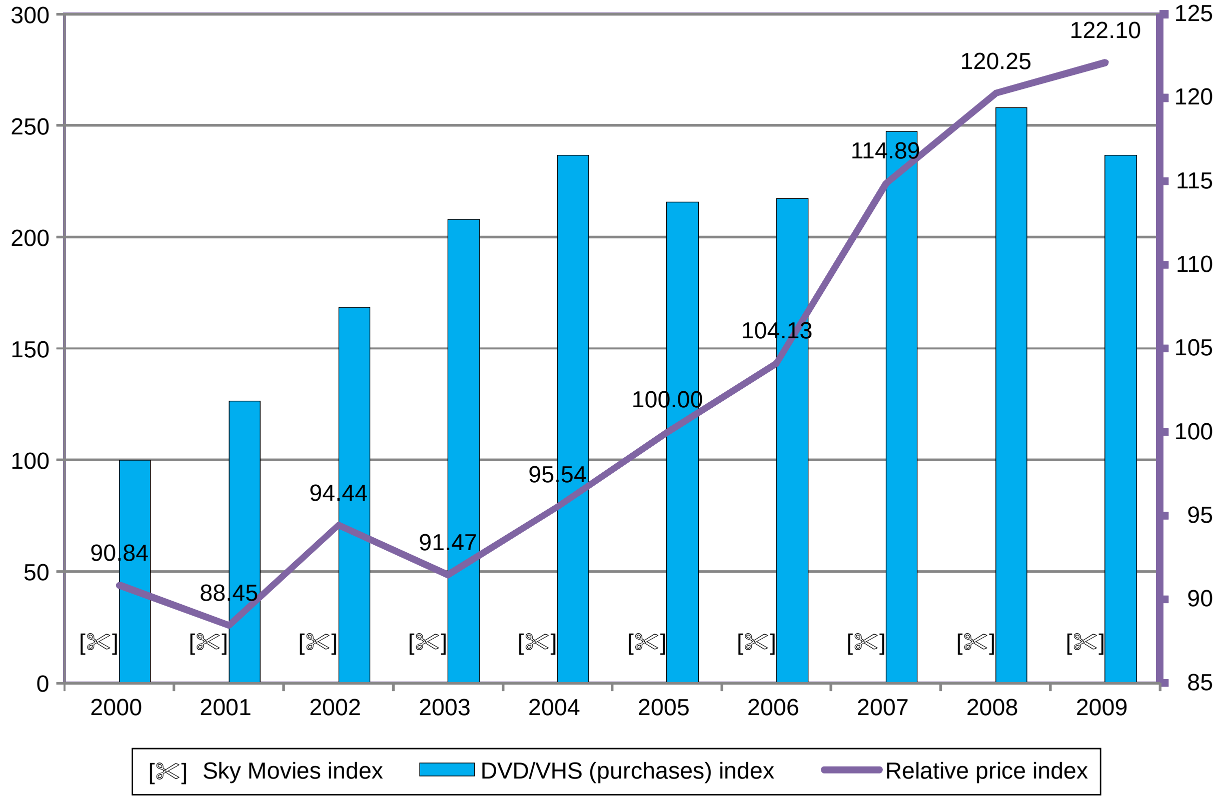
[16] Figures from the British Video Association suggested that VHS accounted for 85 per cent of volume in 2000, declining to 0 per cent by 2007, while DVDs increased from 15 per cent in 2000 to 94 per cent in 2009 and other (including Blu-ray) increased from 0 to 6 per cent in 2009. These figures related to all videos, but we saw no reason to believe that the figures would not be similar for movie videos.

[17] [✄]

[18] [✄]

FIGURE 3

Sky Movies and DVD/VHS movie purchases: volume and relative price indices



Source: CC calculations based on data from *UK Film Council Statistical Yearbook 2010* and Sky.
Notes:
1. Sky Movies Index and DVD/VHS (purchases) index, with base year 2000, were constructed based on the total annual volume of subscribers to any package retailed by Sky containing Sky Movies channels and the total volume of movies purchased on DVD/VHS respectively.
2. Relative price index with base year 2005 was constructed based on the relative price of the average price for Sky Movies retailed by Sky (see Appendix 4.11) to the average unit price for DVD/VHS movie purchases.
3. DVD/VHS movie purchases included all physical video formats, including DVD, VHS, Blu-ray, UMD, HD DVD and also digital downloads.

14. Overall, it did not appear to us that DVD (purchases) were a close substitute for Sky Movies.

Free TV

15. Figure 1 suggests that 58 per cent of relevant respondents would watch movies on TV if Sky Movies was not available (36 per cent said that they would watch on FilmFour, 42 per cent on other FTA channels and 7 per cent on other (basic pay-TV) channels).

16. In most, and possibly all, cases, watching films on these channels would not require consumers to make any additional payment.[19] The incremental prices for Sky Movies

[19] Consumers do not have to pay to view FTA channels (once they have paid the licence fee). They also do not have to make an additional payment to view basic pay-TV channels already included in their subscription. However, they may have to pay extra to view basic pay-TV channels not included in their subscription. For most of the course of our inquiry, Sky's charge for each extra entertainment pack was £1 per month, ie considerably less than its charge for Sky Movies. Viewing movies on basic pay and FTA channels (other than the BBC channels) may have a convenience drawback compared with Sky Movies due to

shown in Table 1 (at least £84 per year for nearly all subscribers) would therefore compare with an effective incremental price of zero for watching additional films on these channels. Although we noted that there was a material price difference between Sky Movies and watching movies on FTA and basic pay-TV channels, we considered this reflected quality differences (Sky Movies offers higher quality in the form of dedicated movie channels showing a large number of movies, including more recent movies, available on demand and often in HD). In our view, these price and quality difference made it less likely that watching movies on FTA and basic pay-TV channels was a close substitute for subscribing to Sky Movies.[20]

17. Given that the effective incremental price of watching movies on FTA and basic pay-TV channels was, in most cases, zero, in our view there was little point in seeking to compare price movements or the trend in Sky Movies subscribers compared with relative prices. As shown in Figure 2, the incremental price of Sky Movies remained broadly constant over time in real terms (though there was a spike in 2002), and consequently it also remained broadly constant compared with the zero price of watching movies on FTA TV (which obviously also remained broadly constant over time).[21] To infer anything much from such data, we would have needed to see some movement over time in relative prices. Where, as here, there was not much movement, this might have reflected that there was not much change over time in all the relevant competitive constraints, rather than that Sky Movies was constrained mainly by another product, the price of which also remained constant.

18. In these circumstances, it was more useful to look at the effect of changes in quality. Sky told us that Sky Movies had been impacted by an increase in the number of movies shown on the FTA channels, though, as indicated in paragraph 11, Sky also told us that the quality of Sky Movies had improved over this period.

19. Figure 4 shows the trend in the number of movies broadcast on the five PSB channels (ie BBC1, BBC2, ITV, Channel 4 and Channel 5), on subscription movie channels (ie the Sky Movies channels and Disney Cinemagic[22]) and on other channels (eg ITV2, FilmFour, Sky 1, etc).[23] Between 1997 and 2009 there was a steady increase in the number of films shown on other channels, reflecting the increase in the number of such channels (both FTA and basic pay channels), in particular following the launch of Freeview. The number of films shown on the five PSB channels was relatively constant, while the number shown on the subscription movie channels increased sharply in 2000 and since then had fluctuated (albeit within a fairly wide range).

- - - - - - - - - -

there being commercial breaks during the movie broadcast, though if the movie is recorded on a PVR this can be avoided by fast forwarding.

[20] In principle at least, it was still possible that there would be a high cross-elasticity if an increase in the price of Sky Movies caused a significant number of Sky Movies subscribers to drop their Sky Movies subscriptions and view more movies on FTA and basic pay channels.

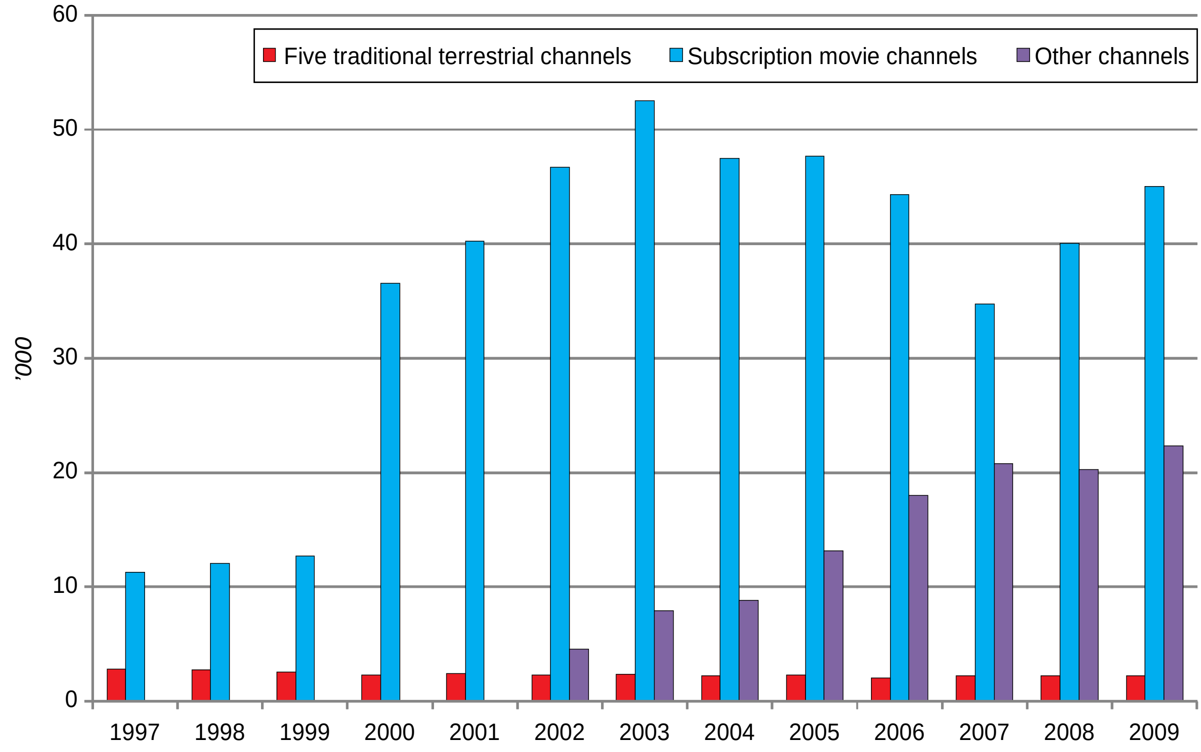
[21] Watching more movies on basic pay channels would not cost a pay-TV subscriber extra (ie it would have a zero effective incremental price) unless a subscriber upgraded to a more expensive basic package.

[22] Disney Cinemagic is included in Sky's dual movies products.

[23] We understood that the category 'digital FTA channels' shown in the *UK Film Council Statistical Yearbook 2009/10* also included basic pay-TV channels such as Sky 1. We therefore labelled it 'other channels'.

FIGURE 4

Total number of film transmissions on all TV channels: annual trends



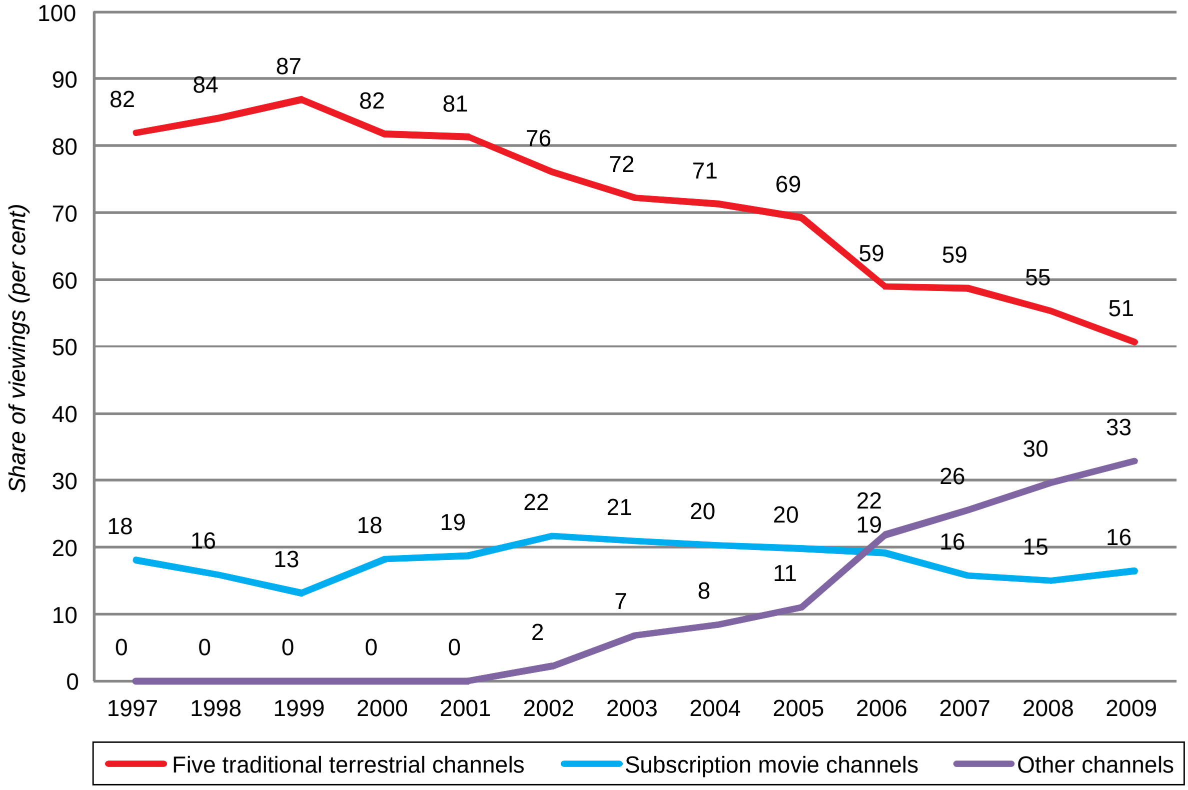
Source: UK Film Council Statistical Yearbook 2009/10.

20. Figure 5 shows the annual shares of the total televised feature film audience in the UK for each type of TV channel. In terms of audience numbers, the five PSB channels received the majority of film viewings in the UK, accounting for 51 per cent of the televised movie audience in the UK in 2009.[24] However, the share of audience on these channels decreased significantly over the years, while viewings on the other channels, and thus their share of film viewings, increased significantly.

[24] Data as provided by the *UK Film Council Statistical Yearbook 2009/10*.

FIGURE 5

Audience for film on all TV channels: annual trends



Source: UK Film Council Statistical Yearbook 2009/10.

21. Sky told us that digital FTA channels had imposed an increasing constraint on Sky Movies.[25] We noted that the proportion of movies viewed on the Sky Movies channels by Sky Movies subscribers dropped from [✂] per cent in 2006 to [✂] per cent in the year to June 2008 but in 2009 [✂].[26] We noted also:

(a) there was a large increase in the number of film transmissions on FTA and basic pay-TV channels but this had been continuous rather than coincident with the modest decline in Sky Movies subscribers shown in Figure 3; and

(b) there was a large increase in the number of viewings of films on the other channels but this was mainly at the expense of the five PSB channels rather than the Sky Movies channels (see Figure 5).

22. It appeared to us that the increase in the number of movies (including older movies) shown on other channels may have reduced demand for the Sky Movies channels compared with the level that would otherwise have prevailed (as suggested, for example, by the shift in viewing from Sky Movies to movies on other channels during 2006 to 2008). However, we did not believe the evidence suggested that the constraint imposed by movies on FTA and basic pay-TV channels was sufficient to conclude that they were close substitutes for Sky Movies. The large increase in the number of films shown on FTA and basic pay-TV channels appeared to have had only a modest impact on the number of subscribers to Sky Movies and no discernible

---

[25] [✂]

[26] Using Sky data, we calculated 12-month averages, based on a simple average of percentages for the constituent months, for households with Sky Movies (consequently these figures are different from those in Figure 5 which are for all households).

impact on the incremental prices charged for Sky Movies (the main decline in viewing shown in Figure 5 was between 2006 and 2008, while Sky Movies average prices between 2005 and 2008 declined in real terms by less than [✂] per cent per year).[27]

DVDs (rental)

23. The main ways that DVDs can be rented are in person from a rental shop or by post under a subscription package (in 2010, postal transactions accounted for 62 per cent of the total number of DVDs rented and 56 per cent of movie DVDs[28]). Subscription services now offer their subscribers the option of streaming certain movies OTT via the Internet, though the majority of the movies available in this way are older than those in the FSPTW. During the course of our inquiry, LOVEFiLM, the largest UK DVD subscription service, which is now owned by Amazon, increasingly acquired digital content to distribute to its customers over the Internet, including FSPTW content from non-major studios. In November 2011, LOVEFiLM reduced the prices of some of its packages and, in December 2011, it increased the disc allocation on some of its 'unlimited' packages (alongside launching its stand-alone SVOD OTT service). In 2011, LOVEFiLM's subscribers rented an average of about [✂] physical DVDs and made [✂] views of streamed content per month but LOVEFiLM forecast that in 2012 this would change to about [✂] physical DVDs and [✂] digital views per month. We discuss the OTT services of LOVEFiLM and Netflix and consider the extent to which they are substitutes for Sky Movies (and for Sky as a pay-TV retailer) in Appendix 4.2. In this subsection of this appendix we consider the rental of physical DVDs.

24. Figure 1 suggests that 38 per cent of relevant respondents would have rented more DVDs in the absence of Sky Movies. Additionally, 10 per cent of relevant respondents specifically mentioned a DVD subscription service.

25. We found that the price for renting a DVD from a shop was in the region of £1 to £4, depending on the recency of the movie and on the number of DVDs rented.[29] We considered comparing this price with the price of Sky Movies but in our view any such analysis would have been subject to many of the same issues as with a comparison with DVD sale prices (see paragraph 7). Prices for subscription DVD rental services were more directly comparable with the price of Sky Movies but the price for a subscription service depended on the specific terms. Sky Movies differs from these services in having some convenience advantages associated with its broadcast channels and SVOD services and in offering movies in a different window (Sky Movies subscribers are unable to view the most recent DVD releases, which can be viewed via a subscription rental service). Table 2 shows LOVEFiLM's prices in February 2012. The range of prices for subscription rental in Table 2 was broadly similar to the range of prices for Sky Movies in Table 1, though a comparison for any individual household would depend on its specific circumstances, in particular whether it subscribed to Sky Sports.

---

[27] The Sky Movies average real price is shown in Figure 2. Between 2006 and 2008 this increased by [✂] per cent a year; there was a decline in the Sky Movies average real price between 2005 and 2006 but for the whole period 2005 to 2008 the decline in the Sky Movies average real price was [✂] per cent a year. Figure 2 also suggested an [✂] per cent decline in the Sky Movies average price in 2003, but this preceded the decline in viewing, and also followed a price increase in 2002 (we described this above as a price spike in 2002).

[28] *2011 BFI Statistical Yearbook*. It is likely that subscription services now account for a higher proportion of total rentals as, prior to 2010, the volume of these services was increasing while that of in-store rental services was in decline.

[29] Prices per DVD were lower for older releases and when renting more DVDs.

TABLE 2 **LOVEFiLM subscription service prices, February 2012**

Price	*Physical DVDs*		*Internet*
	Max no	*Max no out*	*streaming*
£	*per month*	*at a time*	*hours*
4.99	2	1	0
5.99	3	1	2
7.99	Unlimited	1	Unlimited*
9.99	Unlimited	2	Unlimited*
13.27	Unlimited	3	Unlimited*

Source: LOVEFiLM website, 15 February 2012.

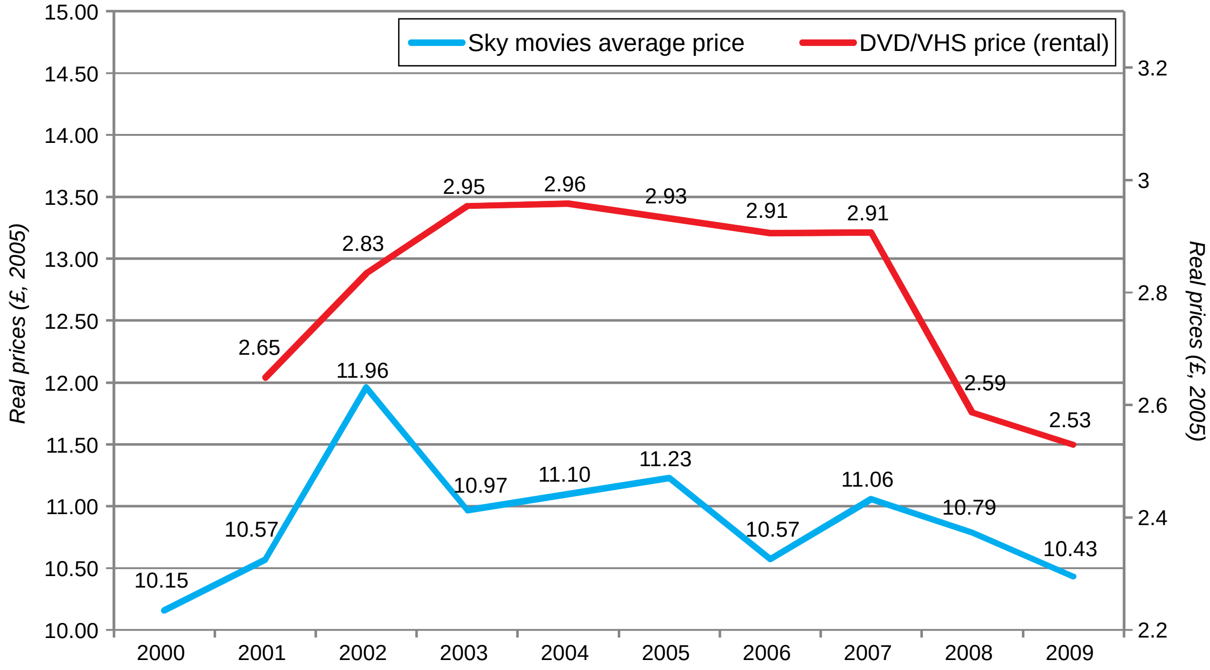
* LOVEFiLM's services with unlimited streaming are considered in Appendix 4.2.
Note: LOVEFiLM also offers an SVOD-only service for £4.99 (see Appendix 4.2). Additionally, LOVEFiLM offers games as part of its service: the above prices excluded games.

26. We looked at similar data for the trends in DVD/VHS rentals (including both rental from shops and subscription services) as we did for DVD purchases, as shown in Figures 6 and 7. Figure 6 suggested that both the Sky Movies average price and the average per DVD/VHS rental price remained broadly constant over time (although there appeared to have been a spike in the Sky Movies price in 2002, an increase in the DVD/VHS rental price between 2001 and 2003 and a fall in the DVD/VHS rental price between 2007 and 2008). Figure 7 shows that [✂]. However, there was no evidence of DVD/VHS rental volumes increasing, which would have been expected if a lower relative DVD/VHS rental price caused Sky Movies subscribers to move to renting videos.[30]

[30] In recent years, the value of DVD rentals was small relative to the value of DVD purchases (around 15 per cent in 2008 and 2009) and relative to the value of subscriptions to Sky Movies (around [✂] based on our estimates). As a result, a significant move from Sky Movies to DVD rental should have been visible in the DVD rental volume data. For example, if 0.4 million Sky Movies subscribers ([✂] per cent of the base of Sky Movies subscribers) rented five DVDs per month, this would total 24 million DVD rentals per year, which would be more than 10 per cent of the actual 2008 total (202 million), on which Figure 6 data was based.

FIGURE 6

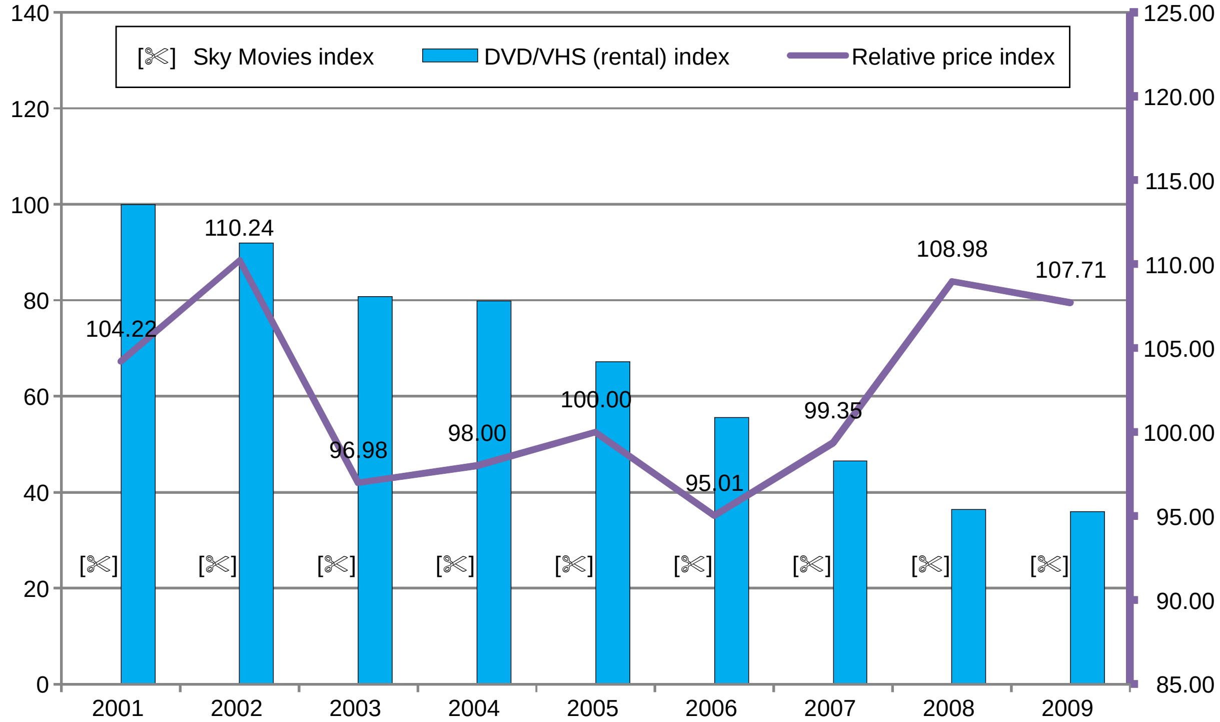
Annual average real prices of Sky Movies (left-hand scale) and DVD/VHS movie rentals (right-hand scale) in 2005 money



Source: CC calculations based on data from *UK Film Council Statistical Yearbook 2010* and Sky.
Notes:
1. Prices were adjusted for changes in the CPI and shown in 2005 money. DVD/VHS prices represented average real value per transaction and the average price of Sky Movies retailed by Sky was constructed as explained in Appendix 4.11.
2. DVD/VHS movie rentals included over-the-counter and online rentals and cover all physical video formats, including DVD, VHS, Blu-ray, UMD, HD DVD.

FIGURE 7

Sky Movies and DVD/VHS movie rentals: volume and relative price indices



Source: CC calculations based on data from *UK Film Council Statistical Yearbook 2010* and Sky.
Notes:
1. Sky Movies index and DVD/VHS (rental) index, with base year 2001, were constructed based on the total annual volume of subscribers to any package containing Sky Movies channels retailed by Sky and the total volume of DVD/VHS movie rentals.
2. Relative price index with base year 2005 was constructed based on the relative price of the average price for Sky Movies (see Appendix 4.11) and the average unit price for DVD/VHS movie rentals.
3. DVD/VHS movie rentals included over-the-counter and online rentals and cover all physical video formats, including DVD, VHS, Blu-ray, UMD, HD DVD.

27. The data in Figures 6 and 7 covered both DVD rental from shops and subscription services. With regard to DVD subscription services, we also considered other relevant evidence. We noted that a relatively small proportion of respondents to our December 2010 survey had said specifically that they would use subscription services if Sky Movies was not available. [✂] In our August 2011 provisional findings, we also noted that LOVEFiLM's customers included those with Sky Movies as well as those without,[31] and [✂].

28. Overall, it appeared to us that on the available evidence, DVD rental, including both shop rental and subscription services, was unlikely to be a close substitute for Sky Movies.

Cinema

29. Figure 1 suggested that, in the absence of Sky Movies, 36 per cent of relevant respondents to our December 2010 survey would watch more movies at the cinema.

[31] LOVEFiLM told us that consumers who did not have pay TV were slightly more likely to be LOVEFiLM customers.

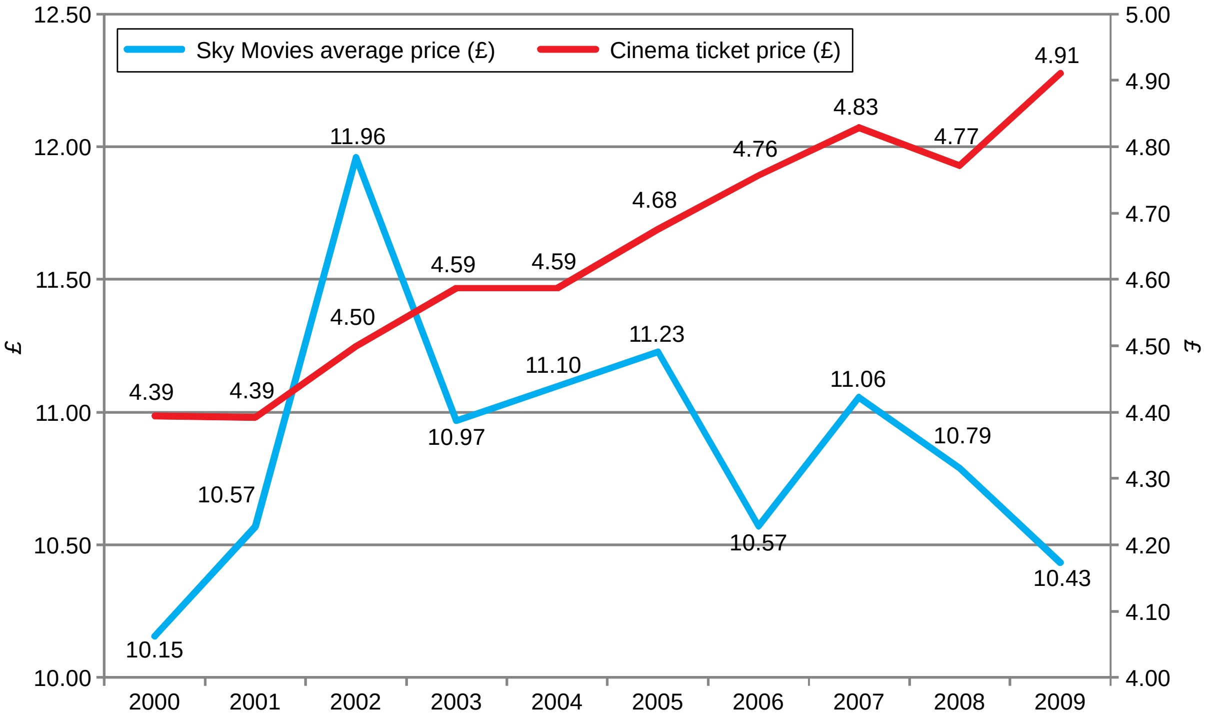
30. We noted that unlike other movie products, viewing a movie at the cinema was paid for on a per-person basis. The basis of charging therefore differed from that for Sky Movies both because each movie is paid for separately and also because it is paid per person. A price comparison with Sky Movies for any individual household would depend on the number of movies viewed per month and the number of members of the household viewing each of those movies. UK Film Council data suggested that the average price per cinema visit in 2009 was about £5, though the cinema visitor may also incur time and expense in travelling to the cinema. We noted that viewing a movie at the cinema was different from viewing a movie on Sky Movies, in particular because movies were generally shown at the cinema 10 to 12 months before they were shown on Sky Movies and the viewing experience was not at home.

31. It seemed to us that, as a product, viewing a movie at the cinema was more different from Sky Movies than a DVD purchase, in particular because cinema visits were paid per person, movies could be viewed earlier at the cinema, and the viewing experience was at the cinema not at home. As it appeared to us that DVD purchases were not a close substitute for Sky Movies, it was unlikely that viewing a movie at the cinema would be a close substitute.

32. Nevertheless, we looked at similar data relating to trends in cinema prices and volumes to that which we looked at in relation to DVD purchases and rentals. Figure 8 shows that cinema prices tended to increase over time while the Sky Movies average price remained broadly constant (apart from the spike in 2002). Figure 9 suggests that the declining relative price of Sky Movies (at least from 2002) was associated initially with increasing Sky Movies subscribers and declining cinema visits ([✂]), but after that with declining Sky Movies subscribers and increasing cinema visits ([✂]). The latter pattern (declining relative prices and declining absolute and relative volume) did not appear to be consistent with cinema visits being a close substitute for subscribing to Sky Movies.

FIGURE 8

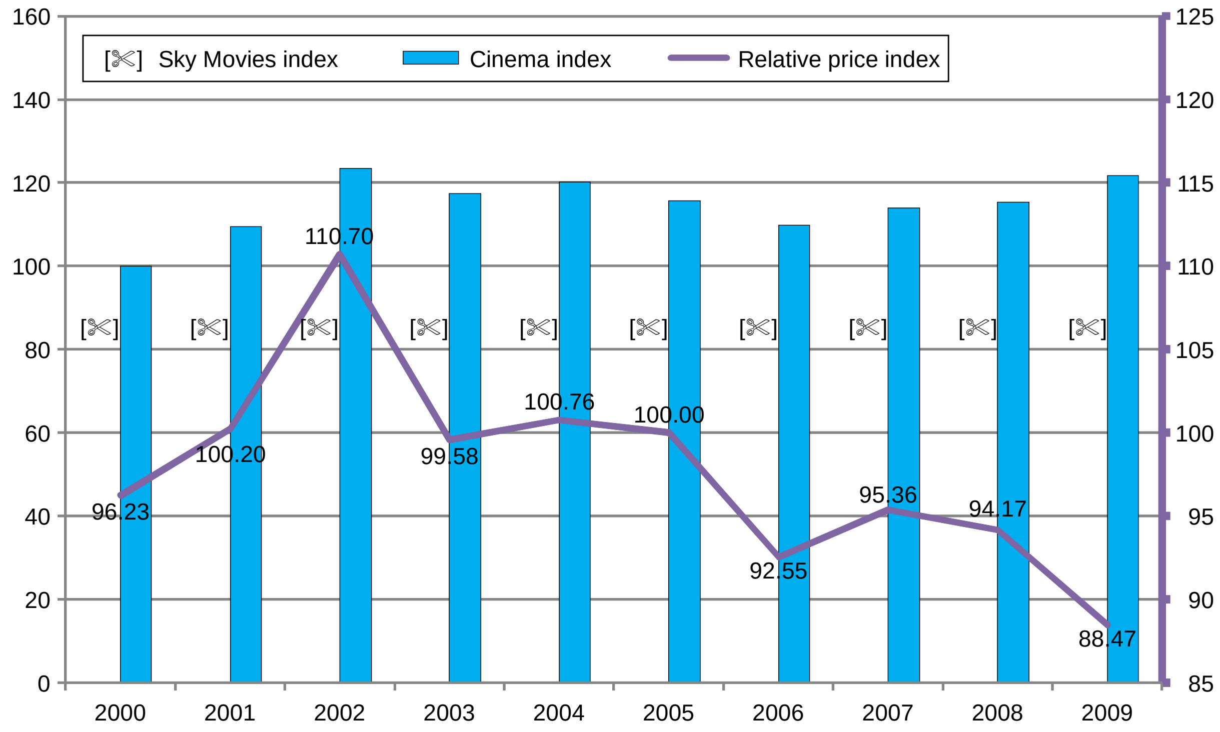
Annual average real prices of Sky Movies (left-hand scale) and cinema tickets (right-hand scale) in 2005 money



Source: UK Film Council Statistical Yearbook 2010 and prices data provided by Sky.
Note: Prices were adjusted for changes in the CPI and shown in 2005 money. The average price of Sky Movies retailed by Sky was constructed as explained in Appendix 4.11.

FIGURE 9

Sky Movies and cinema attendance: volume and relative price indices



Source: UK Film Council Statistical Yearbook 2010 and prices data provided by Sky.
Notes:
1. Sky Movies index and cinema index, with base year 2000, were constructed based on the total annual volume of subscribers to any package containing Sky Movies channels retailed by Sky and the total cinema attendance respectively.
2. Relative price index with base year 2005 was constructed based on the relative price of the average price for Sky Movies retailed by Sky (see Appendix 4.11) and the average cinema ticket.

33. Overall, we did not believe the evidence demonstrated that cinema visits were a close substitute for subscribing to Sky Movies.

TVOD and PPV

34. Figure 1 suggested that 13 per cent of relevant respondents said they would view more movies via PPV services. Additionally, 24 per cent said that they would view more movies over the Internet and some of these respondents might do so on a TVOD basis.[32]

35. Movies can be purchased on a TVOD/PPV basis both from pay-TV retailers offering a broad range of pay-TV (eg Sky, Virgin Media and BT Vision) and from Internet retailers (eg LOVEFiLM, Blinkbox, Apple (iTunes) and Microsoft (Zune)).[33] Based on information for the year to July 2010, we estimated that the value of TVOD/PPV sales

[32] The majority of paid-for transactional viewing over the Internet is on an EST basis (we include EST with DVDs—see paragraph 7), rather than on a TVOD basis (see Appendix 2.2) (we regarded TVOD as paying to stream or download movies for a temporary period). Some movies can be viewed free on the Internet, and there is also some illegal streaming/downloading of movies over the Internet. Movies may also be viewed over the Internet through movie subscription services. Responses shown in Figure 1 may reflect all of these ways of viewing movies over the Internet.
[33] Sky provides a PPV service to its DTH satellite subscribers (Sky Box Office) mostly via linear channels which show movies starting at regular intervals (eg every 15, 30 or 60 minutes). In 2012, Sky rebranded its TVOD service available to its Anytime+ customers as Sky Store. Sky Store is also available via Sky Go and Now TV. Virgin Media offers a TVOD service (FilmFlex).

in the UK was around 10 per cent of the value we attributed to Sky Movies based on our average price estimates. During this period, the majority of TVOD/PPV sales were by the traditional pay-TV retailers (ie Sky, Virgin Media and BT Vision), though sales by other retailers were increasing.

36. Generally, the TVOD/PPV window starts soon after DVD release. Movies are available on a TVOD/PPV basis for about four months (pre-FSPTW) (we describe movies available in this period as 'current TVOD/PPV movies') and often become available again after about 17 months (post-FSPTW) (we describe movies available in this period as 'library TVOD/PPV movies').[34] We noted that the traditional pay-TV retailers' charges for a current SD TVOD/PPV movie were similar to the cost of renting a single recently-released DVD from a shop (ie about £4), though TVOD/PPV customers did not usually benefit from the volume discounts available to those renting. Other retailers' charges for current SD TVOD/PPV movies generally appeared to be slightly lower, eg the iTunes charge was £3.49. Prices were lower for library SD TVOD/PPV movies and higher for HD movies.

37. Figure 10 shows the traditional pay-TV retailers' average price for TVOD/PPV and compares it with our estimate of the average price for Sky Movies. Figure 10 suggests that, in recent years, there was some convergence in current TVOD/PPV prices between Sky (which previously charged higher prices) and Virgin Media and BT. Both Sky's PPV prices and our estimated price for Sky Movies remained broadly constant over time, though, as discussed above (see paragraph 17), we did not draw any inferences about close substitutability simply from two prices remaining broadly constant over time.

FIGURE 10

Annual average real prices for TVOD/PPV (left-hand scale) and Sky Movies (right-hand scale) in 2005 money

[✂]

Source: CC calculations based on [✂].
Note: Prices were adjusted for changes in the CPI and shown in 2005 money. The average price of Sky Movies retailed by Sky was constructed as explained in Appendix 4.11.

38. The survey evidence available to us[35] did not suggest that a high proportion of Sky Movies subscribers regarded existing TVOD/PPV services as an alternative to subscribing to Sky Movies.[36] Additionally, we noted that the value of TVOD/PPV sales was quite small relative to the value we attributed to Sky Movies based on our average price estimates (see paragraph 35), suggesting that it was unlikely that a small reduction in the price of TVOD/PPV would lead to a significant reduction in subscriptions to Sky Movies. For these reasons, we did not believe that TVOD/PPV was a close substitute for subscribing to Sky Movies.

[34] Sky's PPV service via linear channels does not usually include library movies.
[35] This is summarized in Figure 1 and the section below on consumer research (see paragraphs 42–49).
[36] The conjoint results from our December 2010 survey suggested that respondents had a strong underlying preference for paying per view over subscription payment, at least if the PPV price was low enough (see Appendix 4.10). However, in our analysis reported in this appendix our concern was with whether TVOD/PPV products were in fact a close substitute for Sky Movies. In this context, there were some difficulties in interpreting the conjoint results from our survey (as noted in paragraph 89 of GfK's survey report (see Appendix 4.10), only about 6 per cent of respondents said that they would pay £5 per month for a subscription package even though 25 per cent of respondents paid for Sky Movies, the great majority paying an incremental price of at least £7 per month.)

Other pay-TV movie subscription services

39. Apart from Sky Movies (including the Sky Movies service on Sky Go, which can be viewed over the Internet), the main pay-TV movie subscription services up to November 2011 were BT Vision's Film Club (now branded Vision Film) and Universal's PictureBox, which is retailed by Virgin Media and TUTV and incorporated into BT's Vision Film service. However, during December 2011 and January 2012, LOVEFiLM and Netflix each launched OTT SVOD services offering movies and previously-broadcast TV programmes at prices of £4.99 and £5.99 per month respectively (in LOVEFiLM's case, this was a development of its existing subscription service which included movies streamed over the Internet as well as physical DVD rental by post (see paragraph 23)). We discuss the OTT services of LOVEFiLM and Netflix in Appendix 4.2

40. As regards the movie subscription services offered by the other traditional pay-TV retailers (BT's Vision Film and PictureBox), we noted that these were SVOD services which showed movies older than those in the FSPTW.[37] They also had available a smaller number of movies than Sky Movies: in June 2012, BT's Vision Film stated on its website that it offered '200 much-loved favourite films' and we noted that PictureBox had 28 movies (with seven changed every week), compared with over 850 movies shown monthly on the Sky Movies channels of which about 600 are available on a VOD basis via Sky Anytime+ and Sky Go.[38] Notwithstanding these differences, these services offered a broadly similar product to Sky Movies (although lower quality in that they did not show FSPTW movies and had a smaller range of movies). The prices of these services were lower than for Sky Movies: about £7 on a stand-alone basis for BT's Vision Film and £5 for PictureBox, compared with £8 on a stand-alone basis for Sky's single movies and £16 for Sky's dual movies. Evidence from our December 2010 survey suggested that few Sky Movies subscribers regarded them as an alternative (see Table 1). Furthermore, we estimated that the value of their sales was only about [✂] per cent of the value we attributed to Sky Movies. Consequently, as with TVOD/PPV (see paragraph 38 above), we did not believe that the movie subscription services offered by the traditional pay-TV retailers were a close substitute for subscribing to Sky Movies.[39]

Consumer research

41. We reviewed consumer research by Sky and BT. We looked at [✂] (see Table 3 below). (Our views on other consumer research, including more recent data on why customers leave Sky are set out in Appendix 4.2.)

TABLE 3 [✂]

[✂]

Source: [✂].

[✂]

---

[37] BT told us that, at the time of our August 2011 provisional findings, the PictureBox service (which is incorporated into BT's Vision Film) included FSPTW content from one non-major studio (Studiocanal). However, typically, PictureBox and Vision Film offer content in the SSPTW and library windows.

[38] Subscribers to Sky's single movies product receive only half the channels and would consequently have a smaller choice of movies than subscribers to Sky's dual movies product. Since each movie tends to be shown for a shorter period on the PictureBox and Vision Film services than on Sky Movies, the disparity in number of titles would be smaller over a 12-month period. Nevertheless, PictureBox offers no more than 364 different movies over a 12-month period (seven movies each week multiplied by 52 weeks) and BT told us that Vision Film offered 600 different titles in a year (see Appendix 4.12), whereas Sky Movies offers about 1,500 a year (assuming that each movie is on the service for 15 months).

[39] We discuss further the services offered by BT Vision Film and PictureBox and compare them with the new OTT services of LOVEFiLM and Netflix and with Sky Movies in Appendix 4.12.

42. [✂]

43. [✂] It appeared to us that the fact [✂], was consistent with these ways of watching movies not being close substitutes for Sky Movies.

44. [✂][40]

FIGURE 11

[✂]

Source: [✂].
Note: [✂].

45. BT told us that it had undertaken consumer research in order to understand better consumer preferences regarding other forms of content and movies from other windows vis-à-vis movie content in the FSPTW.[41] BT's research assessed consumer preferences towards movies on DVD, non-movie content, movie services with no blockbuster movies, movie services with movies from the SSPTW or library titles, and movie services offering a wider range of TVOD content for a longer period of time. These preferences were compared with consumers' preferences for a movie service with FSPTW content. BT said this research showed that, from a consumer perspective, other forms of content or other movie services were unlikely to be a substitute for FSPTW movies content/services. Table 4 summarizes the main results.

[40] We noted that this research was undertaken prior to the changes to LOVEFiLM's services in late 2011 and the entry of Netflix in January 2012.
[41] This research was undertaken in November 2010 prior to the changes to LOVEFiLM's services in late 2011 and the entry of Netflix in January 2012. It is discussed further in Appendix 6.1, paragraphs 45–47.

TABLE 4 **BT research main results**

	Percentage of Sky Movies customers
Preference for watching movies	
Sky Movies	[✂]
Buy on DVD	[✂]
Rent on DVD	[✂]
Alternatives considered in the absence of Sky Movies	
Watch more PPV movies on TV	[✂]
Buy more movies on DVD	[✂]
Rent more movies on DVD	[✂]
Download or stream more movies to your PC/mobile device	[✂]
Watch fewer movies overall than you do currently	[✂]
Cancel TV subscription service altogether	[✂]
None of these	[✂]
*Sky Movies versus non-movies content**	
Sky Movies channels	[✂]
Premium Entertainment channels	[✂]
Sky Movies versus non-blockbuster movies†	
Sky Movies channels which show blockbuster movies	[✂]
Alternative Movie channels which show Independent, Art House and foreign language movies	[✂]
SVOD versus TVOD	
Pay a monthly subscription	[✂]
PPV	[✂]
Sky Movies versus movies in later windows‡	
Sky Movie channels	[✂]
Library Movie channels	[✂]
Sample	[✂]

Source: BT.

*A suite of fictional premium entertainment channels was created as part of the research. This collection of channels was assumed to be *(a)* premium channels that were not currently available to the respondent, *(b)* would show the most recent series of the most popular US dramas and *(c)* would show this content soon after release in the USA and earlier than the respondent would be able to get it in the UK at the moment.
†This collection of channels was assumed to *(a)* be a collection of channels which show Independent, Art House and foreign language movies, *(b)* contained movies that typically came from smaller studios outside of the big Hollywood studios and *(c)* did not include any 'blockbuster' movies content.
‡This collection of channels was assumed to show *(a)* a much wider range of older blockbuster movies than was currently available on Sky Movies and *(b)* movies from two years after they were released in the cinema, but not any movies that were newer than this.
Note: The total sample consisted of 1,003 active Sky Movies subscribers who were involved in the decision as to which pay-TV service they subscribed to in their home. This included Sky Movies subscribers in Sky, Virgin and TalkTalk/Tiscali homes, and included those who took either Sky Movies 1, Sky Movies 2, or a dual Sky Movies pack.

46. The results in Table 4 suggested that [✂] per cent of respondents preferred to watch movies on Sky Movies compared with [✂] per cent preferring to watch movies on purchased DVDs and [✂] per cent preferring to watch movies on rented DVDs. Unfortunately, these results were very difficult to interpret since it was likely that respondents took into account the incremental cost of buying or renting a DVD.[42] If so, and if they had already paid for Sky Movies, it was hardly surprising that they opted for watching a movie on Sky Movies rather than on DVD. Because of this, we believed that little if any weight could be attached to the results in the first panel of Table 4.

47. BT's research also looked into what consumers would do in the absence of Sky Movies (see second panel of Table 4). These results showed that [✂] per cent of consumers were likely to switch to watching movies on purchased DVDs while [✂]

[42] The question was in a section of the survey which focused on preferences in terms of accessing movies, abstracted from price. Respondents were asked to consider what they would generally prefer to do as between watching a movie on Sky Movies, buying a movie on DVD, or renting a movie on DVD (from a rental store or from an online service like LOVEFiLM).

per cent would switch to renting DVDs. Around [✂] per cent would watch more movies on PPV/TVOD.

48. The results of BT's research also suggested that Sky Movies respondents had a strong preference for watching movies on Sky Movies compared with watching movies on other TV channels, such as general entertainment channels, channels offering non-blockbuster movies, or channels offering movies in a later window (see third to sixth panels in Table 4). The results suggested that [✂] per cent of respondents would rather subscribe to Sky Movies than to an alternative hypothetical product consisting of premium entertainment channels. Similarly, [✂] per cent of respondents would rather subscribe to Sky Movies than to an alternative hypothetical product with non-blockbuster movies, and [✂] per cent of respondents preferred Sky Movies to an alternative product with movies in later windows. The results of the survey also suggested that [✂] per cent of subscribers to Sky Movies preferred paying a monthly subscription compared with [✂] per cent who would prefer paying per movie.[43]

Review of Sky's business documents

49. We reviewed internal Sky documents which discussed its strategy with regard to Sky Movies. The documents discussed below related to the period prior to the publication of our August 2011 provisional findings. We later reviewed subsequent documents and our views on these documents are set out in Appendix 4.2 in the context of our consideration of Sky's perceptions of the new OTT services of LOVEFiLM and Netflix.

50. We noted that [✂].

51. [✂][44]

52. [✂][45]

53. [✂]

54. [✂]

Views of parties about possible substitutes for Sky Movies and our assessment

55. Sky told us that consumers had numerous alternatives for watching movies, including watching movies on FTA TV channels, watching movies on basic pay-TV channels, and buying and renting movies on DVD.[46] Sky submitted:

> A proper analysis of the supply of pay TV packages that include Sky's movie channels must be able to account for the fact that the number of subscribers to such packages [✂].[47] Sky does not consider that it is

[43] We noted that the conjoint results from our December 2010 survey suggested a preference for PPV compared with a monthly subscription (see Appendix 4.10).
[44] [✂]
[45] [✂]
[46] The complete list of alternatives mentioned by Sky was as follows: watching movies on FTA TV channels (including dedicated FTA movie channels, such as FilmFour); watching movies on basic pay-TV channels (including dedicated basic pay-TV movie channels, such as TCM); watching movies on PPV or VOD services (both free and paid-for, including SVOD services); buying movies on DVD; renting movies on DVD, either from traditional 'bricks-and-mortar' stores, or from online services (predominantly subscription DVD rental services); purchasing movies via the Internet; renting movies via an ever-increasing variety of Internet-based services (either on a PPV basis or using a subscription service).
[47] [✂]

> possible to account for [✂] in terms of either increasing prices, or reductions in quality of the services available to consumers. Accordingly, it is evident that some external factor (or factors) must have acted to reduce demand for these packages over that period. Sky considers that the most plausible explanations are: the growth of FTA television services in general and the substantial increase in the availability of movies on FTA television channels in particular; and falling prices for DVDs.

As set out above (see paragraphs 13 and 22), we agreed with Sky that falling prices for DVDs, and the substantial increase in the availability of movies on FTA TV channels were likely to have acted to reduce demand for Sky Movies in this period.

56. Virgin Media told us that pay-TV bundles which did not contain Sky Movies were not close substitutes for those that did. Virgin Media stated that FTA movie channels, Disney Cinemagic, movie downloads as well as movies on other basic channels and DVDs were 'very distant substitutes' for Sky Movies and treating them as close substitutes would result in underestimating Sky's market power. Virgin Media also said that other market developments, such as VOD downloads/streaming, were not sufficiently advanced to constrain Sky Movies. With respect to FTA movie channels, Virgin Media said that its reasoning was based on the fact that these channels consisted of library material rather than recently-released blockbuster movies and thus met a different demand to Sky Movies. With respect to DVDs, Virgin Media said that these products were different from Sky Movies as they fulfilled different consumer needs, drove different behaviour and entailed a different purchasing choice; and that DVDs bought close to the time of movie release were not comparable to Sky Movies (being significantly more expensive). Virgin Media concluded that these alternative ways of watching movies, individually or taken together, were distant substitutes and did not impose a constraint on Sky Movies.

57. BT said that it agreed with Ofcom's previous finding that there were no close substitutes which constrained Sky Movies. As mentioned above, research carried out on behalf of BT suggested that among Sky Movies subscribers, other forms of content (ie premium entertainment channels or non-blockbuster movie channels) as well as other movie products (ie movies on DVDs or TVOD services) did not impose a significant constraint on Sky Movies.

58. Based on the evidence and analysis set out in this appendix, we agreed with Virgin Media and BT that other ways of viewing movies, although substitutes for Sky Movies, were not *close* substitutes for Sky Movies.

59. Disney told us that VOD services were growing in popularity [✂]. Disney referred to the fact that studios [✂], as well as evidence indicating the growing success of many VOD services. Disney also said that the fact that current pay-TV customers were willing to pay for Sky Movies channels, although they had access to FTA services and other forms of viewing movie content, did not indicate that these other distribution channels were not strong substitutes for pay-TV movies. Disney said that FTA channels competed intensively with pay-TV channels for viewers, content, and, in the case of ITV, Channel 4 and Channel 5, advertising revenue. Disney said that this competition constrained the subscription fees that pay-TV operators charged. We agreed that pay-TV subscription charges were constrained by the combined effect of a number of alternatives but, for the reasons set out above, we did not believe that any one alternative could be considered a close substitute for Sky Movies.

Conclusion

60. On the basis of the evidence we saw and the analysis set out both in this appendix and in Appendix 4.2, it appeared to us that Sky Movies did not have any close demand-side substitutes.

OTT services

Introduction

1. In this appendix, we consider the extent to which subscription OTT services, in particular those of LOVEFiLM and Netflix, are substitutes for existing subscription pay-TV products. We consider their substitutability both for Sky Movies and for entire pay-TV packages as offered by traditional pay-TV retailers.

2. We begin by highlighting some of the key features of the OTT services of LOVEFiLM and Netflix and make comparisons with established competitors. We then describe the market positioning of these services and set out information on their growth to date. We then summarize available survey data that is relevant to their substitutability for pay-TV products. Next we consider Sky's response to the new OTT products, and the related actions of other traditional pay-TV retailers. Lastly we set out some evidence on OTT services in other countries. We conclude by giving our assessment.

Description of the new OTT services and comparison with other services

3. In December 2011 and January 2012 respectively, LOVEFiLM and Netflix launched stand-alone Internet SVOD products offering streamed movies and previously broadcast TV programmes at prices of £4.99 and £5.99 per month respectively. In LOVEFiLM's case, this was an additional product to its existing subscription products, which offered movies streamed over the Internet bundled with physical DVD rental by post (see Appendix 4.1, paragraphs 24 to 29).

4. These OTT services have a number of noteworthy features:

   (a) They are delivered over the open Internet and can be viewed on Internet-connected or 'smart' TVs or on TVs via an Internet-connected STB, games console or other device (eg a Blu-ray player or a laptop). They can also be accessed directly on computers via a browser and on mobile devices (smartphones and tablets) with the appropriate application. Consequently, unlike with most traditional pay TV, which is accessed predominantly through a dedicated STB, OTT services are accessed through devices that are not dedicated or proprietary to the OTT service provider (though the OTT service provider generally needs to negotiate with the manufacturer to make its service available through each device).[1,2]

   (b) As content is streamed over the open Internet, viewing requires an Internet connection with adequate speed to avoid picture quality problems such as buffering. Most UK households already have a broadband Internet connection, though OTT viewing may result in additional charges being levied by the consumer's ISP if usage limits are exceeded or if the Internet service is charged on a usage basis (see Section 2). The quality of the OTT viewing experience may also be affected by others using either the Internet connection or, possibly, the same local communications infrastructure at the same time. By contrast with traditional pay TV

[1] This does not apply to computers, including laptops, where viewing is via a browser.
[2] From our market observations, although the negotiations between OTT service providers (ie LOVEFiLM, Netflix and Sky) and device manufacturers might take some time, we noted that each of them was seeking to make its service available on as many devices as possible. We were not aware of manufacturers of Internet-connected TVs, non-pay-TV retailer STBs, games consoles, mobile devices or other Internet-connected devices reaching exclusive agreements with OTT service providers.

where the pay-TV platform provider takes responsibility for the delivery of content to the viewer's TV, OTT services are purchased independently from both Internet access and the device over which the services are accessed, which are both generally purchased for other purposes.

(c) Neither LOVEFiLM nor Netflix require an initial contractual commitment. This is in contrast to traditional pay TV where retailers typically require initial contracts lasting 12 to 18 months in order to recover up-front costs associated with installation costs and subsidizing an STB.

(d) Netflix and LOVEFiLM only provide content on a VOD basis (some in HD) and do not offer linear channels. This is in contrast to most traditional pay-TV retailers, which, although offering some VOD services (eg Virgin Media's FilmFlex (TVOD)), also offer linear channels, and most consumption is on a linear basis.

(e) Netflix and LOVEFiLM charge a single subscription price per month for SVOD (and, in the case of LOVEFiLM, accessing on DVD by post) a wide range of movies and previously-broadcast TV programmes.[3] By contrast, traditional pay-TV retailers offer a basic pay-TV package to which a number of optional additional packs can be added (for example in the case of Sky, the principal additional packs are Entertainment Plus, Sky Movies, Sky Sports and ESPN).

(f) The movie content offered by Netflix and LOVEFiLM on their SVOD services includes some FSPTW content from non-major studios and a wide range of content from subsequent pay-TV windows and library movie content from both major and non-major studios. A more detailed comparison of the movie services of Netflix and LOVEFiLM and those offered by Sky and BT Vision (in terms of the number of movies on each service and their box office success, taking account of the recency of the movies) is set out in Appendix 4.12.

5. Both LOVEFiLM and Netflix currently offer 30-day free trials to prospective users of their stand-alone SVOD services though customers must sign a cancellable bank or credit card mandate to enable payments to start at the end of the free trial period (unless cancelled before then). LOVEFiLM offers the same promotion and others in relation to its hybrid SVOD/DVD services.

6. Table 1 compares the Netflix and LOVEFiLM SVOD-only services with:

(a) Sky's basic entertainment pay-TV package;

(b) a pay-TV package comprising Sky's basic channels plus Sky Movies (dual movies pack); and

(c) Sky Movies (dual movies pack) as an incremental product.

7. The first comparison is relevant to a consumer choosing between a subscription to Sky for basic-only content and a subscription to Netflix or LOVEFiLM. The second comparison is relevant to a consumer choosing between a subscription to Sky for a package including Sky Movies and a subscription to Netflix or LOVEFiLM. The third comparison in the table is relevant to a consumer choosing between Sky Movies on a stand-alone basis and a subscription to Netflix or LOVEFiLM.

[3] LOVEFiLM has a single price for its streaming-only OTT SVOD service but also offers a number of bundled packages with different quantities of streaming and DVDs by post (as set out in Appendix 4.1, Table 2).

TABLE 1 **Summary of features of Netflix and LOVEFiLM OTT subscription services and a comparison with Sky's subscription services**

Feature	*Netflix*	*LOVEFiLM (SVOD-only service)**	*Sky basic entertainment package*	*Sky Movies package (basic plus dual movies pack)*	*Sky Movies (dual movies as incremental product or on Now TV)*
FSPTW content (all exclusive)	Lionsgate, MGM & Momentum	eOne and Studiocanal†	None	Warner, Fox, Disney, Sony Pictures, Paramount, Universal and some non-major studios	Warner, Fox, Disney, Sony Pictures, Paramount, Universal and some non-major studios
SSPTW and/or TSPTW content	Disney, Paramount, Sony Pictures, Universal, Lionsgate, MGM & Momentum	Fox, Sony Pictures, Warner and Universal	Fewer than 10 titles	Fewer than 10 titles	Fewer than 10 titles
Total Movies (including library) at end January 2012	About 1,000 titles	About3,500 titles (4,500 at end June 2012)	Sky's basic Entertainment Pack includes movie-based linear channels (TCM, TCM2 and Movies24). Movies also comprise part of the content shown on other basic pay channels such as Sky1	As for basic package plus 12 linear movie channels showing more than 850 film titles in a month, about 600 of which are also available on a VOD basis to Sky Anytime+‡ and Sky Go§	12 linear movie channels showing more than 850 film titles in a month, about 600 of which are also available on a VOD basis via Sky Anytime+‡ and Sky Go§ and Now TV¤.
TV programmes (other than movies)	About 250 TV programmes consisting of over 9,500 viewable items	Around4,400 TV episodes as at end June 2012	Sky's basic Entertainment Pack has 42 linear channels (including 3 movie channels mentioned above). Sky's Entertainment Extra Pack has a further 48 linear channels	As for basic package	The Sky Movies channels have only a small amount of non-movie content
Price	£5.99 per month	Streaming-only package (LOVEFiLM Instant) is £4.99 per month	£20 per month (or £25 per month for Entertainment Extra pack)	£36 per month (or £41 per month for Entertainment Extra pack)	Incremental price of £16 (£8 for those who already subscribe to Sky Dual Sports) Price of Sky Movies on Now TV is £15
Distribution/ technology	OTT via PCs, laptops, game consoles (Xbox 360, Wii and PS3); mobile devices (Apple and some Android and Windows) and some Internet-connected TVs, STBs and DVD/Blu-ray players	OTT via PCs, laptops, game consoles (Xbox 360 and PS3); mobile devices (Apple and some Android and Windows) and some Internet-connected TVs and STBs [✂]	DTH satellite and broadband via a dedicated STB. Some content is also available at no extra cost OTT (branded Sky Go) via PCs/Macs, laptops, Xbox 360 game consoles; smartphones (Apple and some Android); and tablets (iPads)	DTH satellite and broadband via a dedicated STB. Sky Movies and some other content is also available OTT (branded Sky Go) via PCs/ Macs, laptops, game consoles (Xbox 360); smartphones (Apple and some Android); and tablets (iPads)	As part of package: see 'Sky Movies package' columns. Sky Movies on Now TV via PCs/Macs, laptops, game consoles (Xbox 360); some Android smartphones and expected soon on other devices#
Other	Each account can view on two devices at the same time (subject to circumstances). No transactional VOD or advertising-based viewing	Each account can view on three devices at the same time. Transactional VOD and advertising funded VOD also available	The ability to view the channels available as part of a customer's Sky TV subscription via an additional STB in their home is available for an additional charge of £10.25 per month (branded Sky Multiroom). Sky Go is available on two devices per account§. Transactional VOD also available	As for basic package	Transactional VOD available to all Sky TV customers (not just Dual Movies). Sky Go and Now TV are available on two devices per account and both can be viewed at the same time§

Source: Netflix, LOVEFiLM and Sky.

*LOVEFiLM also offers combined SVOD and DVD-rental-by-post subscription packages.
†[✂]
‡Subscription to Sky Anytime+ requires compatible HD box, for which Sky may make a one-off charge if the box is acquired from Sky. Sky STBs can also be purchased from other retailers, such as Amazon.
§Each subscriber can register two Sky Go devices and watch on both at the same time, but only one of these registered devices can be changed every month.
¤Sky Movies on Now TV enables live OTT viewing of the 11 Sky Movies channels but not of Disney Cinemagic.
#Sky's stand-alone OTT service (Now TV) was distributed at launch on PCs/Macs and certain Android smartphones. Sky told us that distribution on iPhone, iPad, other Android phone and Xbox 360 was expected within one month of launch (17 July 2012) and on YouView when available. Sky said that it expected to make further announcements in respect of distribution on other devices, including PS3 and Roku's streaming player later in the year.

8. Table 1 illustrates that:

(a) There are a number of similarities between the OTT services of LOVEFiLM and Netflix and Sky Movies, in particular all offer a wide range of films and they are all available on a subscription basis.

(b) There are significant differences between the content offered by Sky's traditional pay-TV packages and that offered by the OTT services of LOVEFiLM and Netflix. In particular, Sky's traditional pay-TV packages offer a large number of linear channels many of which broadcast new programmes as well as movies and repeats, whereas LOVEFiLM and Netflix offer previously-broadcast TV series and movies. There is also a large difference in the standard price between Sky's pay-TV packages (which cost at least £20) and a SVOD-only subscription with LOVEFiLM or Netflix (at a cost of £4.99 or £5.99 respectively).[4]

(c) There are also differences between the content offered on Sky Movies and that offered by LOVEFiLM and Netflix. In particular, Sky Movies has most of the FSPTW content (representing around [✂] per cent of box office revenue for movies released in 2011), while LOVEFiLM and Netflix share most of the remainder (see paragraph 4(f)). However, LOVEFiLM and Netflix offer more movies in subsequent pay-TV windows (ie after Sky) and offer more library content, as well as offering previously-broadcast TV programmes. Whilst Sky Movies offers about 850 film titles in a month, of which around 600 are available to watch on a VOD basis via Sky Anytime+, Sky Go and Now TV, in January 2012 LOVEFiLM and Netflix offered approximately 3,500 and 1,000 films respectively, plus thousands of TV episodes.

(d) There is also a significant difference in price between Sky Movies (at least for those not taking or not attaching a lot of value to Sky Sports) and the OTT services of LOVEFiLM and Netflix. The incremental price for Sky Movies (dual movies) is £16 (£15 for Sky Movies on Now TV), which compares with £4.99 or £5.99 for LOVEFiLM and Netflix respectively.[5] We noted that the incremental price of Sky Movies for subscribers taking Sky Sports (which is around [✂] of total Sky Movies subscribers) was £8, which is somewhat closer to the current price of the services of LOVEFiLM and Netflix.[6]

9. There are two other subscription movie services offering movies with a broad range of content: BT's Vision Film and PictureBox (which is available OTT and via traditional pay-TV retailers other than Sky). In June 2012, BT stated on its website that its Vision Film service offered 200 much-loved favourite films, although we noted that the movies on Vision Film tended to be available for a shorter period than movies on the services of LOVEFiLM, Netflix and Sky (see Appendix 4.12). BT told us that, during April 2012, Vision Film offered about 150 movies at any one time, of which 45 were introduced to the service during the month. Vision Film is available as part of BT's Unlimited TV pack which costs £12.50 and includes VOD access to TV shows

---

[4] We recognized that Sky's pay-TV packages include 'lite' broadband (up to 2GB monthly usage cap) as a no-cost option for subscribers taking line rental from Sky. However, even allowing for this, the price differences between Sky's pay-TV packages and the services of LOVEFiLM and Netflix remained significant. We noted that the cost of unlimited broadband was £2.50 per month higher for subscribers to Sky who did not take pay TV.
[5] The incremental price of Sky's single movies products (not shown in Table 1) was £8 and therefore rather closer to the price of the OTT services of LOVEFiLM and Netflix. Sky's two single movies products each included five of the 11 Sky Movies channels.
[6] This comparison related to the dual movies and dual sports products. The incremental prices are slightly different if the product is single movies and/or single sports.

and the ESPN sports channel.[7] PictureBox offers 28 movies at any one time (with seven changed each week, ie all 28 will be different to those shown in the previous month) and costs £5 per month.

Market positioning of OTT services of LOVEFiLM and Netflix

10. LOVEFiLM told us that it would like its service to have wide appeal, being attractive both to those consumers who currently took only FTA TV and to those who subscribed to traditional pay-TV services but who were looking for better value for money. According to its internal documents, [✂].

11. We noted in LOVEFiLM's internal documents suggestions that [✂].[8]

12. In setting out its reasons for recommending price changes to its hybrid SVOD/DVD packages, LOVEFiLM also stated at this time: [✂].

13. Netflix has suggested publicly that it sees Sky as its principal long-term competitor, stating in a letter to shareholders that:

> … in the UK our long-term competition will likely be Sky Go offering Sky Movies and Sky Atlantic on-demand … We believe we will compete very effectively against Sky Go, given our advantages of being an unbundled low-priced offering with broad content that is purely on-demand, and personalized. Over the coming years, we hope to be able to grow large enough to outbid Sky for one or more major studio output deals, as we did this year for MGM. We also have the 'free' BBC iPlayer and Amazon's LOVEFiLM as competitors for viewing time. LOVEFiLM is primarily a DVD-by-mail service … iPlayer is an excellent over-the-top last few days catch-up service, free for UK residents.[9]

14. [✂][10]

15. We also reviewed Sky's internal documents. [✂]

16. Overall, it appeared to us from the internal documents of [✂] that, [✂].

Growth of OTT services to date and projected future growth

17. We obtained data from LOVEFiLM and Netflix on their subscriber numbers from the end of 2011 (in the case of LOVEFiLM) and over the first five months of 2012. As shown in Table 2, LOVEFiLM acquired a substantial number of subscribers in a short period; and [✂]. We noted that Netflix had stated publicly that its launch in the UK and the Republic of Ireland had achieved the highest net additions it had ever seen in the first 90 days of an international market launch.[11] We also noted that, less than five months after launch, Netflix had [✂] paying subscribers and a further [✂] users on free trial (of which around [✂] per cent on the basis of its experience to date

[7] New subscriptions to BT's TV Unlimited pack are available to BT broadband subscribers with a 12-month contract and typically require payment of a £40 activation fee. BT told us that it had [✂] subscribers to Vision Film who took no other subscription packs, paying £7.20 per month.
[8] [✂], LOVEFiLM launched its streaming-only package (at a price of £4.99 per month) before Netflix launched its service in the UK [✂].
[9] Letter to Netflix shareholders from its CEO and CFO, 25 January 2012.
[10] [✂]
[11] http://files.shareholder.com/downloads/NFLX/1818201195x0x562104/9ebb887b-6b9b-4c86-aeff-107c1fb85ca5/Investor%20Letter%20Q1%202012.pdf.

might be expected to become paying subscribers).[12] At the end of July 2012 Netflix stated publicly that, following its successful launch in the UK and the Republic of Ireland, it was encouraged by the continued strong growth of the service and had 1 million members.[13] In comparison, three and a half years after launch, BT Vision had [✂] subscribers to its Vision Film service. We also noted that LOVEFiLM now had [✂] users of its unlimited SVOD service.

TABLE 2 **Recent data on LOVEFiLM and Netflix subscribers, November 2011 to May 2012**

'000

	Nov	*Dec*	*Jan*	*Feb*	*Mar*	*Apr*	*May*
*LOVEFiLM SVOD subscribers with unlimited streaming**							
[✂]		[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
[✂]†	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
[✂]†	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
[✂]†	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
[✂]‡	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
LOVEFiLM SVOD subscribers with unlimited streaming—net increase since end November*							
[✂]		[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
[✂]†		[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
[✂]†		[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
[✂]†		[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Netflix UK and Republic of Ireland subscribers from entry (9 January)							
[✂]†			[✂]	[✂]	[✂]	[✂]	[✂]
[✂]†			[✂]	[✂]	[✂]	[✂]	[✂]
[✂]§			[✂]	[✂]	[✂]	[✂]	[✂]
[✂]§				[✂]	[✂]	[✂]	[✂]

Source: CC calculations based on LOVEFiLM and Netflix data.

*Excludes LOVEFiLM subscribers with limited hours of streaming per month.
†Total at end month.
‡Cancellations in month by paying LOVEFiLM subscribers.
§Number of trials started and of cancellations in month.

18. As the period since the launch of Netflix's service in January 2012 and the development of LOVEFiLM's SVOD service in late 2011 was so short, we also considered their projected subscriber growth. As shown in Figure 2, LOVEFiLM forecast significant growth between now and 2014: by this time it forecast to have [✂] subscribers, an increase of [✂] on its position at the end of 2011 (this included subscribers to both its SVOD-only product and its hybrid SVOD/DVD packages).[14] Netflix [✂] forecast [✂]. We noted that [✂].

[12] Table 2 shows that [✂].
[13] Letter to Netflix shareholders from its CEO and CFO, 24 July 2012.
[14] LOVEFiLM said that [✂]. LOVEFiLM said that, to a large extent, those expectations were based on figures made public by Netflix regarding its mix of physical-only, hybrid and digital-only customers in the USA.

FIGURE 2

LOVEFiLM and Netflix subscriber number forecasts, 2011 to 2014

[✂]

Source: LOVEFiLM and Netflix.
Notes:
1. Netflix subscriber numbers are as at calendar year end and are sourced from figures submitted to us in early March 2012.
2. LOVEFiLM subscriber numbers represent total subscribers across all subscription products and are as at calendar year end and are sourced from figures submitted to us in late February 2012.

19. While it was not possible for us to predict how successful LOVEFiLM and Netflix would be in achieving their projected subscriber numbers, we noted that [✂]. We also noted that both LOVEFiLM and Netflix had committed large sums to acquire content to stream to customers in the UK and, [✂], it seemed unlikely that failure to achieve subscriber projections would necessarily prompt withdrawal from the market. We recognized that content agreements were for a specific period and, over the longer term, content contract renewal costs may increase or become unsustainable on the basis of the number of subscribers they had but, at the time of our report, we had no reason to expect that either LOVEFiLM or Netflix would exit the UK market in the foreseeable future.

20. We considered whether Netflix's activities in the USA and Canada might be informative about its growth prospects in the UK. We noted that, at the end of 2011, Netflix had about 22 million streaming subscribers in the USA and about [✂] million in Canada (where it launched its service in 2010). As an indication of the penetration of Netflix's service in these markets, we prorated these numbers to the UK population, relative to the USA and Canada and they equated to about 4.3 million and [✂] million respectively. We did not consider that these numbers represented a forecast for the UK but they did indicate the extent of adoption of Netflix's services in other territories [✂]. We recognized that the content offered on Netflix's services in the USA and Canada is different to its service in the UK. In particular, Netflix's US service offers the FSPTW content of Paramount (via Epix—see paragraph 62) and Netflix's Canadian service offers the FSPTW content of both Paramount and Fox. However, we noted public statements by Netflix that, in the coming years, it expected to compete head to head with Sky for the FSPTW rights of major studios in the UK, demonstrating at least some intent to enhance further the content on its service in the UK in a way which would make it more comparable to its services in these other territories. We discuss further Netflix's activities in other geographic markets in paragraphs 61 to 74.

21. We also asked Sky and the major studios for their forecasts of the number of Sky Movies subscribers (and/or the revenue attributable to them from Sky Movies).[15] As set out in Annex A, their responses indicated that, generally, [✂] we recognized that these forecasts had been prepared prior to the launch of Netflix and the development of the LOVEFiLM service and the extent to which these developments had been anticipated was unclear). Sky told us that its subscriber and revenue projections were not useful in identifying the expected impact of competitors' SVOD services on Sky's movie business. Sky said that [✂]. We discuss further Sky's assessment of the impact of LOVEFiLM and Netflix on its business and its response to these services in paragraphs 40 to 55.

---

[15] We asked the studios because [✂].

Consumer research

22. In order to assess the extent to which the new OTT services of LOVEFiLM and Netflix were likely to be substitutes for Sky Movies or for a traditional package of pay TV, in February 2012 we surveyed customers who had either *(a)* subscribed to a package from LOVEFiLM which included its SVOD service from 6 December 2011 (when the SVOD-only product became available) or *(b)* subscribed to Netflix since its launch on 9 January. The results of this survey are set out in Appendix 4.3.

23. We also considered consumer research supplied to us by Sky and Netflix.

Our February 2012 survey

24. Our February 2012 survey indicated:

(a) On average, respondents used the LOVEFiLM/Netflix service to watch about six hours of films and six hours of TV programmes per week, a total of about 12 hours a week. There was also some viewing by other members of respondents' households.[16]

(b) More respondents (53 per cent) said that they had watched the LOVEFiLM/Netflix service using a games console (XBOX 360, Nintendo Wii, or PS3) than on any other device, with the next most popular device being a stand-alone laptop (used by 41 per cent). 37 per cent of respondents said that a games console was the *main* device they used to watch the LOVEFiLM/Netflix service, followed by stand-alone laptop (12 per cent), Internet-enabled TV (10 per cent), tablet (9 per cent), desktop computer (7 per cent), STB (4 per cent), Blu-ray player (4 per cent) and laptop connected to a TV (4 per cent).[17] These figures suggested that, for about 60 per cent of respondents, the main viewing was on a TV.

(c) Three in four respondents described themselves as very or quite satisfied with the LOVEFiLM/Netflix service.

(d) Respondents on average rated the LOVEFiLM/Netflix service broadly on a par with Sky Movies for range of films, but worse on offering recent releases and slightly worse on offering 'big hit'/well-known films.

(e) 20 per cent of respondents said that they experienced broadband problems when accessing the LOVEFiLM/Netflix service at least weekly, and another 28 per cent suffered problems sometimes (but less than weekly). 16 per cent of respondents had a monthly download limit to their broadband content.

(f) 54 per cent of respondents said that they would definitely or probably be a subscriber in three months' time.

25. We recognized that one of the principal limitations of this survey was that it was conducted very soon after the launch of the new services and most of the respondents were still in a free-trial period. Therefore, the group of customers of most interest to us were those who indicated that they were likely to continue their subscriptions and

---

[16] Respondents were asked how often others in the household watched the new service. Some care should be taken interpreting these results as results are only estimates (based on the respondent's perception) and a sizeable proportion felt unable to give an estimate. On average, in households with other members, others watched six hours a week, with slightly more hours spent watching films rather than TV programmes.

[17] 1 per cent said that the main device used was a mobile phone and 4 per cent said other devices. 7 per cent of respondents were not sure which was the main device used to view the service.

would become paying subscribers. On the above points, the responses of just those who said they would definitely or probably be a subscriber in three months' time were similar to those of all respondents (except that they watched the service for slightly more hours per week and a higher proportion were very or quite satisfied with the service).

26. LOVEFiLM and Netflix users were also asked whether they had stopped subscribing to pay TV in the last three months and if so their reasons for doing so. For those respondents who said that they were likely to continue their subscription to LOVEFiLM/Netflix in three months' time, the most popular reason given for stopping their pay-TV subscription was that their pay-TV subscription was too expensive (quoted by 63 per cent of respondents), but 32 per cent mentioned 'now watch TV on Netflix/LOVEFiLM'. Similarly, respondents were also asked whether they had stopped subscribing to Sky Movies and why. For those who said they were likely to continue their subscription to LOVEFiLM/Netflix, 65 per cent mentioned 'too expensive' and the same percentage mentioned 'now watch TV on Netflix/LOVEFiLM' as their reasons for stopping their subscription to Sky Movies.[18]

27. Respondents who had a pay-TV service and were involved in making decisions on which pay-TV packages to subscribe to, and who said that they were likely to continue their subscription to LOVEFiLM/Netflix in three months' time, were asked what was likely to happen to their pay-TV package. They were prompted with the following list: keep current pay-TV package with current provider; switch pay-TV provider; downgrade to cheaper pay-TV package (with current provider); stop subscribing to pay-TV; or don't know/too early to say. Table 3 summarizes the responses to these questions.[19]

[18] There was likely to have been some overlap with the previous figures since some of those who stopped subscribing to pay TV were likely to have had Sky Movies in their pay-TV package.
[19] The analysis in this table differs slightly from that in GfK's published report (see Appendix 4.3) because we have included in 'pay-TV households' those which had stopped subscribing to pay TV in the previous three months. Table 3 also shows some additional analysis of responses which is not in GfK's report.

TABLE 3 **Analysis of Netflix and LOVEFiLM users likely to be subscribers in three months' time**

per cent

	[✂]	*[✂]*	*Average*
Summary analysis of impact on pay-TV subscription			
Impacted pay-TV households*†	[✂]	[✂]	15.2
Not impacted pay-TV households*	[✂]	[✂]	53.6
—of which not decision maker‡	[✂]	[✂]	6.9
Total pay-TV households*	[✂]	[✂]	68.8
Household does not have pay TV§	[✂]	[✂]	31.2
Summary analysis of impact on Sky Movies subscription			
Impacted Sky Movies households*†	[✂]	[✂]	8.9
Not impacted Sky Movies households*	[✂]	[✂]	17.8
—of which not decision maker‡	[✂]	[✂]	2.5
Total Sky Movies households*	[✂]	[✂]	26.7
Household does not have Sky Movies§	[✂]	[✂]	73.3
Detailed analysis			
Has stopped subscribing to pay TV or Sky Movies in last 3 months and gave 'now watch TV on NF/LF' as one reason			
Pay TV	[✂]	[✂]	2.4
Sky Movies	[✂]	[✂]	3.6
Intend to stop subscribing to pay TV or down-grade including dropping/reducing Sky Movies			
Stop Pay TV	[✂]	[✂]	3.1
Downgrade pay TV	[✂]	[✂]	7.2
Downgrade—stop Sky Movies	[✂]	[✂]	2.8
Downgrade—reduce Sky Movies	[✂]	[✂]	1.3
Total impacted¶	[✂]	[✂]	15.2

Source: CC survey of Netflix and LOVEFiLM users. The average column is calculated from an equally weighted average of Netflix and LOVEFiLM respondents.

---

*In this table, 'pay-TV households' ('Sky Movies households') includes relevant households which stopped subscribing to pay TV (Sky Movies) in last three months.
†Represents *(a)* subscribers who said that they had stopped subscribing in last three months and who gave 'watching TV on Netflix or LOVEFiLM' as a reason to stop subscribing and *(b)* subscribers who said that they intended to downgrade their subscription in the next three months (see detailed results below).
‡Approximate figure for pay-TV households where Netflix/LOVEFiLM user was not decision-maker about pay TV.
§Excludes households which stopped subscribing to pay TV (Sky Movies) in last three months.
¶Represents *(a)* subscribers who said that they had stopped subscribing in last three months and who gave 'watching TV on Netflix or LOVEFiLM' as a reason to stop subscribing and *(b)* subscribers who said that they intended to downgrade their subscription. The total is less than the sum of constituents as some (but not all) of those who stopped pay TV in the last three months would have subscribed to Sky Movies and would also have stopped Sky Movies and there may also be some who stopped subscribing to Sky Movies in the previous three months who also intend to stop subscribing to pay TV altogether in the next three months.

28. Table 3 shows that, for about 15 per cent of respondents who were likely to continue with their LOVEFiLM/Netflix subscription (22 per cent of such respondents with a traditional pay-TV subscription), their pay-TV subscription would be impacted in some way, in that either they said they had stopped subscribing to pay TV or Sky Movies in the previous three months and gave as a reason that they 'now watch TV on Netflix/LOVEFiLM' or they said that they intended to stop or downgrade their pay-TV subscription in the next three months for this reason.

29. For about 9 per cent of respondents who were likely to continue with their LOVEFiLM/Netflix subscription (33 per cent of such respondents with a Sky Movies subscription) their Sky Movies subscription would be impacted in some way, in that either they said that they had stopped subscribing to Sky Movies in the previous three months and gave as a reason that they 'now watch TV on Netflix/LOVEFiLM' or they said that they intended to stop or downgrade their Sky Movies subscription in the next three months for this reason.

30. If we applied these percentages to the forecasts from LOVEFiLM and Netflix for the number of their subscribers at the end of 2012 (see Figure 2), this implied that about [✂] pay-TV subscriptions and [✂] Sky Movies subscriptions would be impacted in some way by the services of LOVEFiLM and Netflix (representing about [✂] per cent of existing pay-TV subscriptions and [✂] per cent of Sky Movies subscriptions). If we applied the same percentages to the forecasts from LOVEFiLM and Netflix for the number of their subscribers at the end of 2014 (see Figure 2), this implied that around [✂] pay-TV subscriptions and [✂] Sky Movies subscriptions would be impacted in some way (representing about [✂] per cent of pay-TV subscriptions and [✂] per cent of Sky Movies subscriptions).[20]

31. We accepted that using survey responses in this way was subject to a number of uncertainties: these early subscribers might not be representative of future subscribers; it was likely that survey responses effectively captured the switching intentions of subscribers before they informed their provider of their intention to switch and therefore overstated the proportion of subscribers who would in fact end up switching; [21,22] and the subscriber forecasts were subject to many uncertainties and in our view could incorporate some degree of appraisal optimism. For these reasons, although we considered that the results of our February 2012 survey were of some value, this evidence was by no means determinative in our assessment of the extent to which the OTT services of LOVEFiLM and Netflix were substitutes for Sky Movies or for a traditional package of pay TV.

Comments on our February 2012 survey

32. BT said that only limited insight could be drawn from our February 2012 survey results given the relative newness of the OTT services of LOVEFiLM and Netflix. BT considered that, overall, the survey sample had yielded some limited insight into the present behaviour of a small subset of 'early adopters', which was not representative of the pay-TV population or Sky Movies subscribers as a whole. In BT's view, it also appeared that the sample was biased towards those that would be expected to have the highest propensity towards these new services and significantly under-represented those that were likely to value traditional pay-TV content; and that the survey was only able to capture respondents' initial views of these services, since most respondents had only had the service less than one month. BT added that the fact that the vast majority of respondents were still taking these services on a free trial basis would also necessarily distort their views; and that it was difficult, therefore, to see how these results could be extrapolated to the behaviour of pay-TV subscribers more generally. Similarly, Ofcom said that the survey did not cover the preferences of the large majority of Sky Movies customers who had not taken up the services of LOVEFiLM or Netflix, and that many of the respondents who had signed up to one of the new services had done so only very recently. Virgin Media noted that the vast majority of customers had signed up to the new services in the last month and would most likely still have been on a free trial or introductory discount at the time of completing the survey. In Virgin Media's view, the vast majority of customers surveyed would not have had sufficient time fully to assess the new services and to compare them to alternative services, nor to assess how quickly the appeal of the content was exhausted.

---

[20] In these calculations, we applied the percentages from the survey results to Netflix's total number of subscribers and to the increase in LOVEFiLM's subscribers since the end of 2011. We used the current number of Sky Movies subscribers for the 2012 projection and the current number of Sky Movies subscribers plus 10 per cent for the 2014 projection.

[21] We noted in Appendix 5.1 (paragraph 4) that only around [✂] per cent of those contacting Sky's call centre to cancel their subscription eventually did so.

[22] Also, the impacted subscribers in Table 3 included all those giving 'now watch TV on Netflix/ LOVEFiLM' as a reason for stopping/downgrading their subscriptions (even though some respondents gave other reasons as well).

33. As noted above, we recognized that some caution was needed in drawing inferences from the results of our February 2012 survey as the customers of LOVEFiLM and Netflix in January 2012 might not be representative of future subscribers to these services. We also recognized that, as pointed out by BT, Ofcom and Virgin Media, the survey focused on the behaviour of Netflix and LOVEFiLM customers and should not therefore be seen as representative of pay-TV customers more generally.

Consumer research by Sky and Netflix

34. Netflix and Sky provided us with the results of consumer research carried out by each of them in 2011 before Netflix launched its service in the UK. This research is summarized in Annex B. [✂] However, given that, for both Sky and Netflix, this research was conducted on a hypothetical basis prior to the launch of the Netflix service, we put less weight on it than on the results of our February 2012 survey, which, notwithstanding its limitations, surveyed actual subscribers with an experience of the actual services of LOVEFiLM and Netflix.

35. After October 2011, Sky also carried out research to understand the reasons why subscribers dropped Sky Movies and how they would meet their movies needs going forward.[23] The results of this research are summarized in Table 4.

[23] The results of earlier Sky research into reasons for dropping Sky Movies are in Appendix 4.1, Table 3. (Following October 2010, Sky revamped its content tracker survey and therefore the results of Table 4 in this appendix are not directly comparable with those of Table 3 in Appendix 4.1.)

TABLE 4 **Results from Sky leavers' surveys**

per cent

Survey period:	*October 2011*	*December 2011*	*January 2012*	*February 2012*	*March 2012*
*Cancellation period:**	*Vast majority cancelled between July 2011–Sept 2011*	*November 2011*	*December 2011*	*January 2012*	*February 2012*
Main reason for downgrading movies (sample size)	[✂]	[✂]	[✂]	[✂]	[✂]
Technical issues	[✂]	[✂]	[✂]	[✂]	[✂]
End of promotion	[✂]	[✂]	[✂]	[✂]	[✂]
It did not meet my expectations	[✂]	[✂]	[✂]	[✂]	[✂]
Wasn't using it enough	[✂]	[✂]	[✂]	[✂]	[✂]
Affordability	[✂]	[✂]	[✂]	[✂]	[✂]
How will you continue to watch movies (Movies mentions base)	[✂]	[✂]	[✂]	[✂]	[✂]
Prefer watching through SBO	[✂]	[✂]	[✂]	[✂]	[✂]
Don't watch movies enough to use an alternative	[✂]	[✂]	[✂]	[✂]	[✂]
Free channels meet my needs	[✂]	[✂]	[✂]	[✂]	[✂]
Watch free content online/through terrestrial On Demand services	[✂]	[✂]	[✂]	[✂]	[✂]
Subscription to another movie service (ie including online, postal and store services)†	[✂]‡	[✂]	[✂]§	[✂]¶	[✂]#
Where they had another subscription, did you receive a better offer?					
Yes	[✂]	[✂]	[✂]	[✂]	[✂]
No	[✂]	[✂]	[✂]	[✂]	[✂]

Source: Sky.

*The period in which a customer would have needed to go to 'product cancelled' for one or more TV products in order to be in the survey sample. Customer would have signalled their intention to downgrade in prior month, eg the survey conducted in January 2012 would have sought the views of customers who downgraded in December 2011, ie who signalled their intention to downgrade in November 2011.
†This is the wording from the December 2011 survey. In the October 2011 survey this category was presented as two separate categories: 'I have a subscription to an online/postal movie service' and 'I have a subscription to a store service'.
‡This is the sum of online/postal ([✂] per cent) and store service ([✂] per cent).
§[✂] per cent of these respondents mentioned a postal/in-store service; [✂] per cent mentioned an online streaming and DVD rental service; [✂] per cent mentioned an online-streaming-only service and [✂] per cent mentioned iTunes Movies.
¶[✂] per cent of these respondents mentioned a postal/in-store service; [✂] per cent mentioned an online streaming and DVD rental service; [✂] per cent mentioned an online-streaming-only service and [✂] per cent mentioned iTunes Movies.
#[✂] per cent of these respondents mentioned a postal/in-store service; [✂] per cent mentioned an online streaming and DVD rental service; [✂] per cent mentioned an online-streaming-only service and [✂] per cent mentioned iTunes Movies.

36. [✂][24,25]

37. [✂]

38. [✂]

39. This evidence suggested that [✂] to [✂] per cent of those cancelling Sky Movies would continue to watch movies via another subscription service and that a proportion of those would do so via an online streaming-only service. This percentage increased from [✂] per cent in July to September 2011 to [✂] per cent in March 2012.

[24] [✂]
[25] [✂]

Response from Sky to launch of OTT services

40. In this subsection, we consider some of Sky's recent and proposed changes to its offering and the extent to which these changes might be considered as a competitive response to the arrival of OTT services. We first set out an overview of Sky's changes and then describe in more detail Sky's retention activity.

Sky's changes—overview

41. Our review of Sky's internal documents indicated that, in 2011, Sky was monitoring closely developments in relation to [✄].

42. In November 2011, Sky told us that it had been thinking about the entry of OTT services for some time, in particular, more recently, in the light of studio rights it had lost and Netflix's public announcements. Sky explained that, [✄]. Sky described a range of changes to its existing Sky Movies service as well as the then anticipated launch of its new OTT service, Now TV. Sky said that most of the changes to its services were not directly in response to Netflix or LOVEFiLM but, rather, Sky had observed the same market developments as Netflix and LOVEFiLM (eg the proliferation of Internet-connected homes, faster broadband speeds, the proliferation of quality IP-connected devices that were creating new opportunities to deliver content) and was responding to these developments.

43. In December 2011, Sky summarized for us its initiatives [✄]. At that time, Sky said that:

(a) Sky intended to extend Anytime+ to customers who obtained their Internet access through ISPs other than Sky so that the service would be available to all Sky pay-TV subscribers regardless of their broadband provider. This was implemented in March 2012.

(b) Sky would make changes to the user-interface of the TVOD section of Anytime+. The first change would be to establish a new 'Sky Store' brand for Sky's TVOD service, and [✄].

(c) Sky intended to revise the pricing structure of its TVOD service so that it was more competitive, with some titles offered at 99p from February 2012. [✄]

(d) [✄]

(e) Sky would launch its own OTT service in summer 2012, which would offer Sky Movies separately from subscriptions to basic paid-for content as well as separately from any DTH subscription, ie on an unbundled basis. Sky said that Sky Movies would be the first content available to consumers on this service.

[✄]

44. [✄] We discuss this in more detail in paragraphs 49 to 55. [✄]

45. Sky said that changes in other parts of its business were also a response to the developments in the market. Sky said that it had been making changes and additions to its service on a continuing basis, with the aim of improving the value of Sky Movies in the face of ever-stronger competition. It referred, as examples, to its decision to offer streamed VOD movies to its Sky Movies DTH customers on a bonus basis as part of Sky Go, and its decision to reduce the wholesale rate-card prices for certain of its products which incorporate Sky Movies. (We consider Sky's changes to its whole-

sale prices in more detail in Appendix 8.1.) Sky added that it was in the process of improving the Sky Movies website to help customers find the content they wanted to watch.

46. [✂]

47. In January 2012 Sky announced publicly its intention to launch its own OTT service, branded Now TV, stating that this new service would be an additional choice for people who did not currently subscribe to a pay-TV service. Sky said that it would offer Sky Movies on the service from the date of its launch, though it expected to enhance this subsequently with further content. Sky told us that, by 2013, Now TV would offer three products: Sky Movies, certain sports content and content from a group of basic pay-TV channels (Sky 1, Sky Atlantic, Sky Living and around ten others). Sky said that Now TV will offer content to consumers on both a subscription and TVOD basis. [✂] This service was launched in July 2012. At the time of launch, Sky stated that the service was designed for a new audience of people who did not currently have paid-for TV.[26] Shortly after launch, Sky's chief executive said in response to a question about whether Now TV might result in cannibalisation of Sky's existing DTH subscribers:[27]

> They're different propositions. We will target them in to different segments. There'll be some degree of overlap. But, if we can get it right, we'll build the totality of the business more successfully. You never completely eliminate that risk – if that was the case, you'd only ever stick with one brand. But we'll be able to create more value than if we had one.

Sky told us that, though the main focus of its marketing of Now TV was towards Freeview homes, Now TV also represented an alternative option for people who hitherto had decided that they wanted the fuller service offered by traditional pay-TV retailers and, on the basis of our review of the evidence, we agreed with this view.

48. Overall, it appeared to us by the time of our report that Sky had made, and was in the process of making, many changes to its business relevant to its movies offering. These changes were likely to be in part a response to the developments in the market generally, which enabled the OTT services of LOVEFiLM and Netflix to launch, but they also appeared to us to be to some extent a direct competitive response to LOVEFILM and Netflix.

Sky's retention activity

49. In our review of Sky's internal documents, we noted [✂].

50. [✂]

51. [✂]

52. [✂]

53. [✂]

---

[26] http://news.sky.com/story/961107/no-dish-no-contract-sky-launches-now-tv.

[27] Statement by Sky CEO on analysts' call following publication of Sky's results for the financial year ending June 2012, 26 July 2012.

54. In response to an information request in January 2012, Sky provided us with an update to the earlier analysis [✄].

55. Overall, it appeared to us from Sky's retention activity that [✄]. This evidence indicated to us that [✄].

Responses from other traditional pay-TV retailers to launch of OTT services

56. Virgin Media told us that [✄].

57. BT told us that the entry of Netflix and the launch of LOVEFiLM Instant [✄].

58. Overall, although the OTT services of LOVEFiLM and Netflix had not been available on the market for long, we noted that [✄].[28]

Evidence from other countries

59. We noted that Netflix offered an Internet-distributed SVOD service in three other regions in addition to the UK:

   (a) in the USA since 2007;

   (b) in Canada since mid to late 2010; and

   (c) in Latin America since September 2011.

60. To help us understand the degree to which Netflix and LOVEFiLM were likely to compete with traditional pay-TV retailers and with Sky Movies in the UK, we looked at the impact Netflix had had in the USA and in Canada on competition for subscribers to pay-TV movie services and to packages of pay TV. We did not consider Netflix's experience in Latin America due to the short time that had elapsed since Netflix's entry in this region and due to the many differences between the Latin American and UK markets.

USA

61. Netflix introduced a limited version of its current US streaming service in 2007. Netflix told us that its subscription service was priced at $7.99 a month and enabled subscribers to watch instantly unlimited movies and TV episodes over the Internet on more than 700 devices (including PCs, Macs, Internet-connected TVs, the Xbox 360, the Wii, the PS3, Blu-ray disc players, PVRs, Internet video players, Apple's iPhone, iPad and iPod touch, Android and windows tablets and phones, Apple TV and Google TV). Netflix stated in a letter to shareholders that, as at 31 March 2012, Netflix had 23.4 million US streaming subscribers.[29]

62. For some years, Netflix subscribers had access on Netflix's streaming service to the FSPTW content of three major studios, as well as other movie and TV content. In 2008, Netflix and Starz signed a three-year deal which enabled Netflix to stream

[28] BT does not offer Sky Movies but has been in discussions with Sky about doing so (see Section 8).
[29] Letter to Netflix shareholders from its CEO and CFO, 23 April 2012. Netflix told us that one of its most popular packages had been a $10 per month hybrid package which offered consumers unlimited streaming and one-at-a-time DVD rental. In July 2011, Netflix announced that this package would be replaced by two separate packages: *(a)* unlimited streaming at a cost of $7.99 per month; and *(b)* one-at-a-time DVD rental also at a cost of $7.99 per month. The result for those customers who wanted access to both services was a price increase of about 60 per cent. Following this announcement, Netflix lost many subscribers to its US service.

Starz content (including FSPTW movies from Sony Pictures and Disney) to its subscribers. This provided Netflix subscribers with access to both Starz' on-demand and some linear content. In August 2010, EPIX and Netflix also announced a deal which made the content on EPIX, including the FSPTW content of Paramount, Lionsgate and MGM, available on Netflix's streaming service. [✄]

63. In the second quarter of 2011, Sony Pictures' FSPTW content ceased to be on Netflix (this was part of the Starz content which Netflix had previously streamed) and, in September 2011, it was announced that Starz was not renewing its deal with Netflix when it expired in February 2012. In a letter to shareholders, Netflix stated:

> Since the Sony output came off in Q2 2011, the remaining Starz content is primarily the Encore catalog titles and the 15 current Disney Pay 1 titles. For the Encore catalog titles, we have plenty of substitutes and in many cases have already directly relicensed from the studios some of the top performing Encore titles. So, the only significant loss is the current 15 Disney output titles, such as 'Toy Story 3' and 'Tangled,' which currently constitute about 2% of our domestic viewing.[30]

64. We found that the evidence relating to the impact Netflix's service had had on US pay-TV providers during this period was mixed. According to an article published in *The New York Times* in October 2011,[31] the latest earnings reports indicated that, for the most part, the degree of 'cord-cutting' (ie people dropping their entire pay-TV subscriptions in favour of watching TV using OTT services) had been relatively limited. The article said that 'even as internet viewing increases, the vast majority of American households are still paying for television subscriptions and watching most video that way. Those who are cancelling are doing so it seems, because of poverty, not improved technology'.

65. The article went on to say that Netflix and services like it were increasingly being positioned as supplements for traditional pay-TV subscriptions as the major studios, networks and distributors worked to preserve their existing business models.

66. According to an article published in *Ad Age Mediaworks* in November 2011,[32] Credit Suisse analysts forecast that the number of pay-TV subscribers in the USA would contract by 200,000 in 2012. However, the analysts blamed the coming downturn on fewer new households and a growing number of new households avoiding pricey TV subscriptions in the light of a sour economy. The analysts emphasized that they were not 'sounding the cord-cutting alarm' and remained optimistic on pay TV overall. Rather, the analysts identified the immediate problem as 'cord-avoiders', ie households which used pay-TV alternatives like Hulu and Netflix at a time of economic austerity but which may not return to cable and satellite services when the economy improves. The article suggested that years of warnings over so-called 'cord-cutting' had not materialized into a substantial threat for pay-TV, stating:

> While alternatives have seen growth, cable and satellite's domination of live TV, new original content and sports, among other products, have so far insulated them from any mass exodus of subscribers. In most cases, consumers opting out of paid video services are still paying the same system operators for the internet access that allows their video consumption. However, the analysts did warn of a younger generation

---

[30] Letter to Netflix shareholders from its CEO and CFO, 25 January 2012.
[31] 'Cable is holding web TV at bay, earnings show', *The New York Times*, 30 October 2011.
[32] 'Cord-Avoiders to Reduce Cable and Satellite TV Rolls in 2012, Analysts Say', http://adage.com/article/mediaworks/cable-satellite-tv-subscriber-rolls-shrink-2012/231216/.

quickly being conditioned to live without the multi-channel video services offered by cable and satellite providers, a demographic they called 'cord-nevers' …The extent of that problem won't be clear for some time, but remains one of the biggest challenges facing pay TV over the next 10 years.

67. We also reviewed commentary on the effect of Netflix on subscriptions to pay-TV channels offering premium movie content (eg HBO and Starz). The evidence we saw suggested that, so far at least, the rapid growth in Netflix's US streaming subscribers had not been at the expense of subscriptions to these channels. An Enders Analysis report in December 2011[33] stated:

> Netflix and other online services have so far had no discernible impact on premium pay-TV subscriptions also offering movies and top drama entertainment. HBO may have lost some subscribers in recent quarters, yet its main competitors have both seen strong growth, in all a 16.8% growth in combined total subscriptions between Q4 09 and Q3 11. Whether they might have done better without Netflix is, of course, open to question; the point simply being that we have not yet seen obvious signs of damage, in keeping perhaps with the distinctive product propositions of Netflix and the premium film services …
>
> In short, we find no firm indication that Netflix growth has fuelled cord cutting or undermined premium pay-TV film and entertainment subscriptions. However, it cannot be ruled out as a possibility and we would expect negative impact to become evident at some point. That we have not seen any such impact so far may reflect a combination of factors, especially the recency of the superfast growth phase—even today, Netflix online streaming is taken by less than 20% of US homes—coupled with customer inertia in cancelling subscriptions.
>
> Although Netflix may not have undermined premium pay-TV subscriptions so far, it may nevertheless act as a constraint on price increases, though any such threat would again be hard to discern from other factors.

68. The commentary we saw appeared to suggest that, notwithstanding the limited impact to date of Netflix on either subscriptions to channels which offered premium movie services or subscriptions to traditional pay TV overall, Netflix and other OTT services might have a more significant effect in the long term. We noted that Netflix stated recently that it saw its biggest long-term threat as HBO Go (which provides HBO content over the Internet as a bonus to a traditional pay-TV HBO subscription, much like Sky Go in the UK) and other implementations of 'TV Everywhere'.[34] This statement suggested that Netflix perceived HBO's move to enable consumers to access its content on multiple devices over the Internet limited one of Netflix's key differentiating factors, and so moved Netflix and HBO a step closer as competitors.

69. Netflix provided us with [✄] we judged that it was difficult to draw any definitive conclusions.

70. Sky also provided us with some analysis which it had conducted on [✄]. However, although indicative of differentiation, we did not take this [✄] comparison as strong evidence of a lack of competition. [✄]

---

[33] *The Netflix whirlwind*, Enders Analysis, 6 December 2012.
[34] Letter to Netflix shareholders from its CEO and CFO, 25 January 2012.

Canada

71. In September 2010, Netflix launched an SVOD service in Canada. At the time of launch, Netflix's service in Canada offered no FSPTW content from a major studio; however, in January 2011, Netflix entered into a deal with Paramount for its FSPTW rights and, since then, Netflix has also acquired FSPTW rights from Fox.

72. Paramount told us that Netflix was able to attract [✂] subscribers for its streaming service in less than one year, which represented around [✂] of the incumbent traditional pay-TV providers combined 3 million subscribers. Paramount supplied us with the following chart to support its statement (see Figure 3).

FIGURE 3

[✂]

Source: Paramount.

73. Netflix provided us with data which [✂], indicating that, between the launch of its Canadian service in mid to late 2010 and the end of 2011, it acquired approximately [✂] subscribers.

74. However we observed that, as illustrated in Figure 3, Netflix's [✂] subscriber growth in Canada did not seem to have been at the expense of [✂] the results of the analysis appeared broadly consistent with the trends in the USA, which showed a lack of a strong competitive constraint from Netflix on either movie services on traditional pay TV or traditional pay TV generally.

Comments from parties on developments since our August 2011 provisional findings

75. Among the points in BT's responses to our working paper on developments since our August 2011 provisional findings (working paper 29) and to our revised provisional findings, BT said that the new OTT services of LOVEFiLM and Netflix were not materially different from BT's Vision Film subscription service at the time of our provisional findings. BT said that: *(a)* LOVEFiLM and Netflix did not have materially more FSPTW or SSPTW content than Vision Film; and *(b)* the total volume of library movies offered by Vision Film over the course of a year was much higher than the number of movies available on that service at any one time (which we had quoted in our August 2011 provisional findings and working paper 29), being of a similar order of magnitude to the total number of movies offered by each of LOVEFiLM and Netflix. We agreed that Vision Film previously had SSPTW rights to [✂] percentage of box office to that on each of the services of LOVEFiLM and Netflix (though in many cases movies would have been exhibited on Vision Film for a shorter period than they are exhibited on the LOVEFiLM and Netflix services), but we did not agree with BT's other points for the following reasons:

(a) Although BT told us in response to working paper 29 that at the time of our August 2011 provisional findings its Vision Film service had FSPTW rights to Studiocanal movies (which, at that time, were included in the PictureBox service (and hence in Vision Film)), Studiocanal's share of UK box office revenue in 2010 and 2011 was 2 and 4 per cent respectively. We noted that this was considerably less than the percentage of 2011 box office to which LOVEFiLM had FSPTW rights (about [✂] per cent), and to which Netflix expected to have FSPTW rights (see Appendix 4.12). Additionally, each movie was available for longer on the services of LOVEFiLM and Netflix than on PictureBox, which meant that the

number of FSPTW movies available to view at any one time was greater. For example, BT told us that, in August 2011, PictureBox (and hence Vision Film) did not in fact have any FSPTW movies from Studiocanal on its service (see Appendix 4.12).

(b) In August 2011, BT's Vision Film service had approximately 100 movies available at any one time. This was much less than the number on the services of Netflix (about 1,000) and LOVEFiLM (about 3,500) at the end of January 2012. BT also said that it added about 50 additional movies per month, so that over a period of 12 months its service distributed around 600 movies. However, this was still considerably less than the total number of movies available at the end of January 2012 on the services of Netflix and especially LOVEFiLM.[35] Moreover, it appeared to us that the number of movies available at any one time may be more relevant to competition (we noted that it was this number which was usually quoted in marketing material). In our August 2011 provisional findings we stated:

> Apart from Sky Movies … the main movie subscription services of which we are aware are BT Vision's Filmclub, and Universal's PictureBox (PictureBox is retailed by Virgin Media and TUTV). These are SVOD services which show movies older than those in the FSPTW. They also have available a smaller number of movies than Sky Movies: BT Vision's Filmclub currently offers 'over 60' movies and PictureBox has 28 movies … These other movie subscription services offer a broadly similar product to Sky Movies (although lower quality in that they do not show FSPTW movies and have a smaller range of movies).[36]

Up to the time of our August 2011 provisional findings, BT had not told us that its service and the PictureBox service included FSPTW content nor made the point that over a period of 12 months its service distributed around 600 movies. These points were not therefore reflected in the analysis in our August 2011 provisional findings.

(c) Most importantly, in our view, the competitive impact of a pay-TV product did not depend only on the content offered, but also on how it was packaged and marketed. We believed that the competitive impact of the LOVEFiLM and Netflix services was greater than BT's Vision Film service or PictureBox as they used a different business model (OTT), which made them available to a much wider potential customer base than these other traditional pay-TV services, without having to distribute through Sky. We noted that [✄].[37] We considered that the difference between the services was illustrated by the fact that less than five months after launch, Netflix already had [✄] paying subscribers and a further [✄] users on free trial (of which we expected around [✄] per cent to become paying subscribers) whereas three and a half years after launch, BT Vision had [✄] subscribers to Vision Film.

[35] The number of movies available over the course of a year on the LOVEFiLM and Netflix services would be greater than the number available in any one month, although not to the same proportionate extent as for BT's Vision Film service (because each movie is available for longer on the LOVEFiLM and Netflix services than on BT's Vision Film service).
[36] August 2011 provisional findings, Appendix 5.5, paragraphs 39 & 40. We also stated that survey evidence suggested that few Sky Movies subscribers regarded other subscription movie services (Vision Film and PictureBox) as an alternative (see Table 1); and we estimated that the value of their sales was only about [✄] per cent of the value we attribute to Sky Movies. We did not regard these remarks as relevant to the LOVEFiLM and Netflix services (because of their different business models and activities to date compared with the other subscription movie services at the time of our August 2011 provisional findings).
[37] [✄]

76. Virgin Media said that its experience with PictureBox had confirmed its view that an SVOD service which was only able to offer SSPTW and library movie titles [✂]. However, as set out above, we believed that the OTT services of LOVEFiLM and Netflix differed from PictureBox in a number of respects, in particular by offering a much greater range of movies, including FSPTW movies from some non-major studios, and through being much more actively marketed.

77. [✂] We noted this speculation in various analyst reports, but we also noted other analyst reports which suggested that Netflix's launch in the UK had gone well and that, over the longer term, its position in the UK might become greater than shown in Netflix's own forecasts. We recognized that Netflix had made a big investment in launching its service in the UK and that there were a number of risks associated with its business both in the UK and in the USA. However, we did not see a consensus view from either analysts or media commentators which suggested that Netflix was likely to exit the UK in the foreseeable future. Subsequently, BT suggested we had failed to attach due weight to the negative evidence from analysts. It said that the most relevant and objective measure for evaluating the various analyst views was Netflix's share price, which remained far below its 2011 peak and, in BT's view, clearly showed a business that had struggled as a result of the same issues that it would face in the UK were it to attempt to outbid Sky for FSPTW movie rights from the major studios. We noted that Netflix recently stated that it saw enormous challenges ahead and that it would no doubt have further ups and downs as it pioneered Internet TV.[38] However, we also noted that, although Netflix's share price had fallen substantially since mid-2011, its market capitalization in late July 2012 remained about $3 billion, and this did not suggest the market was expecting Netflix's business model to fail. We recognized that the level of Netflix's share price gave an indication of how profitable the market expected Netflix overall to be in the future but our concern was less with the extent of Netflix's future profitability and more with whether Netflix was likely to exit the UK in the foreseeable future, and on this matter we did not consider any clear inference could be drawn from the current level of Netflix's share price.[39] Therefore, we maintained our view as stated in our revised provisional findings that we did not see any reason to expect that either LOVEFiLM or Netflix would exit the UK market in the foreseeable future (see paragraph 19).

78. Virgin Media told us that it did not believe that the new/enhanced services offered by Netflix and LOVEFiLM were (or would be) capable of offering effective competition to Sky. Virgin Media said that Sky's decision to launch Now TV should not be seen as a competitive response but rather as a step to enable Sky to manage competition across distribution technologies (now that this was technically feasible for Sky), and thereby to protect revenue streams from its installed base of satellite customers. Virgin Media added that Sky's public statements about its Now TV service indicated that Sky envisaged this product appealing to a discrete customer segment separate from that which it targets with its pay-TV bundles. However, in our view, the launch of Sky Movies on Now TV before other content was launched on this service was at least in part a response to the competitive threat from LOVEFiLM and Netflix. While we agreed that Sky was seeking as far as possible to protect its traditional pay-TV revenue stream, for example by focusing its marketing for Now TV on households without pay TV, we believed that launching Sky Movies on Now TV posed some risk

[38] Letter to Netflix shareholders from its CEO and CFO, 24 July 2012.

[39] We also did not agree with BT that the 2011 fall in Netflix's share price related to the same issues that Netflix would face in the UK were it to attempt to outbid Sky for FSPTW movie rights from the major studios. The 2011 fall in Netflix's share price occurred after Netflix started charging separately for VOD and DVD-by-post (effectively an increase in the subscription charge to its existing subscribers) but we did not believe that Netflix's UK subscription charges depended on whether it had FSPTW rights from the major studios. Indeed, Netflix told us that it pursued a similar strategy for its subscription charges in each territory in which it operated and we observed that this included territories where Netflix held FSPTW rights from major studios as well as those such as the UK where it did not.

to Sky's traditional Sky Movies revenues. It appeared to us that Sky's willingness to take this risk was indicative of Sky's desire to respond to the entry of LOVEFiLM and Netflix.

79. Ofcom said it was not clear that the experience of Netflix in the USA or Canada served as a guide to the future performance of Netflix or LOVEFiLM in the UK, as there might be significantly less scope for growth in the UK compared with North America. Ofcom noted the popularity in the UK of the PSBs and other free catch-up services and said that, given this wide range of free content, there might be less of an incentive for UK consumers to pay a subscription fee for offerings similar to those which had attracted consumers in North America. However, we noted that there were other differences between the UK and North American markets. In particular, we noted that the penetration of pay TV was much higher in North America, and that take-up of Netflix's OTT service in North America was predominantly by households which already had pay TV (rather than by those seeking to supplement a more limited offering of free TV).[40]

80. More generally, Ofcom said that, while it recognized that in the long term there was the potential for the OTT services of LOVEFiLM and Netflix to have a positive impact on competition, the future development of these new services remained uncertain. In Ofcom's view, LOVEFiLM and Netflix clearly had ambitions in the pay-TV retail market, but their ability to compete directly with Sky on a sustainable basis was not certain and, critically, it depended on access to compelling content, which was currently controlled by Sky and was likely to remain so. We assess below the extent to which the OTT services of LOVEFiLM and Netflix constrained Sky and how any constraint may be expected to increase in the future (though we could not be certain about what will happen). In our view, we did not expect LOVEFiLM and Netflix to seek to compete directly with Sky in the sense of replicating its business model. However, we believed that these services could compete with Sky on the basis of attributes such as a wide range of content and low price and, consequently, we believed that their ability to develop successfully was not dependent on obtaining large amounts of the content currently controlled by Sky. (We consider the ability of LOVEFiLM and Netflix to compete with Sky for the FSPTW content of major studios in Section 7.)

81. In its response to our revised provisional findings, BT said it was surprising that we considered the launch of Sky Movies on Now TV a response to Netflix and LOVEFiLM (see paragraph 86) given our statement above (see paragraph 42) that Sky had said most of the changes to its services were not directly in response to Netflix or LOVEFiLM but, rather, Sky had observed the same market developments as Netflix and LOVEFiLM and was responding to these developments. We agreed that Sky was targeting Now TV at those who did not currently have pay TV and was seeking as far as possible to protect its traditional pay-TV revenue stream. However, we noted that Sky Movies was launched ahead of other content on Now TV and that Sky considered this was at least in part a response to the perceived competitive threat from LOVEFiLM and Netflix (see paragraphs 40 to 48). Hence we considered Sky's launch of Sky Movies on Now TV as, at least in part, a response to this competitive threat.

[40] Moreover, we noted that, so far, the growth of OTT in North America had not tended to lead to 'cord cutting', ie pay-TV subscribers terminating their pay-TV subscriptions altogether (see paragraphs 61–74).

Assessment

82. We assess first the extent to which the new OTT services of LOVEFiLM and Netflix are likely to be substitutes for Sky Movies, and then the extent to which they may be substitutes for bundled packages of traditional pay-TV.

OTT services as a substitute for Sky Movies

83. In our view, the substitution of the OTT services of LOVEFiLM and Netflix for Sky Movies could arise either as a result of LOVEFiLM or Netflix subscribers downgrading or cancelling traditional pay-TV packages that included Sky Movies, or because those who wanted an OTT subscription service regarded LOVEFiLM and/or Netflix as alternatives to Sky Movies on Now TV.

84. We found that:

(a) There were a number of similarities between the OTT services of LOVEFiLM and Netflix and Sky Movies, in particular all offered a wide range of films, with at least some in HD, and all were available on a subscription basis.

(b) There were also significant differences between the OTT services of LOVEFiLM and Netflix and Sky Movies. In particular, the OTT services of LOVEFiLM and Netflix cost significantly less than Sky Movies,[41] had no minimum contract period, and had a greater number of movies (and non-movie content) available to watch, but had much less FSPTW content than Sky Movies. Other differences included that LOVEFiLM and Netflix did not present their content in linear channels whereas most consumption of Sky Movies was still on this basis; and LOVEFiLM and Netflix were both currently available on more devices than Sky Movies (including via Now TV and Sky Go), although over time we expected Sky to add more devices.

(c) Due to the short time period since the start of these OTT services, there was necessarily little measurable evidence of their impact. The results of our survey, conducted in February 2012 (see Appendix 4.3), suggested that 27 per cent of those likely to subscribe to LOVEFiLM/Netflix were currently (ie at that time) or recently taking Sky Movies and, of that group, around one-third indicated that they had already stopped, or were likely in the near future to stop, subscribing to Sky Movies and gave as a reason that they ‘now watch TV on LOVEFiLM/Netflix’ (whereas about two-thirds indicated that they were likely to continue to subscribe to Sky Movies). This suggested that the new services were likely to have some impact on subscriptions to Sky Movies. However, given the short period since the launch of these OTT services, we acknowledged that some caution was needed in interpreting these survey responses. In particular, the data may overstate the percentage who actually substitute the LOVEFiLM/Netflix service for Sky Movies, since [✂].

(d) Some other evidence also suggested that the OTT services of LOVEFiLM and Netflix would have a limited impact on subscriptions to Sky Movies, at least in the short term. In particular, [✂] and [✂] indicated that, [✂]. Furthermore, evidence from the USA and Canada suggested that the presence of Netflix had not yet had a significant impact on subscriptions to premium movie services on pay-TV there.

[41] Especially for those Sky Movies subscribers who do not take (or do not attach a lot of value to) Sky Sports.

85. We noted that responses to our February 2012 survey suggested that 18 per cent of those subscribing to LOVEFiLM/Netflix also subscribed to Sky Movies and intended to continue with both subscriptions, despite the fact that these consumers could already view a large range of movies through Sky Movies and general entertainment programmes on Sky's basic channels. It appeared to us that this was consistent with evidence from the USA and Canada, [✂]. It seemed to us that there were a number of possible reasons why some households with Sky Movies may wish to take LOVEFiLM/Netflix as well, including: *(a)* the LOVEFiLM/Netflix subscription might be taken by a different member of the household to view in a different room to the traditional pay-TV service; *(b)* the LOVEFiLM/Netflix subscription might be taken to obtain content on a VOD basis (some Sky Movies subscribers may not have (or may not be aware of being able to have) a VOD service (eg Anytime+) within their existing traditional pay-TV subscription); and *(c)* the LOVEFiLM/Netflix subscription might be taken in order to be able to view a particularly large range of content (ie the content on both services).

86. In addition, in our view, Sky's launch of Sky Movies on Now TV before other content was launched on this service was, at least in part, a response to the competitive threat from LOVEFiLM and Netflix. Importantly, Sky Movies on Now TV differs from Sky's previous OTT service (the Sky Go monthly ticket) in that Sky Movies is available separately from subscriptions to basic paid-for content (as well as separately from any subscription to Sky's DTH platform), meaning that consumers are able to obtain Sky Movies for a price of £15, whereas previously the lowest price for a Sky Movies OTT package was £32 (see Section 2). [✂] Sky's public statements indicated that Sky was targeting this service at households without pay TV, many of whom were also potential customers of LOVEFiLM and Netflix. Therefore, in our view, Sky Movies on Now TV was a substitute for some potential subscribers to the OTT services of LOVEFiLM and Netflix, and vice versa. Overall, based on this evidence, we found as follows:

(a) The new OTT services of LOVEFiLM and Netflix were substitutes for some existing and some prospective Sky Movies subscribers. However, the number of such subscribers was not such as to lead us to conclude that these services were close demand-side substitutes for Sky Movies.[42] This is not to say that they were not substitutes but we did not find them to be *close* substitutes.

(b) As a result of the existence of switching barriers (see Section 5) and the fact that [✂], it was likely that the OTT services of LOVEFiLM and Netflix exerted a greater constraint on Sky Movies when competing for new customers (ie those new to pay TV or switching traditional pay-TV supplier) than when competing for existing customers of Sky Movies who were not considering changing their traditional pay-TV supplier.

(c) There was some evidence to suggest that, over time, these services were likely to become substitutes for more Sky Movies subscribers as they gained more movie content (in any window). However, given the different market positioning of the OTT services of LOVEFiLM and Netflix compared with Sky Movies, we did not expect them to become close substitutes for Sky Movies in the foreseeable future.

[42] As we note in Appendix 4.1 (paragraph 2), in general another product would be a close demand-side substitute for Sky Movies if the cross-elasticity of demand for Sky Movies with respect to the price of the substitute was high. That is, we would consider the other product a close substitute if a small reduction in its price relative to that of Sky Movies led to a significant reduction in subscriptions to Sky Movies. If there were a close substitute for Sky Movies, the price of the close substitute would be a major determinant of the price of Sky Movies.

87. We noted that the Sky Movies service on Now TV was similar to the Sky Movies service available through Sky and Virgin Media (the only difference in standard definition content being that the Disney Cinemagic channel was not part of Sky Movies on Now TV). We expected the price of Sky Movies when offered as part of a bundle of traditional pay TV to be constrained by the price of Sky Movies on Now TV, and vice versa. Indeed, [✂] We noted, consequently, that, although there was some differentiation between Sky Movies as offered through Sky and Virgin Media as traditional pay-TV retailers and Sky Movies as offered on Now TV (eg the consumer experience, contract terms, price, etc), Sky Movies could be considered as a single product. Our evaluation of whether other OTT services were substitutes for Sky Movies related to either form of distribution.

88. Although not close substitutes for Sky Movies, the new OTT services of LOVEFiLM and Netflix were nonetheless, in our view, closer substitutes for Sky Movies than other pay-TV movie services previously available (ie BT's Vision Film and PictureBox). The LOVEFiLM and Netflix services used a different business model (OTT), which made them available to a much wider potential customer base than these other traditional pay-TV movie services, without having to distribute through Sky. They also offered a much greater number of movies, including some FSPTW content (from non-major studios) and content from subsequent pay-TV windows and library content from both major and non-major studios. Moreover, we noted that LOVEFiLM had acquired a substantial number of subscribers in a short period and Netflix had stated publicly in July 2012 that, following its successful launch, it had 1 million members in the UK and the Republic of Ireland (see paragraph 17). It also appeared to us that these services were likely to continue to expand. We consider the implications of the OTT services of LOVEFiLM and Netflix on the various areas of analysis relevant to testing our theory of harm in Sections 5, 6 and 7.

89. In summary, we found that the new OTT services of LOVEFiLM and Netflix were substitutes to Sky Movies for some existing and potential future Sky Movies subscribers, though we did not believe there were sufficiently many such subscribers to consider the new OTT services of LOVEFiLM and Netflix to be close demand-side substitutes for Sky Movies. Looking to the future, we noted that there was some evidence to suggest that, over time, they were likely to become substitutes for more Sky Movies subscribers, although we did not expect either of these OTT services to become a close substitute for Sky Movies in the foreseeable future.

OTT services as a substitute for packages of traditional pay TV

90. As well as being a substitute (though not a close substitute) for Sky Movies (and therefore, in some cases, for a traditional pay-TV package which includes Sky Movies (ie where the pay-TV subscription is taken entirely in order to access Sky Movies), the OTT services of LOVEFiLM and Netflix might also be regarded as a substitute for some pay-TV packages which do not include Sky Movies (or where the Sky Movies part of the package is not determinative of the subscription being taken). For example, subscribers to a traditional pay-TV package with only basic pay TV might regard the LOVEFiLM/Netflix services (which include TV content as well as movies) as a substitute for all or part of their traditional pay-TV package. We assessed the extent to which the OTT services of LOVEFiLM and Netflix were likely to be substitutes for traditional pay-TV packages overall, both those including Sky Movies and those without it.

91. We noted above (see paragraph 8) that the content and pricing of the OTT services of LOVEFiLM and Netflix were different from those of traditional pay-TV packages. It appeared to us that the launch of these services did not induce much price-cutting of traditional pay-TV packages in response. Also, although the results of our February

2012 survey suggested that the OTT services of LOVEFiLM and Netflix were among the reasons why some subscribers stopped subscribing to pay TV, it appeared to us that the overall impact of these services on pay-TV subscriptions in the short term was likely to be small. This evidence was supported by evidence from the USA and Canada, which suggested that OTT services had so far had a limited impact on demand for packages of traditional pay TV.

92. Because of the short time period since the launch of the OTT services of LOVEFiLM and Netflix, caution was needed in making inferences from current subscriber numbers. However, we noted that Netflix appeared to consider its UK launch to have been successful and LOVEFiLM had acquired many new subscribers. On the basis of both our February 2012 survey results and reports from the USA and Canada, we expected subscribers to the LOVEFiLM and Netflix services to come both from households without pay-TV and from those with pay TV (which may be because the subscriber wished to extend the range either of the content that can be viewed or the devices on which it can be viewed,[43] or because one person within the household wished to have a personal subscription to an OTT service). We noted that, [✂],[44] and both currently and for the foreseeable future, we believed that LOVEFiLM and Netflix would be closer competitors to each other than to retailers selling packages of traditional pay TV. Sky's new OTT service (Now TV) would be, potentially, a closer competitor to LOVEFiLM and Netflix but it was likely also to be significantly differentiated from these services in offering more FSPTW movie content, and sports and other entertainment content.

93. We noted that there were some reasons to believe that, over time, the new OTT services of LOVEFiLM and Netflix were likely to become closer substitutes for traditional pay TV, at least for packages offering general entertainment and movies (it was less clear that OTT services were going to exercise a constraint on pay-TV packages that include sport as this would depend on OTT operators acquiring relevant sports rights). These reasons included:

(a) the increasing adoption of Internet-connected TVs and/or STBs, improving convenience and reducing dependence on games consoles as a means of accessing OTT services on households' main TV;

(b) the increasing availability of broadband, and faster broadband;

(c) the increasing awareness of OTT among less technologically-aware households, in particular following the launch of services which 'popularize' OTT services, eg YouView;

(d) social factors, including interaction on social media and early adopters of OTT services not being persuaded of the need for more expensive traditional pay TV (households who would otherwise have subscribed to pay TV may be less likely do so if happy with OTT services); and

(e) an improving range and quality of content on the existing OTT services of LOVEFiLM and Netflix (ie under existing licensing agreements).

[43] This is likely to be more of a consideration for traditional pay-TV retailers other than Sky, because currently they do not offer the ability to view content on devices such as games consoles and mobiles. Sky does offer this ability, via Sky Go, but its range of devices is currently less than that of LOVEFiLM and Netflix (see Table 1 above).

[44] We noted that Netflix had made some public statements indicating that in the longer term it regarded Sky to be its principal competitor. However, [✂].

94. We recognized that the OTT services of LOVEFiLM and Netflix could only exercise an increasing constraint on traditional pay TV (or on Sky Movies) if at least one of them (or a similar OTT supplier) continued to offer suitable content at prices that were attractive to significant numbers of subscribers. We noted that both LOVEFiLM and Netflix had signed content deals with studios which demonstrated their intention to do so. While we could not be certain about future events, on the basis of the evidence available to us, we expected that at least one OTT supplier would remain in the market in competition with Sky Movies over the longer term.

95. Overall, based on this evidence, our view was that, in the short term, the OTT services of LOVEFiLM and Netflix were closer competitors to each other than to packages of traditional pay TV. Over time we thought it likely that the OTT services of LOVEFiLM and Netflix would exercise more of a constraint on traditional pay TV but the extent of such future constraint was uncertain and we did not expect them to become a close substitute for packages of traditional pay TV in the foreseeable future.

96. In our view, although neither close substitutes for Sky Movies nor for packages of traditional pay TV, the OTT services of LOVEFiLM and Netflix were more important as a constraint on Sky Movies than as a constraint on packages of traditional pay TV (which include basic content). This was because the movies on the OTT services of LOVEFiLM and Netflix were a key part of their offering and the evidence suggested that the extent of the differentiation between these services and Sky Movies was less than between these services and packages of traditional pay TV.

Sky and studio projections of Sky Movies subscriber numbers and revenue

1. If market participants such as Sky and the studios expected Netflix and/or LOVEFiLM to exert a significant constraint on Sky Movies, we might have expected this to be reflected in their revenue forecasts (from either a reduction in subscriber numbers, price or both). We therefore asked both Sky and the six major studios to supply us with any updated forecasts they had made relating to Sky Movies.

Sky's forecasts

2. Sky told us that [✂].

3. Figure 1 plots the subscriber number projections that Sky included in its [✂] for both retail and wholesale Sky Movies subscribers along with the associated projections for incremental premium revenue (excluding VAT) per subscriber per month, which we calculated using the revenue data Sky provided. In relation to retail subscribers, Sky provided projected revenue associated with the incremental price for the premium element of packages which included movie channels, [✂]. For wholesale subscribers, Sky provided projected revenue from wholesaling packages of channels which included Sky Movies channels. In other words, where a sports product was taken alongside Sky Movies, the revenues shown reflected revenues earned on this product also. This limited our ability to assess Sky's projections solely with regard to Sky Movies.

FIGURE 1

[✂]

Source: CC calculations based on Sky data.
Notes:
1. To calculate incremental revenue per retail subscriber per month we divided (half-yearly) incremental retail revenue for the premium element of packages which included Sky Movies channels by forecast subscriber numbers and then by six.
2. To calculate incremental revenue per wholesale subscriber per month we summed monthly wholesale revenue from wholesale packages including Sky Movies channels over six-month periods and then divided by the average number of forecast wholesale subscribers to these packages over the period and then by six.

4. Figure 1 indicates that, [✂].

5. Sky told us that, [✂].

6. Commenting on the figures, Sky told us that [✂].

7. In relation to wholesale subscribers, [✂].[45]

8. We accepted that these figures were, to some extent, [✂], if Sky anticipated that the entry/expansion of Netflix/LOVEFiLM was likely to have a significantly adverse effect on Sky Movies, we would expect this to be reflected in either its subscriber forecasts or its price forecasts, with the effects likely to grow over time. [✂], which suggested to us that [✂].

[45] [✂]

9. We asked Sky to provide us with any monthly or annual forecasts that it had made of the costs it expected to incur in relation to Sky Movies over the next five years, including any marketing and subscriber acquisition costs and any other costs which it forecast would be required to achieve the subscription volumes it had projected. Sky explained that [✂]. We noted that [✂]. Subsequently, based on updated figures provided to us by Sky, we calculated that its annual budget for FSPTW movies for 2015/16 was [✂].

Studio forecasts

10. We also asked the major studios to provide us with any forecasts they had made of the revenues they anticipated earning from licensing their content to Sky Movies. We received responses from [✂]:

    (a) [✂]

    (b) [✂]

    (c) Paramount provided us with its revenue forecasts for movies made available to Sky Movies in 2011 and 2012 [✂].

    (d) Disney told us that, [✂]. However, Disney told us that the growth and entry of LOVEFiLM and Netflix was a transformative development in the UK pay-TV sector.

Netflix and Sky consumer research carried out in 2011

1. In this annex, we summarize the results of research Netflix carried out to assess the likely take-up of its service and research Sky carried out to assess consumer attitudes towards Internet-distributed subscription services more generally. We also summarize some other Sky research. This research was conducted in 2011 (ie before Netflix launched in the UK).

Netflix research on likely take-up of its UK service

2. [✂][46] As shown in Table 1, [✂].[47]

TABLE 1 [✂]

[✂]

Source: [✂].

3. [✂]

4. [✂][48]

Sky research on attitudes towards Internet-distributed subscription services

5. In October 2011, Sky conducted a survey to understand customer attitudes towards Internet-distributed subscription services, and in particular Netflix. [✂]

6. The key results are presented in Table 2. The results suggested that approximately [✂] per cent of Sky subscribers and [✂] per cent of Sky Movies subscribers were personally interested in a service which allowed them to rent movies or TV series directly to their TV or other device (eg PC, laptop or games console).

[46] [✂]
[47] [✂]
[48] [✂]

TABLE 2 **Sky research on customer attitudes towards Internet subscription services**

per cent

	Overall	*Current Sky Movies subscribers*	*Lapsed Sky Movies subscribers*	*Non-Sky Movies subscribers*
Personal interest in a service that allows you to rent movies or TV series directly to TV and other devices				
Unweighted (number)	[✂]*	[✂]	[✂]	[✂]
1	[✂]	[✂]	[✂]	[✂]
2	[✂]	[✂]	[✂]	[✂]
3	[✂]	[✂]	[✂]	[✂]
4	[✂]	[✂]	[✂]	[✂]
5	[✂]	[✂]	[✂]	[✂]
Interested = 4+5	[✂]	[✂]	[✂]	[✂]
If you were to take up this service, what impact do you expect it to have on your current TV viewing?				
Unweighted (number)	[✂]	[✂]	[✂]	[✂]
Would be in addition to current viewing	[✂]	[✂]	[✂]	[✂]
Would replace some of my current viewing	[✂]	[✂]	[✂]	[✂]
Would replace all of my current viewing	[✂]	[✂]	[✂]	[✂]
I don't know	[✂]	[✂]	[✂]	[✂]

Source: Sky.

*Number of current Sky Movies subscribers, lapsed Sky Movies subscribers and non-Sky Movies subscribers does not sum to [✂] because [✂] respondents did not report what package they were on and not all respondents answered this question.

7. Of those who were interested in an Internet-distributed service, [✂] per cent said that, if they took up such a service, they would expect it to be in addition to their current viewing, compared with [✂] per cent who said that it would replace some of their current viewing, and [✂] per cent who said it would replace all of their current viewing. However, a slightly higher proportion of Sky Movies subscribers said that it would be in addition to their current viewing than non-Sky Movies subscribers.

8. The survey also asked respondents to rank a number of features of a movie-streaming service in order of importance. The results are presented in Figure 1. These results covered all respondents and not just those who were interested in taking up such a service. They indicated that, for all groups, the most important features were: [✂].

FIGURE 1

[✂]

Source: Sky.

9. The survey also asked respondents whether they had heard of Netflix. The results indicated that approximately [✂] per cent of respondents had ([✂] per cent of Sky Movies subscribers; [✂] per cent of lapsed Sky Movies subscribers and [✂] per cent of non-Sky Movies subscribers). Respondents were then read the following short description of the Netflix service and asked to indicate how interested they would be in subscribing to such a service: 'Netflix is an American subscription-based movie and television show rental service that offers media to subscribers via Internet streaming and via DVD-by-mail that will soon be launching in the UK. In the USA subscribers can stream unlimited movies and TV shows for a fixed fee to more than 200 devices, including PCs, internet-connected TVs and games consoles.' The results are summarized in Table 3. If we were to classify anyone who responded 8 or above as 'interested', this would indicate that [✂] per cent of Sky subscribers

([✂] per cent of Sky Movies subscribers) would be interested in joining Netflix; though if we were to classify anyone who responded 7 or above as 'interested', this would indicate that [✂] per cent of Sky subscribers ([✂] per cent of Sky Movies subscribers) would be interested in joining Netflix. We noted that it was difficult to put much weight on these results given that the description of the offering did not include the price or describe the range or age of the content which would be available. We also noted that it was unclear whether Sky Movies subscribers were being asked whether this new subscription would be in addition to, or instead of, their current Sky Movies subscription.

TABLE 3 **Sky research on customer attitudes towards Internet subscription services: interest in Netflix**

per cent

	Overall	*Current Sky movies subscribers*	*Lapsed Sky movies subscribers*	*Non-movies subscribers*
1 or above	[✂]	[✂]	[✂]	[✂]
2 or above	[✂]	[✂]	[✂]	[✂]
3 or above	[✂]	[✂]	[✂]	[✂]
4 or above	[✂]	[✂]	[✂]	[✂]
5 or above	[✂]	[✂]	[✂]	[✂]
6 or above	[✂]	[✂]	[✂]	[✂]
7 or above	[✂]	[✂]	[✂]	[✂]
8 or above	[✂]	[✂]	[✂]	[✂]
9 or above	[✂]	[✂]	[✂]	[✂]
10 or above	[✂]	[✂]	[✂]	[✂]

Source: Sky.

Other Sky research

10. In November 2011, Sky conducted some qualitative research[49] [✂].

11. [✂]

12. In September 2011, Sky conducted its 'Economy Omnibus' survey, which, among other things, researched OTT services. The results suggested that the awareness of LOVEFiLM [✂]; however, take-up of the LOVEFiLM service was currently low, [✂].[50] The survey results also suggested that, of the Sky customers who were aware of LOVEFiLM and not yet a subscriber to it, [✂]. The figure was only [✂]. These figures were likely to be [✂]. We also noted that [✂].

13. In December 2011, Sky commissioned a further survey to explore, among other things, the relative importance of various factors on respondents' choice of online services, and the perceived strength or weakness of Sky Movies on each factor. [✂][51]

14. [✂]

[49] [✂]
[50] [✂]
[51] [✂]

Movies on pay TV survey—A research report prepared for the CC by GfK NOP

As part of the movies on pay TV market investigation, the CC commissioned GfK NOP to undertake a market research survey to understand better the characteristics, behaviour and intentions of new subscribers to the streaming services of LOVEFiLM and Netflix.

The resulting survey report is attached.

GfK. Growth from Knowledge

Pay TV Market

Netflix and LOVEFiLM

A research report prepared for

The Competition Commission

March 2012

Provided by: GfK Consumer Services

Your contact:

David Rodgers

Phone: +44 (0)20 7890 9779, Fax: +44 (0)20 7890 9744
e-Mail: david.rodgers@gfk.com

Table of Contents

1 Executive Summary 1

2 Background and Research Objectives 5

3 Research Design 6

4 Survey Findings 7

4.1 Pay TV and Film Viewing Behaviour 7

4.2 Customer Profile and Use of the New Service 14

4.3 Impact of Service on Pay TV Viewing 27

Appendix

A – Email invite and questionnaire

1 Executive Summary

Background

1. The Competition Commission (CC) has been investigating the supply and acquisition of Subscription Pay TV Movie Rights and the wholesale supply and acquisition of packages including Core Premium Movies channels. With the recent launch of the new Netflix and LOVEFiLM streaming services, the CC wished to assess the impact of these new services on consumer use of Pay TV services.

2. Invitations to an online survey were sent out to 20,000 Netflix customers who had signed up to the free trial in the UK since launched on 9 January 2012, and 20,000 LOVEFiLM customers who were new to LOVEFiLM and had signed up to one of its packages which include unlimited streaming since 6 December 2011. 2,215 customers completed an interview during the period that the survey was open (2-12 February, 2012): 1,327 Netflix and 888 LOVEFiLM customers. Results have been weighted at the analysis stage so that there is equal representation of Netflix and LOVEFiLM customers.

Pay TV and Film Watching Behaviour

3. About two in three (65%) customers had a Pay TV service, 40% with Sky TV. One in five (20%) customers had Sky Movies at the time of being surveyed. The vast majority of those subscribing to Sky Movies took all the Sky Movies channels including Sky Premiere i.e. were Dual Movies subscribers.

4. Those interviewed watched a lot of films, 15 on average per month.

Customer Profile and Use of New Service

5. Customers comprised predominantly males, full-time workers, and those aged less than 35 years. Three quarters (75%) of customers were male and half (48%) were aged less than 35 years old.

6. Nine in ten (89%) customers were responsible for paying the subscription to the new service.

7. The free trial was a key reason for signing up to the new service, with two in three saying they signed up for this reason. Other key reasons were being able to watch the content on-demand, and on a device convenient to the customer. The other key reason for signing up to the service was it being inexpensive or better value for money than the service they were used to paying for.

8. At the time of surveying, most were recent users of the service, just over a third (36%) of customers had signed up to the service within the previous two weeks, and a similar proportion (41%) three to four weeks before.

9. The average customer used the service personally to watch about six hours of films and six hours of TV programmes per week. The devices used most often to watch the service were a games console (XBOX 360, PS3 or Nintendo Wii)one of these being used by over one in three customers (37%), followed by a standalone laptop (12%) and an internet enabled TV (10%).

10. Three quarters (74%) of customers were very or quite satisfied with the new service.

11. Just over half (55%) indicated they would definitely or probably continue subscribing to the service. One in five (20%) said they would definitely do so.

Impact of New Service on Pay TV Usage (among those who would continue to subscribe to the service)

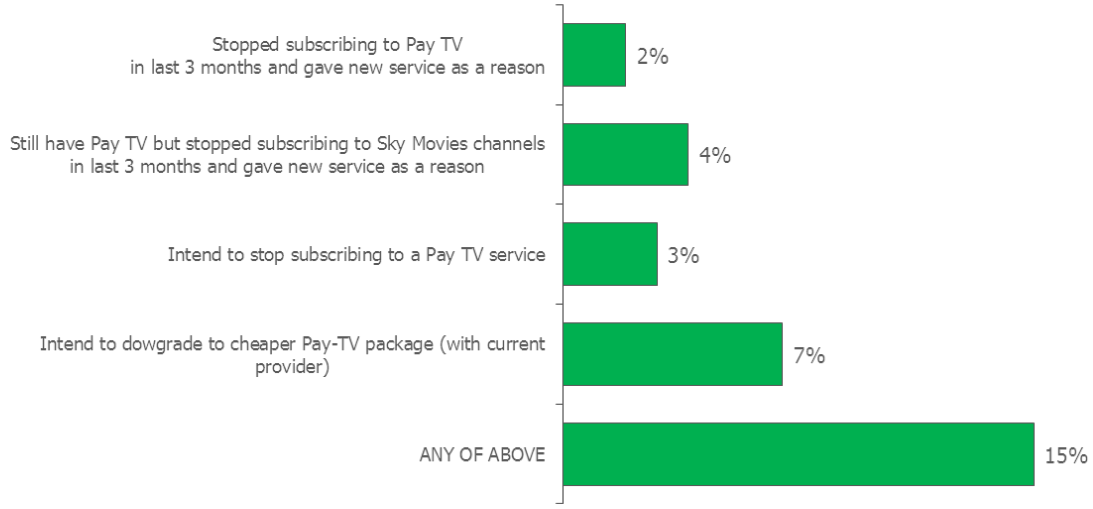
12. Respondents were asked a series of questions designed to assess the impact of the new service on their Pay TV viewing. Regarding behaviours in the previous three months, customers were asked: whether they had stopped subscribing to a Pay TV service or to any Sky Movies channels (those still on a Pay TV service). They were also asked about how the service would impact their future use of a Pay TV service.

13. The chart below shows the impact of the new service among “continuing customers” i.e. those who said they would definitely or probably continue subscribing to the service. Looking at actions already taken, 2% of continuing customers had stopped subscribing to Pay TV in the last three months and described one of the reasons for doing so as “now watch TV programmes on Netflix/ LOVEFiLM”. 4% of continuing customers still had Pay TV but had stopped subscribing to Sky Movies channels in the last three months because of the new service.

14. Looking at future intentions, 3% of continuing customers intended to stop subscribing to a Pay TV service as a result of the new service, and 7% intended to downgrade to a cheaper Pay TV package.

15. Overall, this meant that for 15% of continuing customers, their Pay TV viewing had either been impacted already, or would be impacted as a result of the new service.

Figure 1 – Impact of new service (summary chart)



Base: All likely to continue subscribing to service:(1207)

2 Background and Research Objectives

16. The CC has been investigating the supply and acquisition of Subscription Pay TV Movie Rights and the wholesale supply and acquisition of packages including Core Premium Movies channels. As part of this investigation the CC commissioned GfK NOP to undertake a research survey (in late 2010) to help better understand what drives use of Pay TV services. The findings from this survey are reported separately[1].

17. With the recent launch of the new Netflix and LOVEFiLM streaming services, the CC commissioned this follow-up survey to assess the impact of these new services on consumer use of Pay TV. In particular, this new survey sought to establish:

- The profile of people signing up to the new service
- How they are using the new service (content watched and devices used to access the service)
- Their satisfaction with the service and intention to continue subscribing (after the end of the free trial period)
- The likely impact of the new service on their existing Pay TV services, in particular whether they have already dropped or downgraded any Pay TV services, and/or are likely to drop or downgrade Pay TV services in future.

[1] Competition Commission/Movies on Pay TV Market Investigation/Provisional Findings Report/Appendix 5.2

3 Research Design

18. A random sample of 20,000 Netflix customers, and 20,000 LOVEFiLM customers who had signed up to one of their packages which include unlimited streaming after 6 December 2011, were selected from the respective customer databases. The sample were contacted via email by Netflix and LOVEFiLM, inviting them to take part in a survey about film and TV services in the UK, with the survey being conducted on behalf of the Competition Commission. A copy of the email invitation is appended.

19. The survey was conducted using an online methodology and a different version of the script was shown to the Netflix and LOVEFiLM customers to ensure the questions were relevant to the respondents and to remove any mention of the other service provider. A copy of the questionnaire is also appended.

20. Fieldwork was conducted between 2 – 12 February 2012, and reminder emails were sent out in the middle of the fieldwork period to all except those who had cancelled in the meantime. In total 1,327 Netflix customers and 888 LOVEFiLM customers completed the survey, a response rate of 6.6% for Netflix customers and 4.4% for LOVEFiLM customers.

21. At the analysis stage data has been weighted so that there is equal representation of Netflix and LOVEFiLM customers.

4 Survey Findings

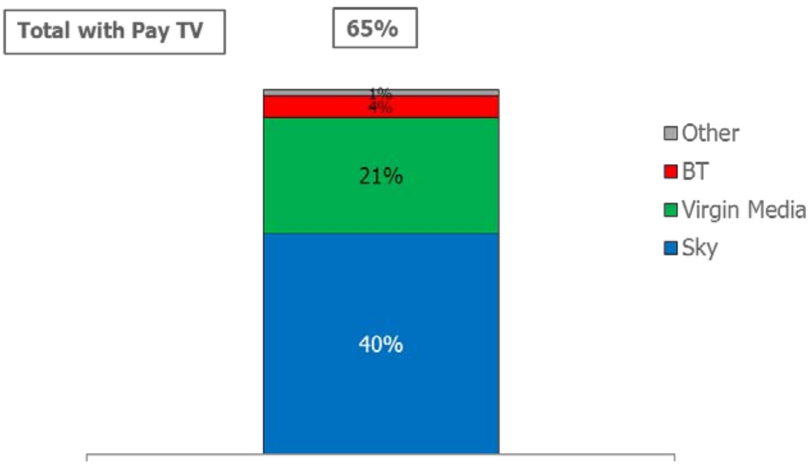
4.1 Pay TV and Film Viewing Behaviour

22. This first section of the report describes the viewing behaviour of customers: whether they have a Pay TV service, and if so whether they subscribe to Sky Movies, and more generally the number of films they typically watch.

23. Respondents were asked from which company (if any) they bought a TV service (from a prompted list). Two in three (65%) customers had a Pay TV service, 40% with Sky and 21% with Virgin Media.

Figure 2: Whether have Pay TV service

Q1 From which, if any, of these companies do you or anyone in your household have a TV service?



Base: All customers (2215)

24. The providers of other communication services - landline phone, mobile phone and broadband – were also identified. 29% of customers used Virgin Media for their broadband service compared with 23% who used BT. Just over one in three (37%) used BT for their landline compared to a quarter (24%) for Virgin Media and 15% for Sky.

Table 1: Communication service providers used

Q1 From which, if any, of these companies do you or anyone in your household have….a landline/mobile phone/ broadband?

	All customers
BT	
Landline	37%
Broadband	23%
Mobile	-
Sky	
Landline	15%
Broadband	18%
Mobile	-
Virgin Media	
Landline	24%
Broadband	29%
Mobile	7%
Talk Talk/Top Up TV	
Landline	9%
Broadband	10%
Mobile	-

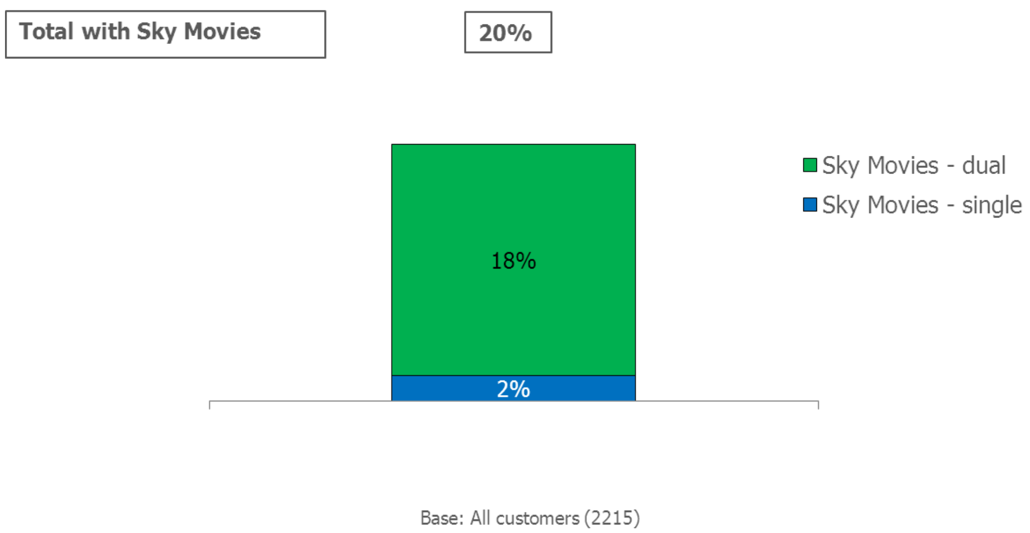
Base: All customers (2,215)

25. One in three (34%) customers with a Pay TV service had Sky Sports.

26. Respondents who had Sky, Virgin Media or Talk Talk Pay TV were asked whether or not they received any Sky Movies channels on a monthly subscription basis. Looking at usage based on all customers, one in five (20%) customers had Sky Movies. The vast majority of those subscribing to Sky Movies took all the Sky Movies channels including Sky Premiere (these customers are described in the chart below, and hereafter in the report, as dual customers).

Figure 3: Whether subscribe to Sky Movies

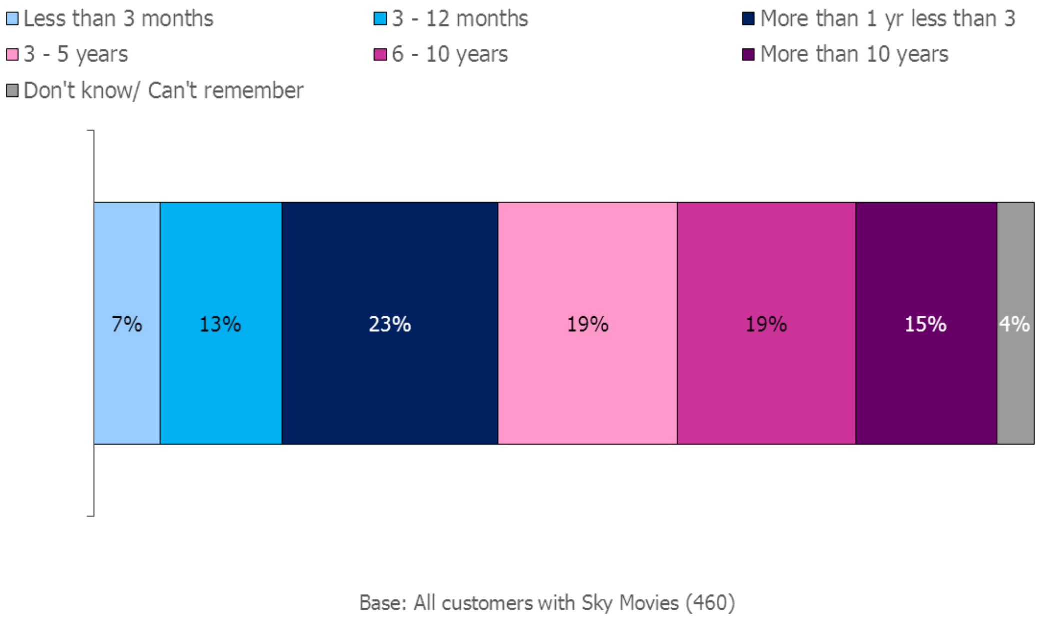
Q3a Do you, or anyone in your household, get any Sky Movies channels on a monthly subscription basis? Q3b Do you, or anyone in your household, take all the Sky Movies channels i.e. including Sky Premiere?



27. One in five (20%) of Sky Movies subscribers had taken the service for one year or less, but only slightly fewer had done so for over ten years (15%), and there was a spread of responses in between these extremes.

Figure 4: Length of time had Sky Movies

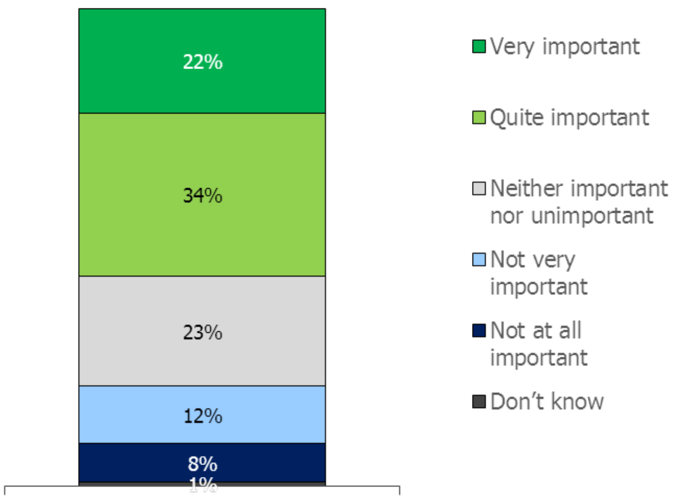
Q5a How long have you, or your household, had Sky Movies channels on a monthly subscription basis?



28. Three in four (75%) took out a Sky Movies subscription when they first got a Pay TV service. Just over half (56%) indicated that having Sky Movies was important in their household's decision to have a Pay TV service, this proportion being slightly higher than among the Sky Movies subscribers interviewed in the first Pay TV survey (51%)[2].

Figure 5: Importance of Sky Movies

Q5c How important was Sky Movies channels in your household's decision to have a TV service from (Sky/Virgin Media/Talk Talk)?



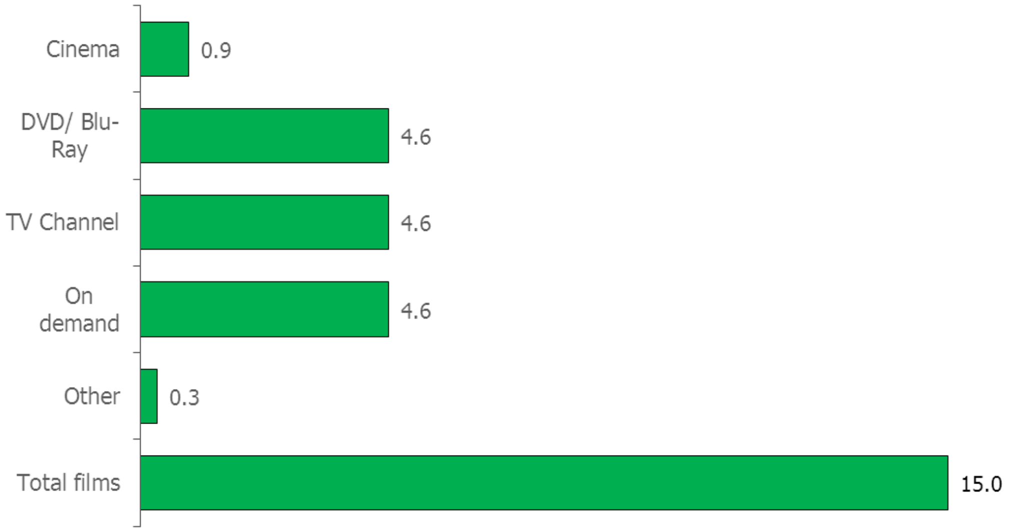
Base: All customers with Sky Movies (460)

2 Competition Commission/Movies on Pay TV Market Investigation/Provisional Findings Report/Appendix 5.2

29. Respondents were asked how many films they watched personally in a typical month: at the cinema, on DVD/Blu-Ray, on a TV channel (whether watched at the time of broadcast/multicast or recorded and watched later), on-demand, or via some other means. The total number of films watched has been calculated by adding together the frequencies mentioned across these different channels. Overall, respondents watched a lot of films, on average customers watched 15 films per month.

Figure 6: Average number of films watched in a typical month – personally

Q4g. Thinking about all the different ways you watch films, roughly how many films in total do you personally watch in a typical month?

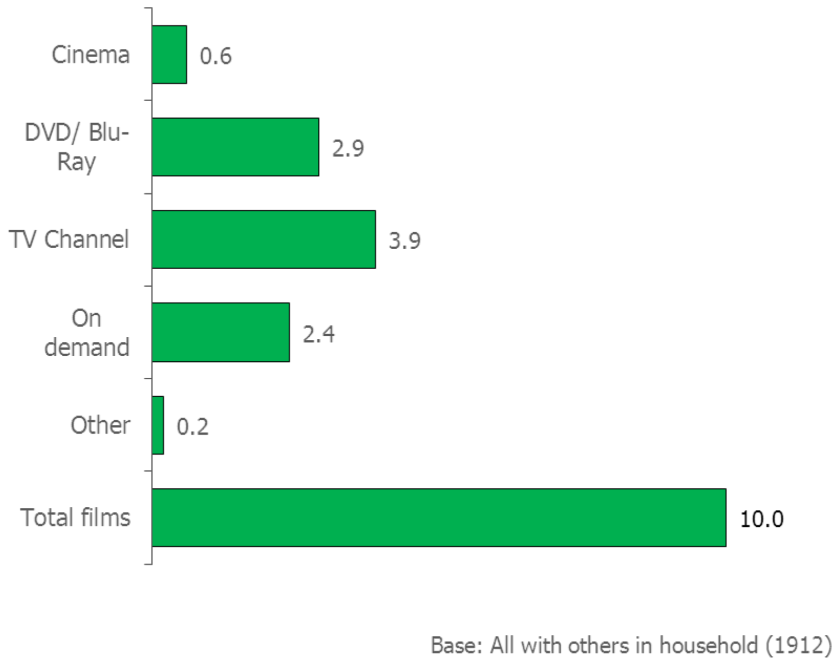


Base: All customers (2215)

30. Respondents were also asked about the film watching behaviour of other members of the household. Some care should be taken interpreting these results, as results are only estimates (based on the respondent's perception), and a sizeable proportion felt unable to give an estimate. On average, in households with other household members, the others watched an average of 10 films per month.

Figure 7: Average number of films watched in a typical month – others in household

Q4h Roughly how many films in total do other people in your household watch <u>without you</u> in a typical month?



4.2 Customer Profile and Use of the New Service

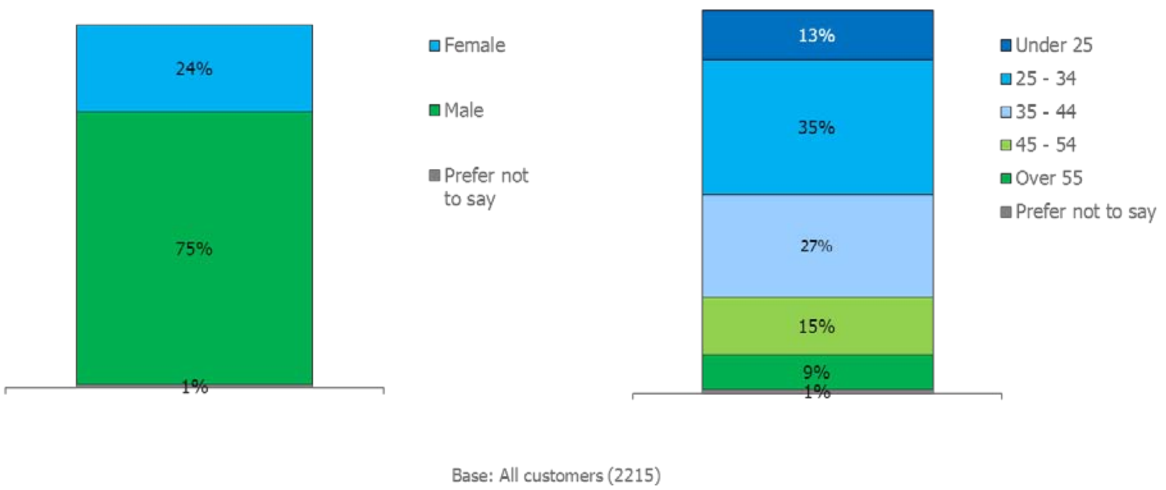
31. This section describes the profile of those using the new service, how it is being viewed (content and devices used), customer satisfaction with and intention to continue subscribing to the new service.

32. Customers comprised predominantly males, full-time workers, and those aged less than 35 years. Three quarters (75%) of customers were male and half (48%) were aged less than 35 years old.

Figure 8 – Age and gender profile

D1 Which age group are you in?

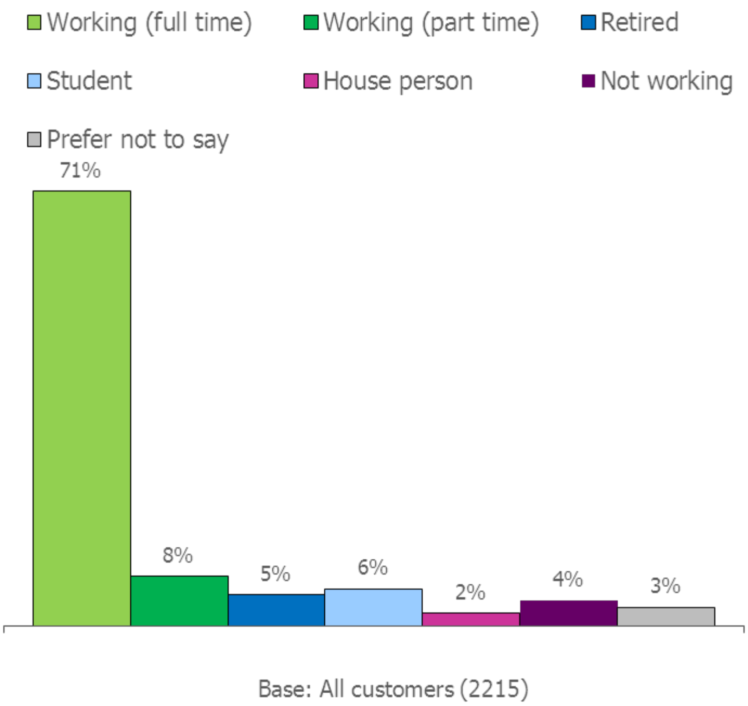
D2 Are you male/female?



33. A high proportion of customers were working full-time, reflecting in part the age and gender profile.

Figure 9 – Working status

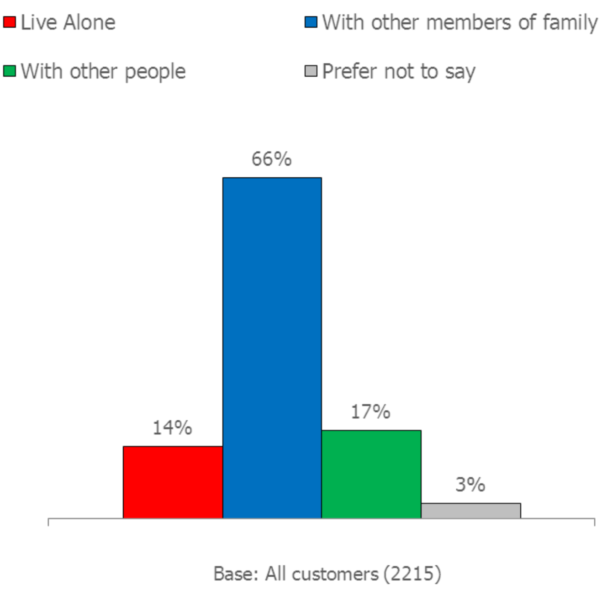
D3 And which of the following best describes your current working status?



34. Most customers were living with other family members in the household, although a minority were living alone or with other non-family members in the household. Four in ten (39%) lived in a household with two adults aged 16+. The majority did not live with any children (at the analysis stage children were defined as those aged 15 years or under). Households with children aged 0-4 years represented 12% of households, with children aged 5-10 years 13% of households, and children aged 11-15 13% of households.

Figure 10 – Household composition

D4 Do you live…

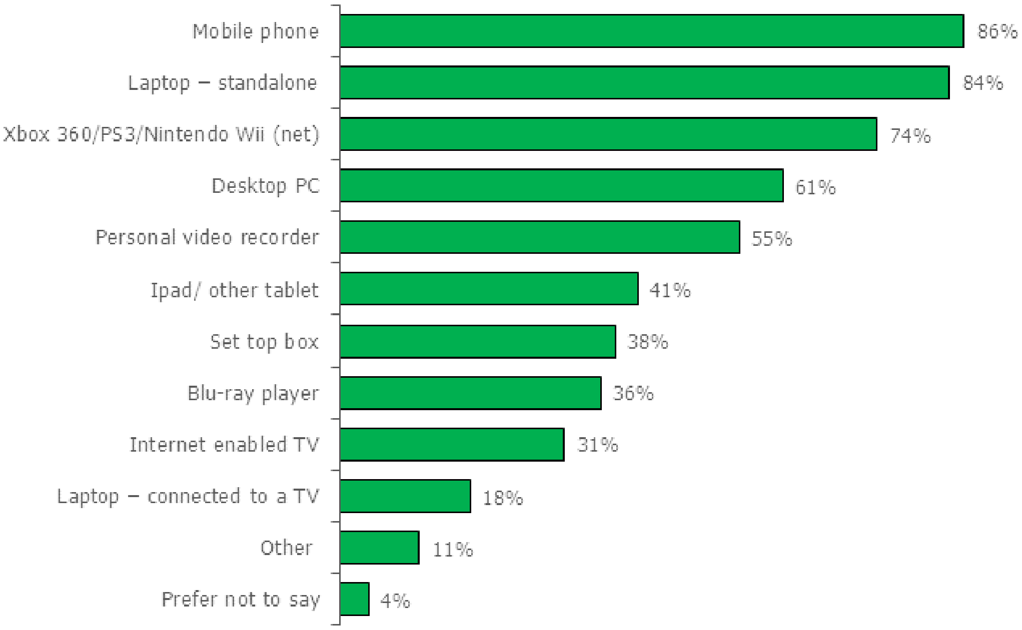


35. Respondents were asked whether or not they were the person in the household responsible for paying various types of bills. The majority were responsible for paying the household bills. Just over two thirds (70%) were responsible for paying the mortgage or rent in their household. The proportion paying the internet bill was slightly higher, 73% of customers. Nine in ten (89%) customers were responsible for paying the subscription to the new service.

36. The range of devices owned in the household is shown in the chart below. Stand-alone laptops and mobile phones were owned in the vast majority of households. Three in four households had at least one games console (XBOX 360, PS3 or Nintendo Wii). Desk top PCs and personal video recorders were owned in more than half of all households. Mentions of all other devices were at the minority level.

Figure 11 – Devices owned in the household

D6 Which of the following devices do you or anyone in your household own?



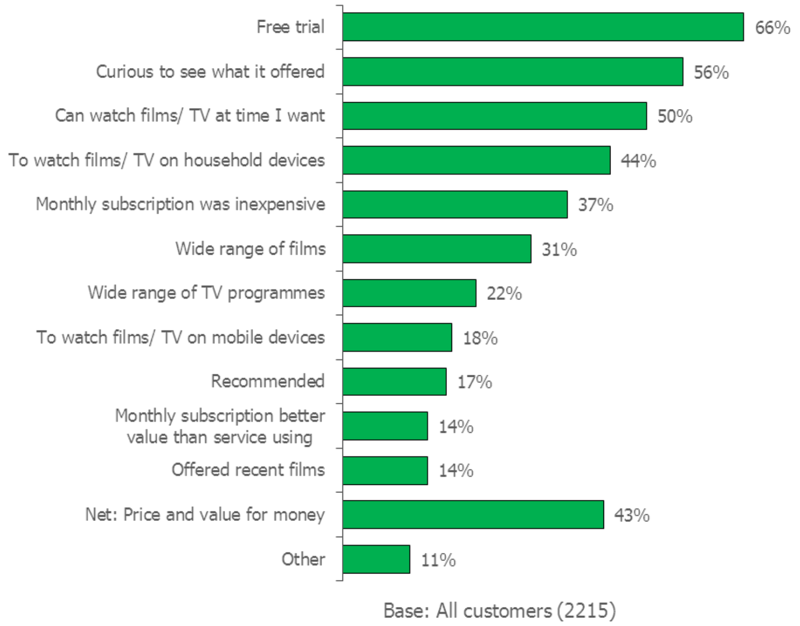
37. 20% of customers said they experienced broadband problems at least weekly, and another 28% suffered problems sometimes (but less than weekly). 16% of customers had a monthly download limit to their broadband.

38. At the time of surveying, just over a third (36%) of customers had signed up to the service within the previous two weeks, and a similar proportion (41%) three to four weeks before. Only one in four (23%) had signed up more than a month ago. Seven in ten (71%) customers were still on the free trial at the time of surveying.

39. Respondents were asked why they had signed up to the new service. The free trial was a key hook with two in three (66%) stating this as a reason. Other key reasons were being able to watch the content on-demand, and on a device convenient to the customer. The other key reason was it being inexpensive or better value for money than the service they were used to paying for.

Figure 13 – Reasons for Signing Up

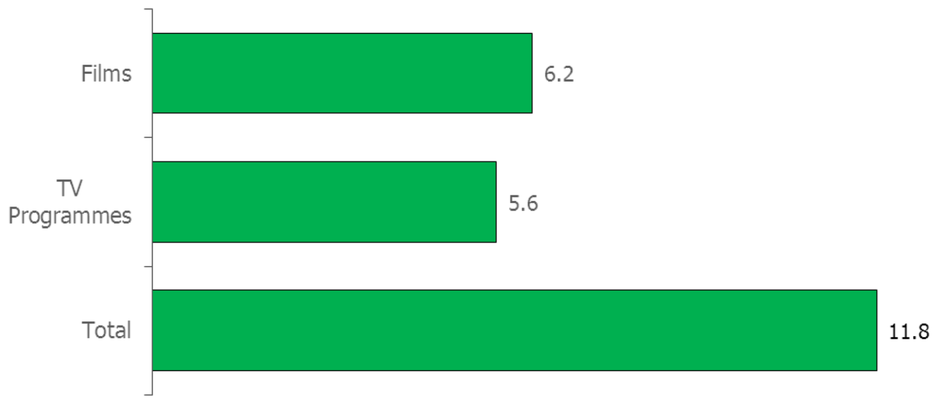
Q6 Why did you sign up to {Netflix/LOVEFiLM}?



40. The average customer used the service to watch about six hours of films, and six hours of TV programmes per week, meaning the average customer used the service for 12 hours a week.

Figure 14 – Average number of hours watched service per week – personally

Q7a Since signing up to {Netflix/ LOVEFiLM} approximately how many hours a week on average have <u>you personally</u> used your subscription to watch films or TV programmes (Please exclude any extras you have paid to watch)?

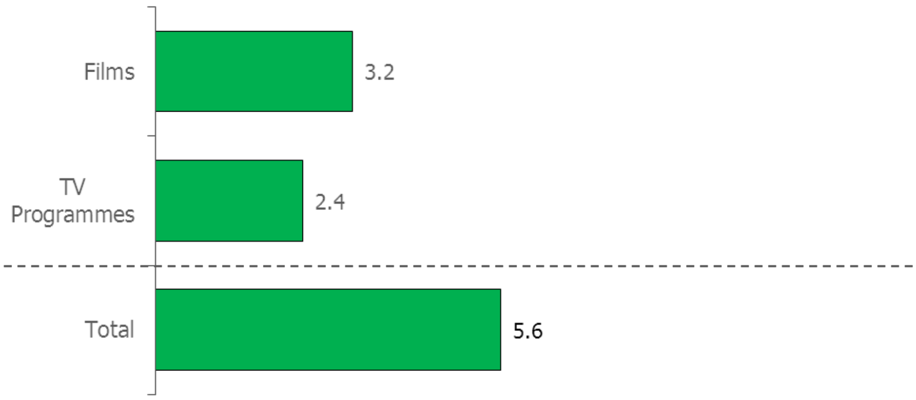


Base: All customers (2215)

41. Respondents were also asked how often others in the household watched the new service. Some care should be taken interpreting these results, as results are only estimates (based on the respondent's perception), and a sizeable proportion felt unable to give an estimate. On average, in households with other members, others watched six hours a week, with slightly more hours spent watching films rather than TV programmes.

Figure 15 – Average number of hours watched service per week – others in household

Q7b Approximately how many hours a week on average have others in the household used your subscription to {Netflix/ LOVEFiLM} to watch films or TV programmes (Please exclude any extras they have paid to watch)?

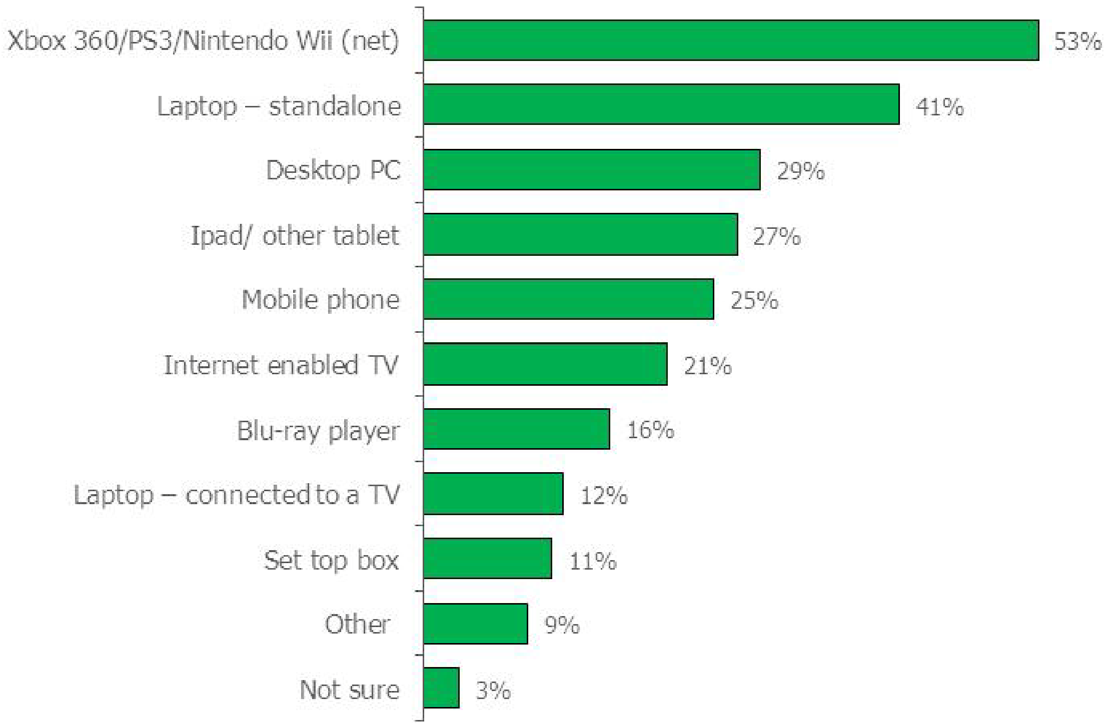


Base: All with others in household (1912)

42. More people mentioned that they had used a games console (XBOX 360, Nintendo Wii, or PS3) to watch the service than any other device, and two in five (41%) said they had watched a film or TV programme on a standalone laptop.

Figure 16 – Devices used to watch service – personally

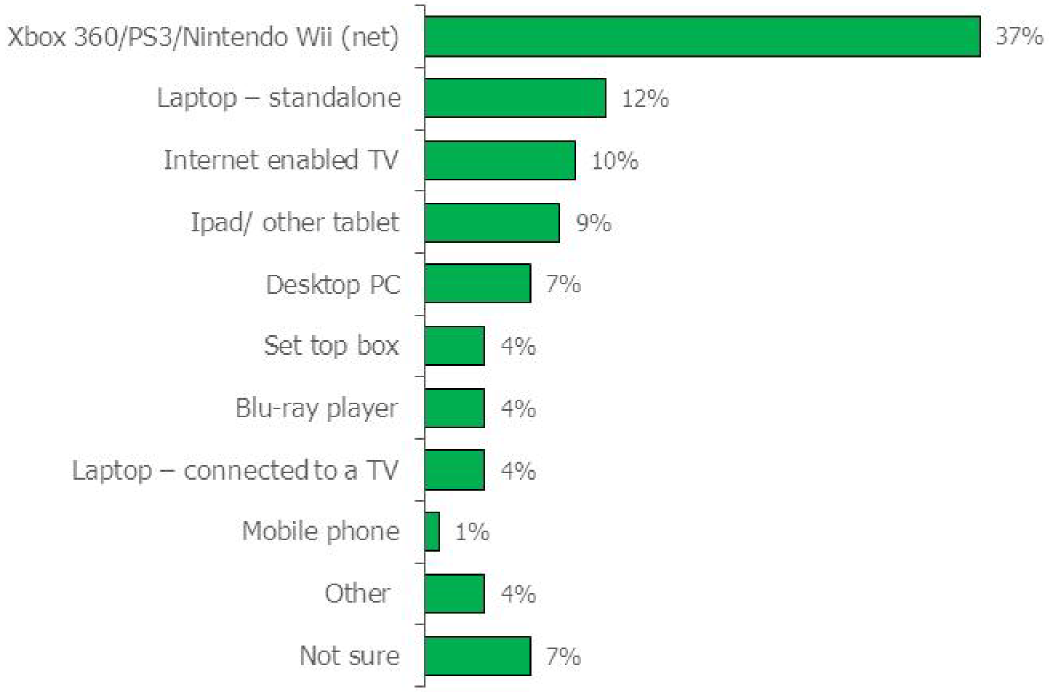
Q8a Which of the following devices have you used to watch films or TV programmes from {Netflix/ LOVEFiLM}?


Xbox 360/PS3/Nintendo Wii (net)
53%
Laptop – standalone
41%
Desktop PC
29%
Ipad/ other tablet
27%
Mobile phone
25%
Internet enabled TV
21%
Blu-ray player
16%
Laptop – connected to a TV
12%
Set top box
11%
Other
9%
Not sure
3%

43. Having identified the range of devices they used to watch the service, respondents were then asked which one was the main device that they used to stream films or TV programmes. Just over one in three used a games console (XBOX 360, PS3 or Nintendo Wii). Next most often mentioned was a standalone laptop.

Figure 17 – Main device used to watch service

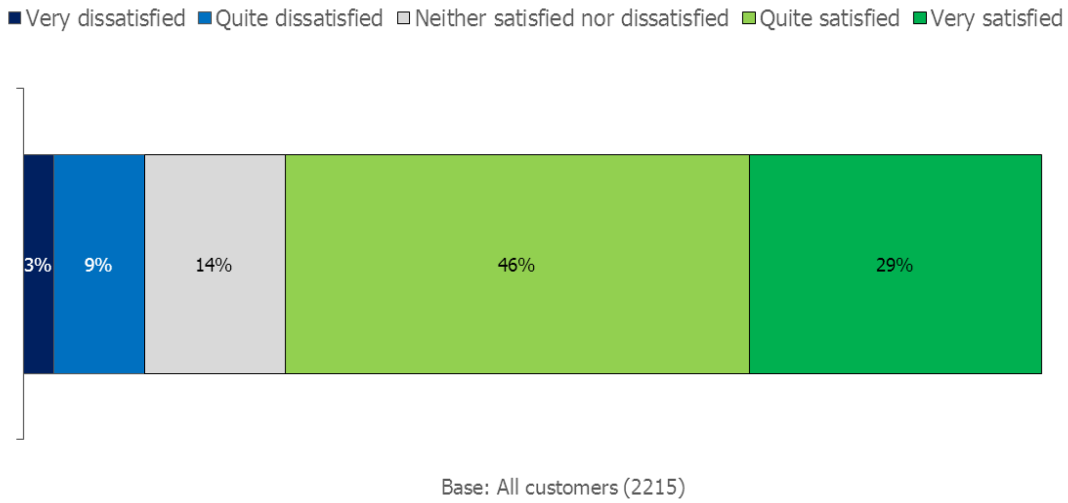
Q8b Which one of these is the main device that you use to stream movies or TV programmes?



44. Satisfaction with the service was evaluated by asking customers to give a rating on a 5-point “Very satisfied” to “Very dissatisfied” scale. Three in four customers described themselves as very or quite satisfied.

Figure 18 – Satisfaction with service

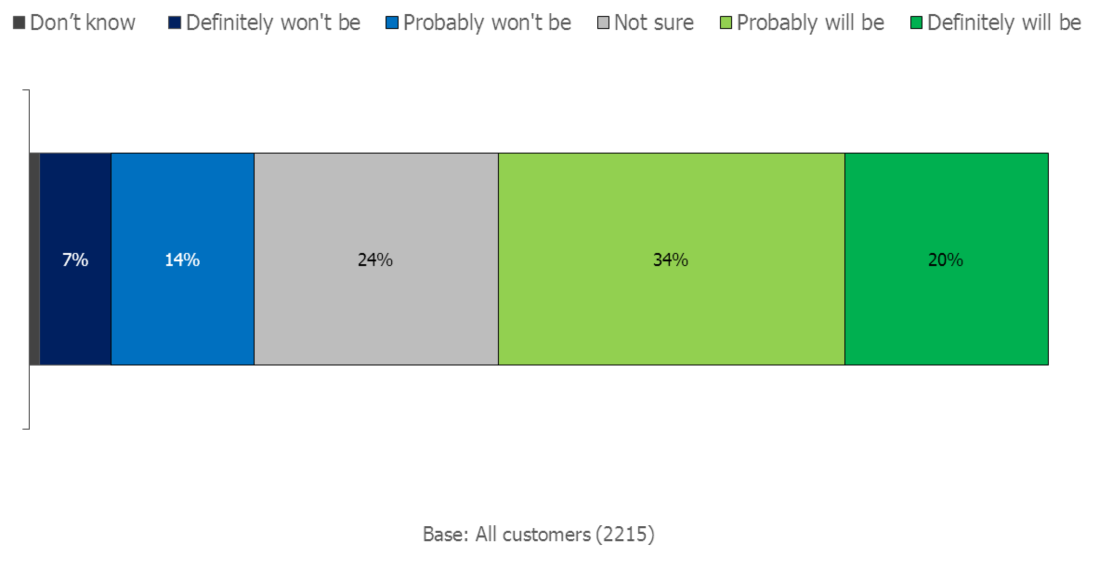
Q9 How satisfied are you with {Netflix/LOVEFiLM}?



45. Respondents were then told how much the service will cost after the free trial period. This was cited as from £5.99 for Netflix customers, and from the actual subscription price for LOVEFiLM customers depending on the service they had signed up to (subscription price between £4.99 for unlimited streaming up to £14.99 for the most expensive option (unlimited streaming plus games plus 3 discs at home)). They were then asked the likelihood of being a subscriber in three months time, using a 5-point "Definitely will be" to "Definitely not" scale. Just over half indicated they would definitely or probably continue paying the subscription, and one in five said they would definitely do so.

Figure 19 – Likelihood of being a subscriber in three months time

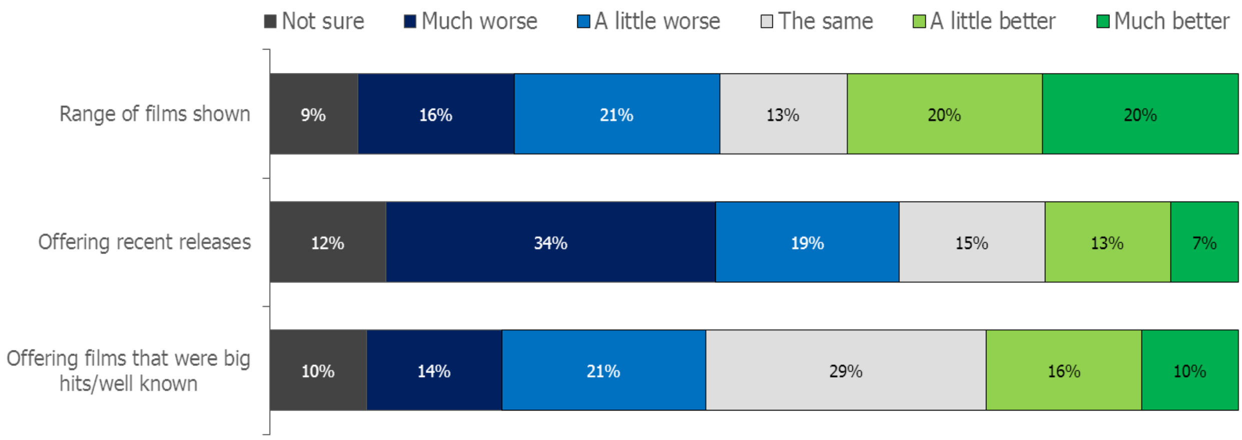
Q10b. You told us you have signed up to {Netflix/LOVEFiLM}. This is likely to cost from £(INSERT {5.99} for Netflix customer/ INSERT cost from S3 for LOVEFILM customers) as a monthly subscription after the free trial period. How likely are you to be a {Netflix/LOVEFiLM} subscriber in three months time?



46. Later in the survey, customers who had Sky Movies were asked to compare the films shown on the new service against Sky Movies in terms of the range of films, the offering of recent releases, and the offering of big hit well known films. The service was not seen to provide as many recent releases as Sky Movies, and on balance was rated slightly worse on its offering big hit well known films. However, it was rated on a par with Sky Movies in terms of the range of films shown.

Figure 20 – Rating of film service against Sky Movies

Q13 I'd like you to think about how the films shown on {LOVEFiLM streaming service / Netflix} compare to those available on Sky Movies. Would you say that {LOVEFiLM's streaming service / Netflix} is...



Base: All Sky customers (460)

4.3 Impact of Service on Pay TV Viewing

47. Respondents were asked a series of questions designed to assess the impact of the new service on their Pay TV viewing. Regarding behaviours in the previous three months, customers were asked:

    - whether they had stopped subscribing to a Pay TV service
    - whether they had stopped subscribing to any Sky Movies channels (those still on a Pay TV service)

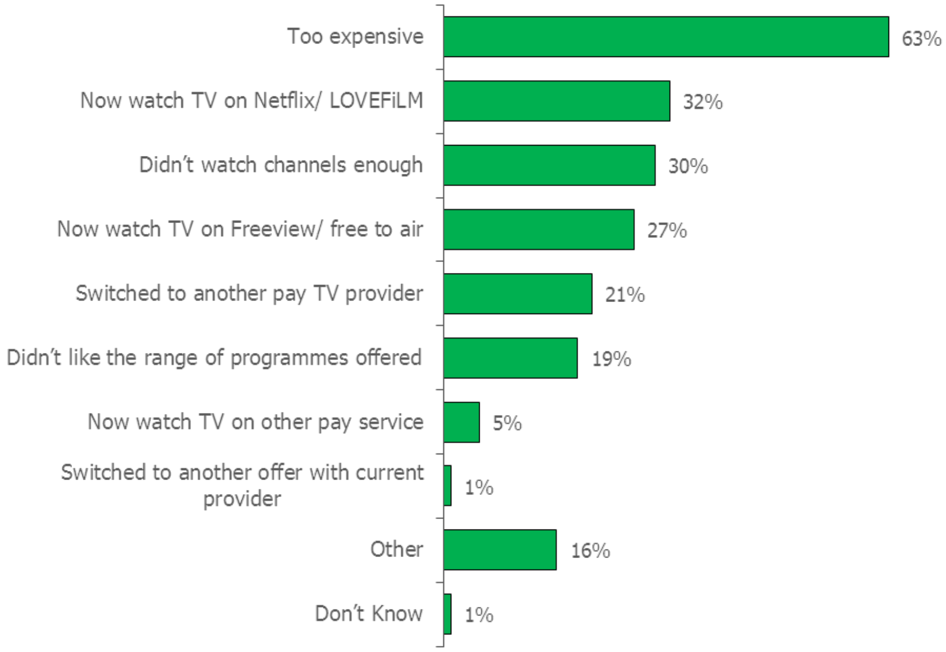
    They were also asked about how the service would impact their future use of a Pay TV service.

48. All the findings in this section of the report are based on those saying they would definitely or probably be a paying subscriber to the new service in three months time – described hereafter as a "continuing" customer.

49. 7% of continuing customers had stopped subscribing to a Pay TV service in the last three months. These respondents were asked why they had stopped subscribing (possible factors described on a prompted list), and in the majority of cases the reason cited was the expense. Some though indicated that they had stopped subscribing because they now watch TV and films on the new service. Overall, 2% of continuing customers had stopped subscribing to Pay TV in the last three months and described one of the reasons for doing so as "now watch TV programmes on Netflix/ LOVEFiLM".

Figure 21 – Reasons why stopped subscribing to Pay TV service in last three months

Q2b Why did your household stop subscribing to this Pay TV service?

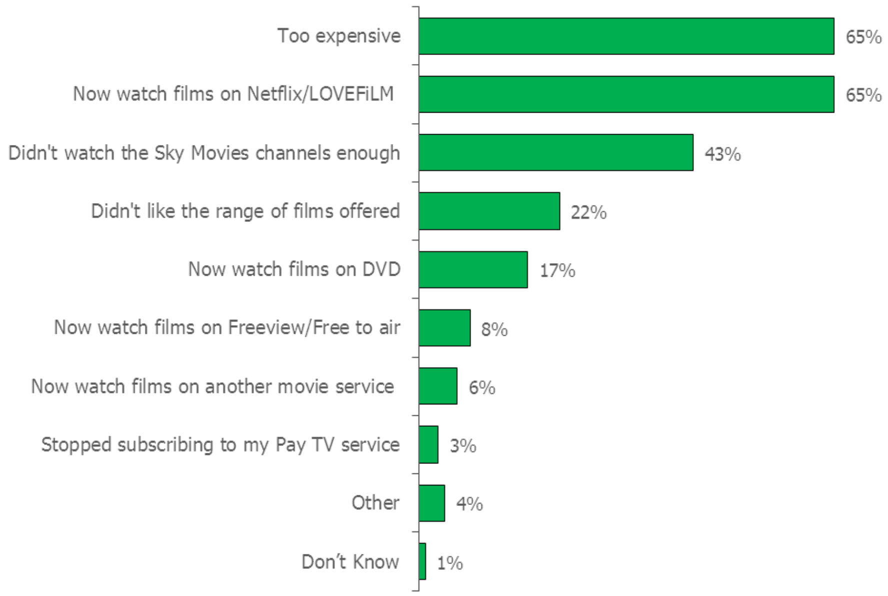


Base: All likely to continue subscription and stopped subscribing to Pay TV in last 3 months (93)

50. Those who still had a Pay TV service (Sky, Virgin Media or Talk Talk) but without some or all of the Sky Movies channels were asked whether they had stopped subscribing to any Sky Movies channels in the last three months. 5% of all continuing customers had stopped subscribing. Of these, two in three mentioned they now watched films on Netflix/LOVEFiLM as a reason for stopping, so the proportion who had stopped with one of the reasons being the new service was 4% of continuing customers.

Figure 22 – Reasons why stopped subscribing to Sky Movies in last three months

Q3d Why did you, or your household, stop subscribing to Sky Movies channels?



Base: All likely to continue subscription and stopped subscribing to Sky Movies in last 3 months (67)

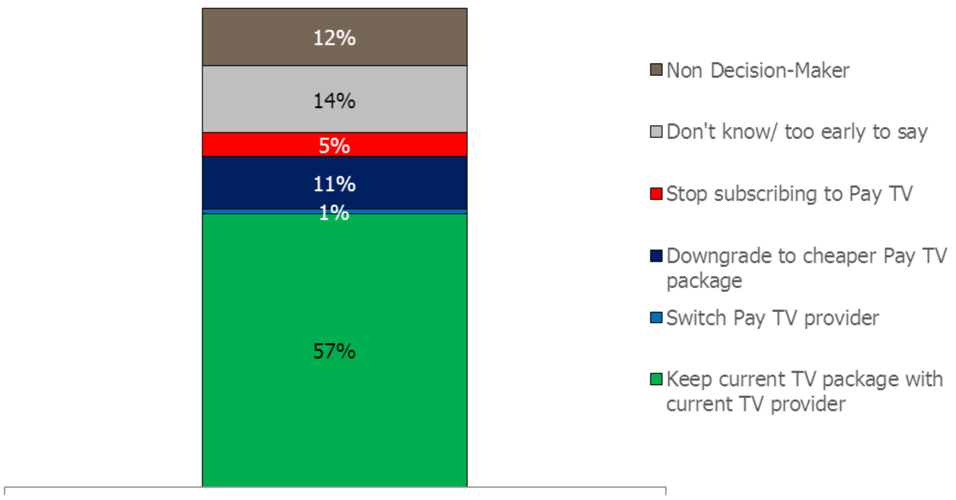
51. Those who had a Pay TV service and were involved in making decisions on which Pay TV packages to subscribe to, were asked what was likely to happen to their Pay TV package given their continuing subscription to the new service. They were prompted with the following list:

- Keep current Pay TV package with current provider
- Switch Pay TV provider
- Downgrade to cheaper Pay TV package (with current provider)
- Stop subscribing to Pay TV
- Don't know, too early to say

52. Just over half (57%) of continuing customers said they would keep their current Pay TV package with the current provider. A further 12% were non decision-makers (and therefore not influential on any decision to change). Some indicated it was too early to say. However, 5% of continuing customers indicated they would stop subscribing to their Pay TV service, and 11% would downgrade to a cheaper package. When asked why they would stop subscribing to their current Pay TV package, most cited price factors (new service is better value for money or too expensive to subscribe to both), although a minority indicated a preference for the new service content.

Figure 23 – What will do with Pay TV package with continuing Netflix/LOVEFiLM subscription (All Pay TV Users)

Q11a Given that you are likely to be a {Netflix/LOVEFiLM} subscriber in three months, what is likely to happen to the Pay TV service that you or your household subscribes to?

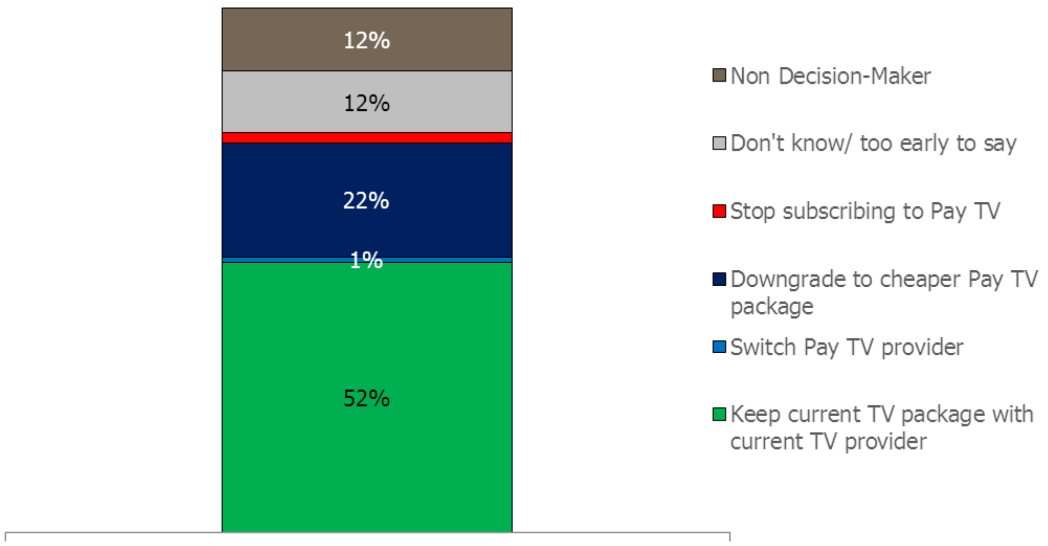


Base: All likely to continue subscribing to service who are Pay TV users (762)

53. The chart below shows exactly the same set of responses but this time looking solely at those with a Sky Movies subscription. Among this group, the proportion indicating they would downgrade to a cheaper Pay TV package (with their current provider) increases notably, to 22% among continuing customers.

Figure 24 – What will do with Pay TV package with continuing Netflix/LOVEFiLM subscription (Sky Movie Subscribers)

Q11a Given that you are likely to be a {Netflix/LOVEFiLM} subscriber in three months, what is likely to happen to the pay TV service that you or your household subscribes to?

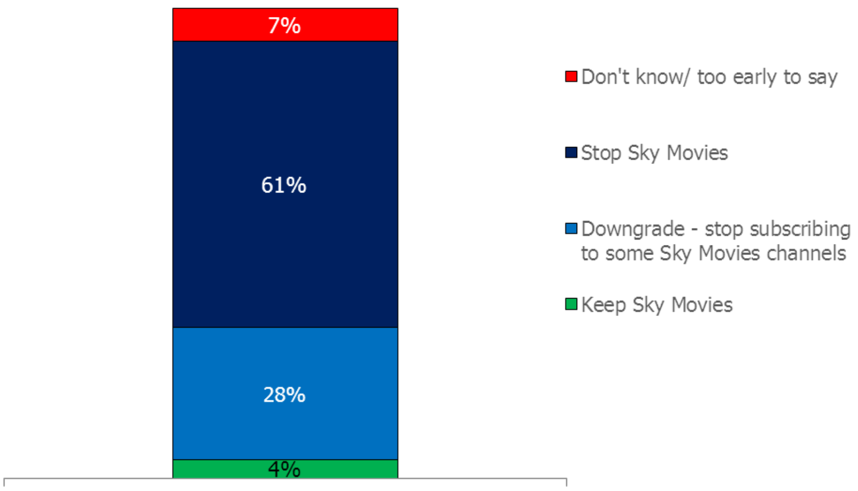


Base: All likely to continue subscribing to service who are Sky Movie users (270)

54. Those subscribing currently to Sky Movies who indicated they would switch or downgrade their Pay TV package given their continuing subscription to the new service, were asked what would happen to their Sky Movies subscription: whether they would keep it as is, downgrade the package and stop subscribing to some Sky Movies channels (dual users only), stop subscribing altogether, or whether it was too early to say. The sample size for this particular group of respondents is low and therefore results should be treated with caution, but the indication is that most would stop subscribing to Sky Movies altogether.

Figure 25 – What will do with Sky Movies if downgrading/switching Pay TV package

Q11b/c And what will happen to the Sky Movies package that you or your household subscribes to?

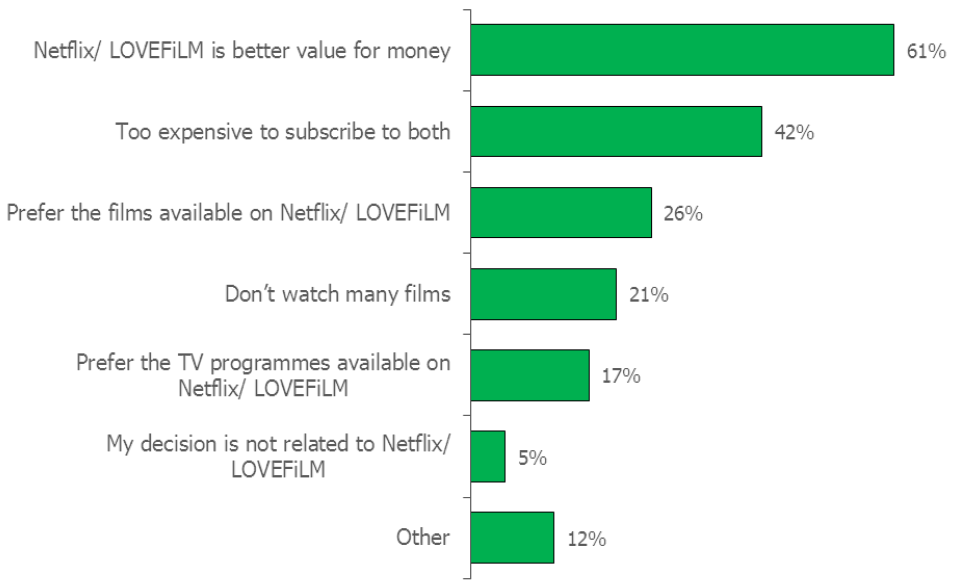


Base: Sky Movie Users likely to continue subscribing to service and will switch/downgrade Pay TV package (58)

55. The reason why people would stop or downgrade their Sky Movies subscription was primarily due to the new service being seen as better value for money, and it being too expensive to subscribe to both.

Figure 26 – Reasons would stop/downgrade Sky Movies

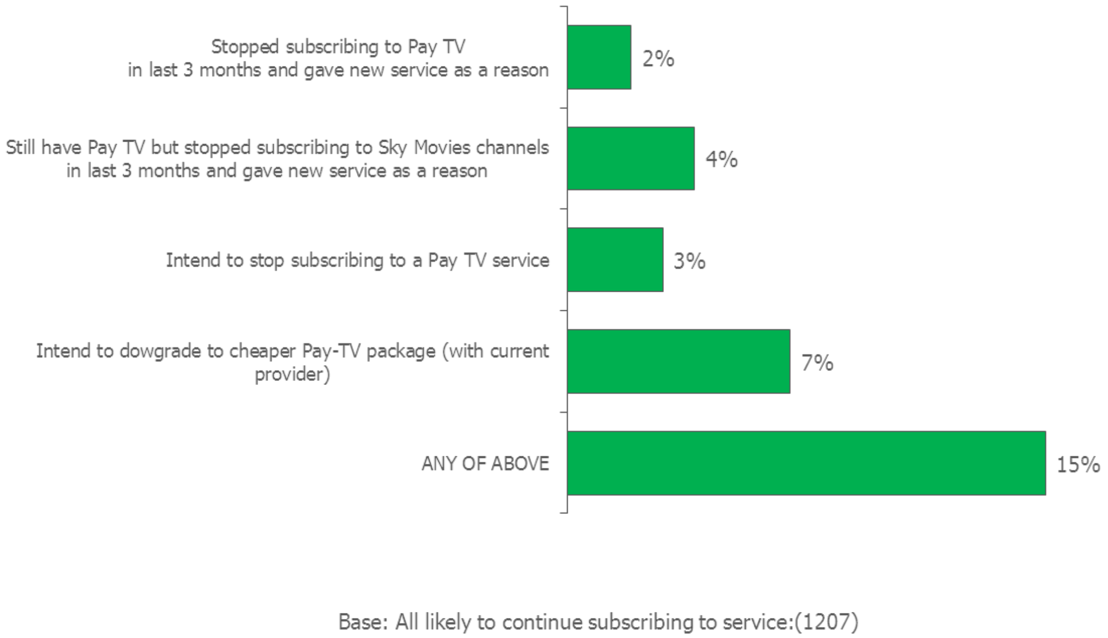
Q11d Why would you {downgrade/ stop subscribing} to Sky Movies?



Base: All who would downgrade/stop Sky Movies (52)

56. The chart below provides a summary of results from this section of the report. Based on those who said they will definitely or probably be a subscriber to the service in three months time, it shows that 15% of continuing customers either have already changed their Pay TV viewing or will do so as a result of the new service.

Figure 27 – Impact of new service (summary chart)



57. Looking specifically at the future impact on Sky Movies, 3% of continuing customers said they intended to downgrade to a cheaper Pay TV package and stop subscribing to Sky Movies, and 1% would downgrade from a dual to single channel Sky Movies service.

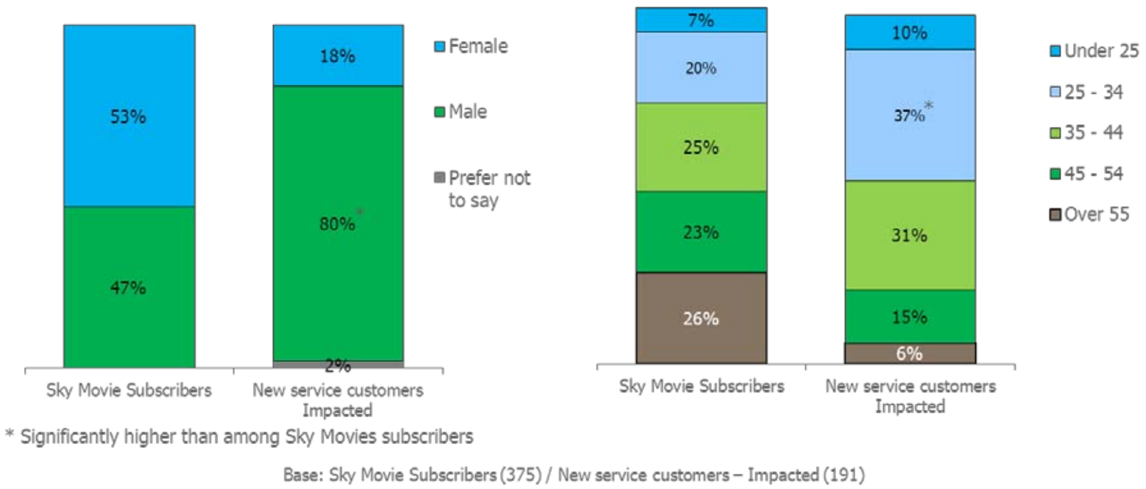
58. In this final part of the report, we look at the profile of those who indicated that their Pay TV viewing has been or will be impacted by the new service i.e. those who will continue to subscribe to the new service and who had already stopped subscribing to Pay TV or Sky Movies, or intended to stop or downgrade their Pay TV package as a result of the new service (the "Any of Above" group in Figure 27). This group is described as "New service customers impacted", hereafter. The profile of these customers has been compared against the profile of Sky Movies subscribers identified in the first Pay TV survey conducted by GfK NOP for the Competition Commission (in late 2010)[3].

59. The New service customers impacted were typically younger males, 80% being male and 47% aged less than 35 years old.

Figure 28 – Demographic profile of user – age and gender

D1 Which age group are you in?

D2 Are you male / female?

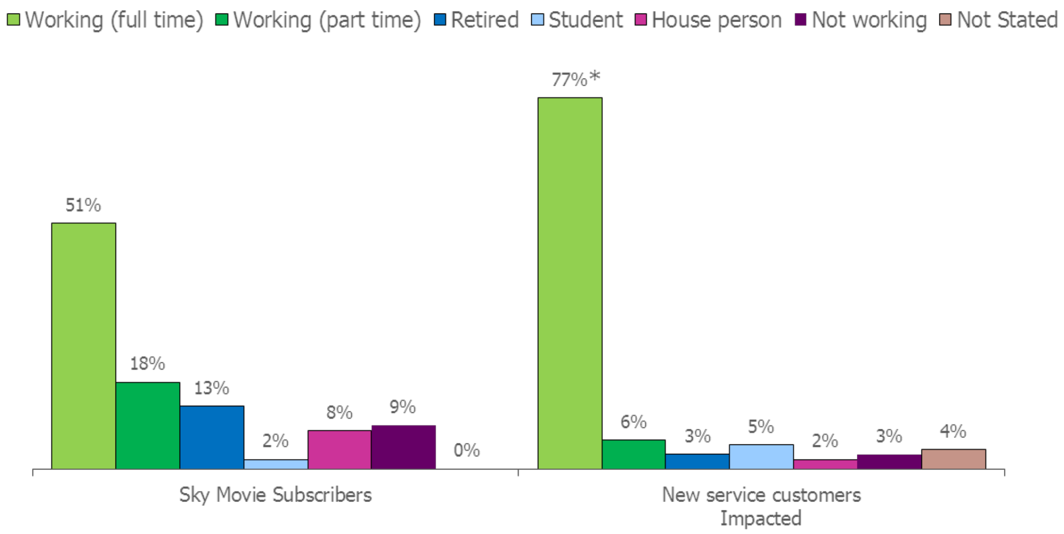


3 Competition Commission/Movies on Pay TV Market Investigation/Provisional Findings Report/Appendix 5.2

60. The profile of New service customers impacted tended to be more full-time working.

Figure 29 – Demographic profile of user – working status

D3 And which of the following best describes your current working status?



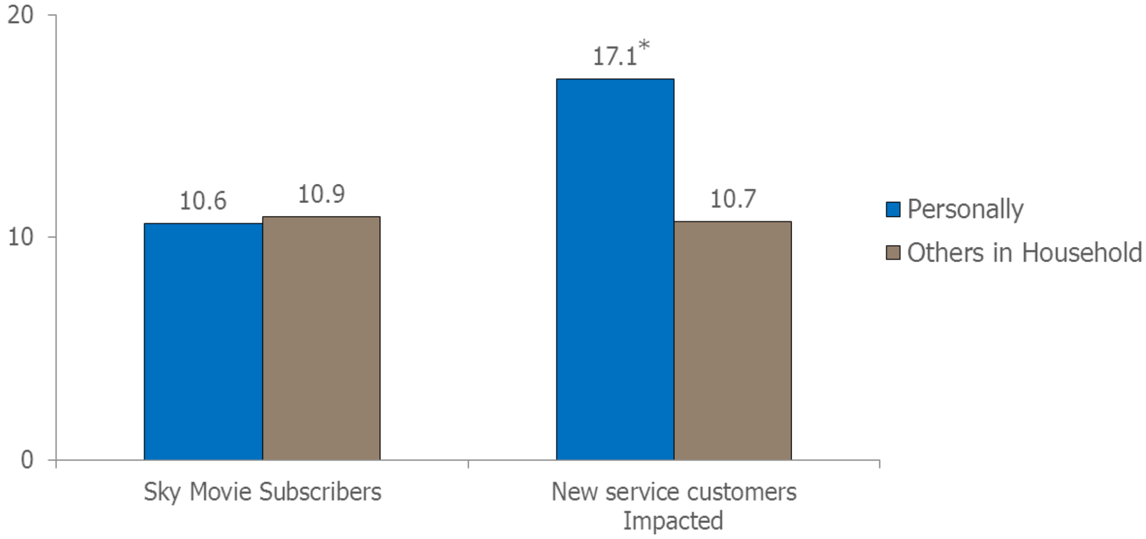
* Significantly higher than among Sky Movies subscribers

Base: Sky Movie Subscribers (375) / New service customers – Impacted (191)

61. New service customers impacted were likely to watch more films (personally) than Sky Movies subscribers, although there was no evidence of heavier film viewing among other members of the household.

Figure 30 – Average number of films watched in a typical month

Q4g/h. Thinking about all the different ways you watch films, roughly how many films in total do you personally/ others in household watch in a typical month



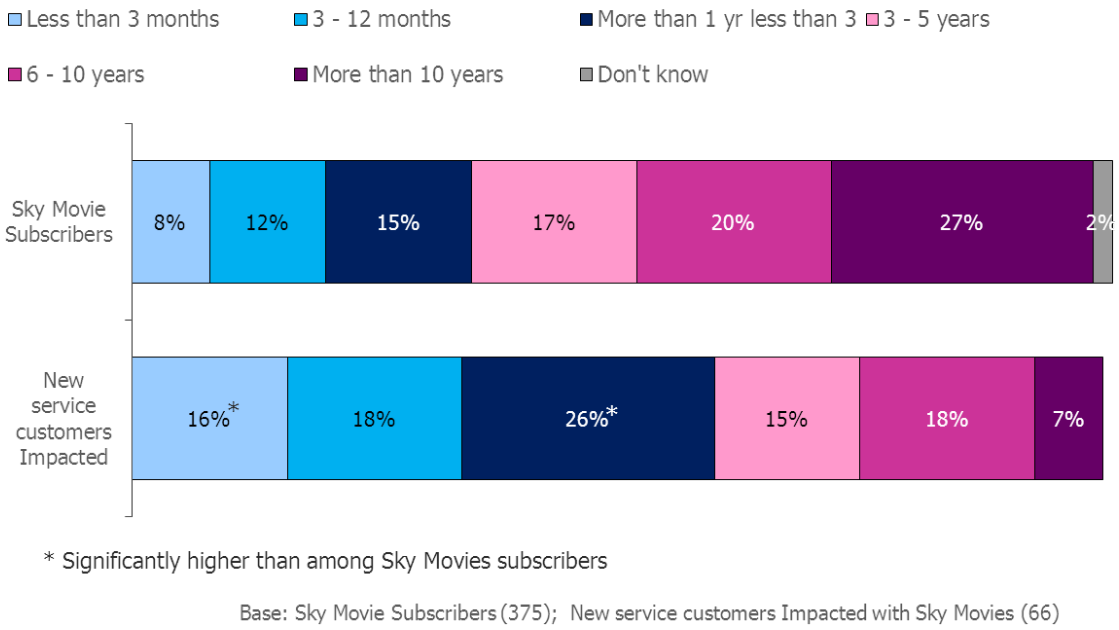
* Significantly higher than among Sky Movies subscribers

Base: Sky Movie Subscribers (375) / New service customers – Impacted (191)

62. A higher proportion of New service customers impacted had signed up to Sky Movies in the last year, compared with Sky Movies subscribers in general, indicating that these were typically less well established customers.

Figure 31 – How long had Sky Movies

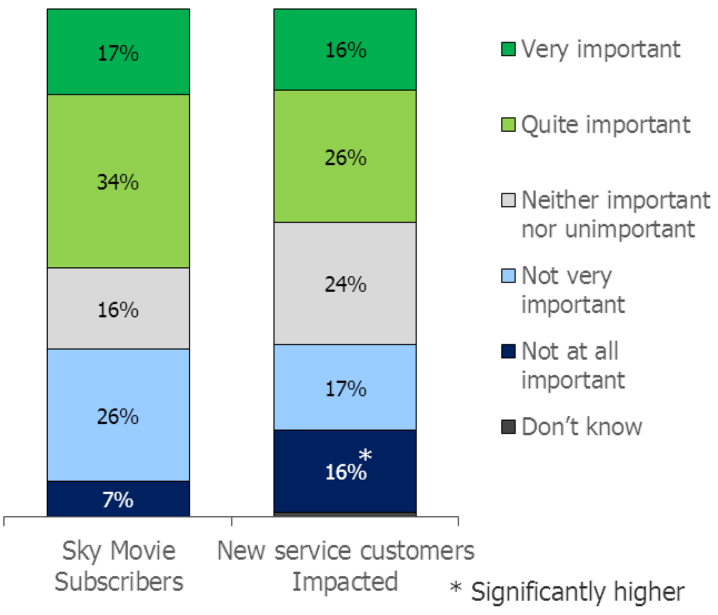
Q5a How long have you, or your household, had Sky Movies channels on a monthly subscription basis?



63. New service customers impacted were more likely than Sky Movies subscribers to say Sky Movies was not at all important in their decision to get a Pay TV service.

Figure 32 – Importance of Sky Movies in decision to get Pay TV service

Q5c How important was Sky Movies channels in your household's decision to have a TV service from (Sky/Virgin Media/Talk Talk)?



Base: Sky Movie Subscribers (375); New service customers Impacted with Sky Movies (66)

APPENDIX A – Email invite and questionnaire

Please could you spare 10 minutes to help with an important survey.

Netflix/ LOVEFiLM has been asked to send you this survey by the Competition Commission, which is an independent public body carrying out an inquiry looking at the way in which film services are supplied in the UK.

GfK NOP is an independent market research company and has been asked by the Competition Commission to carry out this research.

You can access the survey by clicking once on the hyperlink below, or by pasting the url into your browser. This will take you to a site hosted by GfK NOP.

[Link to survey]

The results obtained from this survey will be assessed and used by the Competition Commission for the purposes of its inquiry. Please be assured that all survey responses are anonymous and any disclosure of data by the Competition Commission will ensure that no responses are attributable to you individually. There will be no attempt to sell you anything as a result of this research.

We would be grateful if you completed the survey by Sunday 12 February.

For more information about the Competition Commission and its inquiry, please click here.

If you have any questions with regard to this survey, please click here.

Thank you very much for your help.

SCREENING QUESTIONNAIRE
For Netflix customers:
S1. Can I just check, we understand that you have you recently signed up for a free trial with Netflix and are still receiving this service. Is this right?

Yes Go to S2
No CLOSE
Not sure CLOSE

For LOVEFILM Customers:
S1a. Can I just check, we understand that you have you recently (in last 3 months) signed up to LOVEFiLM and are still receiving a LOVEFiLM package. Is this right?

Yes Go to S2
No CLOSE
Not sure CLOSE

If S1/1a is 'YES'
S2 Are you still on a 'free' trial or are you already paying?

Free
Paying
Not sure CLOSE

If S1a Yes [LOVEFiLM customers only]
S3 Which package are you on?
PLEASE TICK ONE BOX ONLY

Package Name	Max discs per month	Number of discs out at a time	Games included	Streaming (per month)	Price per month	Service signed up for
LOVEFiLM Instant – unlimited streaming	No discs	0	N	Unlimited	4.99	
Unlimited (1 disc at home)	Unlimited	1	N	Unlimited	7.99	
Unlimited (2 discs at home)	Unlimited	2	N	Unlimited	9.99	
Unlimited & games (2 disc at home)	Unlimited	2	Y	Unlimited	11.22	
Unlimited (3 discs at home)	Unlimited	3	N	Unlimited	13.27	
Unlimited & games (3 disc at home)	Unlimited	3	Y	Unlimited	14.99	
Don't know/ Can't remember						

S3a. And which of these services have you **used**?

PLEASE SELECT ALL THAT APPLY

DVD delivery service (ASK IF 2- 6 S3)
Game delivery service (ASK IF 4 OR 6 at S3)
Online film streaming (ASK ALL)
Online TV programme streaming (ASK ALL)
Other
None of these

ASK ALL
S4 How long ago did you sign up for this service?

Within the last week
1-2 weeks ago
3-4 weeks ago
5-6 weeks ago
7-8 weeks ago
Over two months ago
Don't know

S5 Do you work in, or have any strong connections with, any of these industries?

Advertising
Banking
Journalism - CLOSE
Marketing
Internet Service Provider - CLOSE
TV/film industry – CLOSE
None of these
Refused – CLOSE

S6 Have you taken part in any market research on film services in the UK in the last month?

Yes	CLOSE
No	GO TO Q1
Don't Know	CLOSE

PAY TV AND FILM SERVICES USED

Q1. From which, if any, of these companies do you or anyone in your household have….

	A TV Service	Landline Phone	Mobile Phone	Broadband
BT			xxxx	
Sky			xxxx	
Talk Talk				
Top-Up TV		xxx	xxx	
Virgin Media				
None of these				

Q2a. Have you, or anyone in your household, stopped subscribing to pay TV services from any one of these providers in the last 3 months?

BT
Sky
Talk Talk
Top-Up TV
Virgin Media
None of these
Don't know/ not sure

IF SELECTED ANY PROVIDER AT Q2a
Q2b. Why did your household stop subscribing to this pay TV service? **MC**

PLEASE SELECT ALL THAT APPLY

Too expensive
Didn't watch the channels enough
Didn't like the range of programmes offered
Switched to another pay TV provider (i.e. Sky, BT, Talk Talk, Top Up TV, Virgin)
Switched to another offer with my current pay TV provider (i.e. Sky, BT, Talk Talk, Top Up TV, Virgin)
Now watch TV programmes on Freeview/Free to air
Now watch TV programmes on {Netflix/LOVEFiLM}
Now watch TV programmes on other pay service
Other (Write in)
Don't Know

IF GET SKY/VIRGIN MEDIA/TALK TALK TV SERVICE
Q3a Do you, or anyone in your household, get **any** Sky Movies channels on a monthly subscription basis?

Yes
No
Don't know

(SHOW IN BOX ON RIGHT HAND OF SCREEN)

Sky Movies Channels;

Sky Movies Indie
Sky Movies Modern Greats
Sky Movies Classics
Sky Movies Premiere
Sky Movies Premiere +1
Sky Movies Crime & Thriller
Sky Movies Drama & Romance
Sky Movies Family
Sky Movies Action & Adventure
Sky Movies Comedy
Sky Movies Sci-Fi & Horror
Sky Movies Showcase

IF Q3a 'Yes'
Q3b. Do you, or anyone in your household, take **all** the Sky Movies channels i.e. including Sky Premiere? **SC**

Yes
No
Don't know/Can't remember

(SHOW IN BOX ON RIGHT HAND OF SCREEN)

Sky Movies Channels;

Sky Movies Indie
Sky Movies Modern Greats
Sky Movies Classics
Sky Movies Premiere
Sky Movies Premiere +1
Sky Movies Crime & Thriller
Sky Movies Drama & Romance
Sky Movies Family
Sky Movies Action & Adventure
Sky Movies Comedy
Sky Movies Sci-Fi & Horror
Sky Movies Showcase

IF NO AT Q3a OR NO AT Q3b
Q3c. Have you, or anyone in your household, stopped subscribing to any Sky Movies channels in the last 3 months? **SC**

Yes – some (moved from dual to single movie package)
Yes – all (I now no longer take any Sky Movies channels) {do not ask if YES at Q3a}
No
Don't know

IF YES (SOME OR ALL) AT Q3c
Q3d. Why did you, or your household, stop subscribing to Sky Movies channels? **MC**

PLEASE SELECT ALL THAT APPLY

Too expensive
Didn't watch the Sky Movies channels enough
Didn't like the range of films offered
Now watch films on {Netflix/LOVEFiLM}
Now watch films on DVD
Now watch films on Freeview/Free to air
Now watch films on another movie service
Stopped subscribing to my Pay TV service
Other (Write in)
Don't Know

IF GET BT AT Q1

Q4a Do you, or your household, currently subscribe, or have you subscribed, in the last 3 months, to the BT Vision FilmClub service on a monthly subscription basis? **SC.**

Yes
No
Don't know

IF GET VIRGIN/TOP UP TV/BT/TALK TALK PAY TV AT Q1
Q4b Do you, or your household, currently subscribe, or have you subscribed in the last 3 months, to the Picture-Box film service on a monthly subscription basis? **SC.**

Yes
No
Don't Know

ASK ALL

Q4c Apart from the film services you have already told us about, do you pay for any other film services from any other provider? **MC**

PLEASE SELECT ALL THAT APPLY

Internet delivered film subscription service
Internet delivered non subscription film service (i.e. pay as you go)
Mail order DVD subscription
Mail order DVD & internet combination subscription {for Netflix customers only}
None of these

IF ANY AT Q4c

Q4ci Please tell us the name of the provider of this service?

WRITE IN

IF DVD & INTERNET COMBINATION AT Q4c

Q4d. In relation to your service from {INSERT NAME FROM Q4ci} which of the following have you **used**?

PLEASE SELECT ALL THAT APPLY

DVD delivery service
Game delivery service
Online film streaming
Online TV programme streaming
Other
None of these

IF GET ANY PAY TV AT Q1
Q4f Do you, or any of your household get any Sky sports channels on a monthly subscription? **SC.**

Yes
No

FILM PACKAGE USEAGE

Q4g. Thinking about all the different ways you watch films, roughly how many films <u>in total</u> do you <u>personally</u> watch in a typical month…?
Please give your (approximate) best estimate

WRITE IN NUMBER OR ZERO FOR EACH, OR TICK THE DON'T KNOW BOX

At the cinema
On DVD/Blu-Ray
On a TV channel (whether watched at time of broadcast/multicast or recorded and watched later)
On demand i.e. at a time of your choosing (on any device)
Other (write in)
Don't know/can't remember

Q4h. Roughly how many films <u>in total</u> do <u>other people</u> in your household watch <u>without you</u> in a typical month…?
Please give your (approximate) best estimate

WRITE IN NUMBER OR ZERO FOR EACH, OR TICK THE DON'T KNOW BOX

At the cinema
On DVD/Blu-Ray
On a TV channel (whether watched at time of broadcast/multicast or recorded and watched later)
On demand i.e. at a time of their choosing (on any device)
Other (write in)
Don't know/can't remember
No one else in the household

ASK Q5 IF GET SKY MOVIES CHANNELS (YES AT Q3a) OR PICTUREBOX / BT VISION FILM CLUB (YES AT Q4a-b) OR OTHER SUBSCRIPTION (ANY AT 4C) REST GO TO Q6

REPEAT Q5a-c FOR EACH MOVIE PACKAGE USED

Q5a How long have you, or your household, had {Sky Movies channels/ PictureBox film services/ BT Vision FilmClub/ INSERT ANSWER FROM Q4ci } on a monthly subscription basis? **SC.**

3 months or less
4-6 months
7-12 months
More than 1 year – less than 3 years
3-5 years
6-10 years
More than 10 years
Don't know/can't remember

Q5b Did you, or your household, get {Sky Movies channels/ PictureBox film services/ BT Vision FilmClub} when you first got a TV Service from (.....ANSWER AT Q1)? **SC.**

Yes
No
Don't know/can't remember

SCRIPTING NOTE - DO NOT ASK THIS QUESTION FOR OTHER SUBSCRIPTION SERVICE (Q4c)

Q5c How important was {Sky Movies channels/ PictureBox film services / BT Vision FilmClub} in your households decision to have a TV service from (.....ANSWER AT Q1)?

Very important
Quite important
Neither important nor unimportant
Not very important
Not at all important
Don't know/can't remember

SCRIPTING NOTE - DO NOT ASK THIS QUESTION FOR OTHER SUBSCRIPTION SERVICE (Q4c)

NEW TRIAL SERVICE

ASK ALL
Q6. Why did you sign up to {Netflix/LOVEFiLM}? **MC**

PLEASE SELECT ALL THAT APPLY

ROTATE PRECODE (EXCEPT ALWAYS END WITH OTHER)

Wide range of films
Wide range of TV programmes
Offered recent films
I can watch films/TV programmes at the time I want
Free trial
The monthly subscription was inexpensive
The monthly subscription was better value than the service I am/was using
Curious to see what it offered
Recommended by family/a friend/colleague
To watch films/TV programmes on mobile devices
To watch films/TV programmes on household devices
Other (Write in)

Q7a. Since signing up to {Netflix/ LOVEFiLM} approximately how many hours a week on average have you personally used your subscription to watch films or TV programmes (Please exclude any extras you have paid to watch)?

WRITE IN NUMBER OF HOURS AGAINST EACH, OR TICK "NOT SURE" BOX

	Films	TV Programmes	Total
No. of hours			
Not sure			

SCRIPTING NOTE – AUTOMATICALLY COMPUTE TOTAL HOURS

Q7b. Approximately how many hours a week on average have others in the household used your subscription to {Netflix/ LOVEFiLM} to watch films or TV programmes (Please exclude any extras they have paid to watch)?

WRITE IN NUMBER OF HOURS AGAINST EACH, OR TICK "NOT USED" BOX

	Films	TV Programmes	Total
No. of hours			
Not sure			
No others in household			

SCRIPTING NOTE – AUTOMATICALLY COMPUTE TOTAL HOURS

Q8a. Which of the following devices have you and/or others in the household used to watch films or TV programmes from {Netflix/ LOVEFiLM}? **MC**

PLEASE SELECT ALL THAT APPLY

	Personally	Others in household
Internet enabled TV		
Desktop PC		
Laptop – standalone		
Laptop – connected to a TV		
Ipad/ other tablet		
Mobile phone		
XBOX 360		
PS3		
Nintendo Wii		
Blu-ray player		
Set top box		
Other		
Not sure		

ALL SELECTING MORE THAN ONE AT Q8a

Q8b. And which one of these is the main device that you and/or others in your household use to stream movies or TV programmes? PLEASE SELECT ONE ANSWER **SC.**

	Personally	Others in household

ASK ALL

Q9 How satisfied are you with {Netflix/LOVEFiLM}?

Very satisfied
Quite satisfied
Neither satisfied nor dissatisfied
Quite dissatisfied
Very dissatisfied

Q10a Are you involved in making decisions on which Pay TV packages to subscribe to? **S.C**

Yes – involved
Yes – decision maker
No
Don't Know

Q10b. You told us you have signed up to {Netflix/LOVEFiLM – From S3} This is likely to cost from £(INSERT {5.99} for Netflix customer/ INSERT cost from S3 for LOVEFILM customers) as a monthly subscription after the free trial period. How likely are you to be a {Netflix/LOVEFiLM} subscriber in three months time?

Definitely will be
Probably will be
Not sure
Probably not
Definitely not

Don't know/ Not sure

IF YES AT Q10aAND GET A TV SERVICE AT Q1 AND SAY DEFINITELY OR PROBABLY CONTINE SUBSCRIPTION AT Q10b
Q11a. Given that you are likely to be a {Netflix/LOVEFiLM} subscriber in three months what is likely to happen to the pay TV service that you or your household subscribes to? **S.C**

PLEASE SELECT ONE ANSWER

Keep current pay-TV package with current provider
Switch Pay TV provider
Downgrade to cheaper pay-TV package (with current provider)
Stop subscribing to pay TV
Don't know – too early to say

IF DOWNGRADE OR SWITCH PROVIDERS AT Q11A AND ARE DUAL MOVIES (YES AT 3b)
Q11b. And what will happen to the Sky Movies package that you or your household subscribes to? **S.C**

Keep current Sky Movies package
Downgrade current Sky Movies package i.e. stop subscribing to some Sky Movies Channels
Stop subscribing to Sky Movies altogether
Don't know – too early to say

IF DOWNGRADE OR SWITCH AT Q11a AND CURRENT SKY MOVIES CUSTOMER (YES AT Q3a) BUT NOT PREMIERE (NO AT Q3b) i.e. single movie
Q11c. And what will happen to the Sky Movies package that you or someone in your household subscribes to?

Keep Sky Movies package
Stop subscribing to Sky Movies altogether
Don't know – too early to say

IF DOWNGRADE AT Q11b OR STOP SUBSCRIBING AT Q11b OR c
Q11d. Why would you {downgrade (IF DOWNGRADE AT Q11b)/ stop subscribing (IF STOP AT Q11b OR C} to Sky Movies? **MC**

PLEASE SELECT ALL THAT APPLY

{Netflix/ LOVEFiLM} is better value for money
Prefer the films available on {Netflix/LOVEFiLM}
Prefer the TV programmes available on {Netflix/LOVEFiLM}
Don't watch many films
Too expensive to subscribe to both
My decision to downgrade is not related to {Netflix/LOVEFiLM}
Other (Write in)
Don't Know

IF STOP SUBSCRIBING TO PAY TV AT Q11a
Q11e Why would you stop subscribing to your current Pay TV package? **M.C**

PLEASE SELECT ALL THAT APPLY

{Netflix/ LOVEFiLM} is better value for money
Prefer the films available on {Netflix/LOVEFiLM}
Prefer the TV programmes available on {Netflix/LOVEFiLM}
Don't watch many films
Too expensive to subscribe to both
My decision to downgrade is not related to {Netflix/LOVEFiLM}
Other (Write in)

ASK IF DEFINITELY/PROBABLY LIKELY TO SUBSCRIBE TO {LOVEFiLM / Netflix} AT Q10a, AND USE PICTUREBOX / BT VISION FILMCLUB/OTHER SUBSCRIPTION AT Q4A-C
Q12 Given that you are likely to be a {LOVEFiLM / Netflix} subscriber in three months what is likely to happen to your... (PICTUREBOX / BT VISION FILMCLUB/ INSERT ANSWER FROM Q4ci) film service subscription?

Keep it
Drop it but keep the other elements of my pay TV package (NOT SHOWN FOR OTHER SUBSCRIPTION)
Stop pay TV subscription altogether ("Stop film subscription" for OTHER SUBSCRIPTION)
Switch to another pay TV provider
Don't know/ not sure
REPEAT Q12 FOR ALL FILM SERVICES USED

ASK SKY MOVIES CUSTOMERS (YES AT Q3a) REST GO TO D1.
Q13. I'd like you to think about how the **films** shown on {LOVEFiLM streaming service/ Netflix} compare to those available on Sky Movies. Would you say that {LOVEFiLM's streaming service / Netflix} is...

	Much better	A little better	The same	A little worse	Much worse	Not sure
Range of films shown						
Offering recent releases (time after cinema release)						
Offering films that were big hits / well known						

DEMOGRAPHICS

D1. Finally, here are a few questions which will be used for classification purposes only.

Which age group are you in? **SC.**

17 years or under
18-24 years
25-34 years
35-44 years
45-54 years
55-64 years
65 years or over
Prefer not to say

D2. Are you... **SC.**

Male
Female
Prefer not to say

D3. And which of the following best describes your current working status? **SC.**

Working full time (30+ hours a week)
Working part time (8-29 hours a week)
Retired
Student
House person
Not working
Prefer not to say

D4. Do you live...

Alone	GO TO D5
With other members of your family	
With other people	
Prefer not to say	GO TO D5

D4i. Please could you tell us the number of people in your household, including yourself...
WRITE IN NUMBER FOR EACH

Adults (aged 18+ years)

Children in household aged:
- Aged 0-4 years
- Aged 5-10 years
- Aged 11-15 years
- Aged 16-17 years

Prefer not to say

D5. Within your household are you the person solely or jointly responsible for .....?

	Yes	No	Prefer not to say
Paying the rent/mortgage			
Paying the internet bills			
Paying the Pay TV subscription			
Paying Netflix/LOVEFiLM subscription			

D6. Which of the following devices do you or anyone in your household own? **MC**

PLEASE TICK ALL THAT APPLY

Internet enabled TV
Desktop PC
Laptop – standalone
Laptop – connected to a TV
Ipad/ other tablet
Mobile phone
XBOX 360
PS3
Nintendo Wii
Blu-ray player
Set top box
A Personal video recorder (i.e. Sky+, V+, Freeview+)
Other
None of these
Prefer not to say

D7 Do you ever have problems with your broadband connection that affects what you stream and/or download?

Yes – Frequently (every 1 – 2 days)
Yes – Often (at least once a week)
Yes – Sometimes (at least once a month)
No
Don't know/Not sure

D8 Does your household have a monthly download limit to your broadband?

Yes
No - Unlimited
Don't know.

D9 Please can you provide us with the first part of your postcode? (i.e. DA17, TN1)

WRTIE IN

Thank you very much for your help. We may be carrying out further research as part of our inquiry. If so, are you willing to be re-contacted to give us your views?

Yes
No

CLOSING SCREEN

Thank you for completing this survey. If you have any queries regarding this research or have any other comments you would like to make on this topic please contact the Competition Commission on; moviesonpaytv@cc.gsi.gov.uk)

If you have any queries specifically regarding the survey please contact GfK NOP on; INSERT EMAIL ADDRESS

Survey data showing responses of Sky Movies customers to hypothetical changes in the price of Sky Movies

1. A number of surveys were drawn to our attention which asked Sky Movies customers about what their response would be to hypothetical changes in the price of Sky Movies. This appendix provides a brief summary of data from these surveys.

Ofcom research

2. Ofcom's pay-TV research during 2007 asked customers how they would respond to hypothetical increases in price for various packages.[1] One of the questions asked a random sample of Sky Movies customers how they would be likely to respond to a 10 per cent increase in the price of the Sky Movies element of the various movies packages (which was equivalent to an increase in the overall price of a Sky Movies bundle of approximately 2 to 6 per cent). Ofcom focused on the responses of those who took both Sports and Movies. Of these customers: 18 per cent said that they would drop the movies element of the bundle; 7 per cent would switch to a basic TV package (ie drop Sports and Movies); 3 per cent would switch to FTA TV; 4 per cent would drop Sports but keep Movies and basic; and 1 per cent would switch to PPV movies.

3. According to Ofcom, this suggested that it would not be profitable for a hypothetical monopolist retailer of Sky Movies packages to raise prices. However, Ofcom concluded that these results should be treated with caution because prices might have already been raised above competitive levels (ie the cellophane fallacy) and because of the risk of stated preference bias (ie that actual switching levels were overestimated). Nevertheless, Ofcom noted that this evidence suggested that premium movies customers might be more price-sensitive than premium sports customers.

4. The survey also asked customers to which film products they would be likely to substitute if they dropped Sky Movies from their package. The results were: 28 per cent would watch more films on FTA TV; 18 per cent would watch more films at the cinema; 17 per cent would rent more DVDs; and 9 per cent would consume more PPV movies.

5. In May to July 2008, Ofcom conducted a willingness to pay survey.[2] The aim of this survey was to measure the elasticity of demand of nine different channel packages[3] in such a way as to remove any stated preference bias. (As discussed in paragraph 3, earlier stated preference survey work had suggested that a price increase for Sky Movies was unprofitable from current levels, but Ofcom suspected that this might have been in part due to the survey overestimating switching rates.) Ofcom was unable to estimate an elasticity for those consumers who took a Sky Movies mix due to the low sample size but estimated that the elasticity of demand, at current prices, for

---

[1] Annex 13 to Ofcom First Pay TV Consultation.
[2] Annex 10 to Ofcom Second Pay TV consultation.
[3] The packages (tested across two phases of research) were: (1) Sky Sports A showing a variety of sports including two-thirds of all live FAPL games; (2) Sky Sports B showing live coverage of all football competitions other than FAPL, plus a range of other sports; (3) Sky Sports combination comprising Sky Sports A and B; (4) Sky Movies combination including ten different Sky Movies channels; (5) Sky Movies channel, a single channel showing a range of films; (6) a bundle of basic channels; (7) Sky Sports combination with basic, including a hypothetical package of 120 channels, a variety of sports and two-thirds of all live FAPL games; (8) Sky Movies combination with basic, including a hypothetical package of 120 channels plus ten different Sky Movies channels; and (9) Sky Sports and Movies combination with basic, including the standard package of 120 channels, ten different Sky Movies channels, a variety of sports and two-thirds of all live FAPL games.

those who took a Sky Sports and Movies mix was –1.1 (ie 11 per cent of subscribers would stop purchasing the package in response to a 10 per cent price increase). Based on this evidence, Ofcom at first concluded that Sky, as a wholesaler of premium movie channels, could profitably increase its prices from current levels (Ofcom considered that the reason it did not do so could have been related to wholesale prices being set with reference to retail prices). Sky also provided some elasticity estimates from a conjoint study it had undertaken, which Ofcom used to demonstrate that a wholesale price increase would also be profitable under these assumptions. Ofcom noted that if prices were above competitive levels, it would expect switching to be higher than at competitive levels (ie that a price increase from competitive levels would be even more profitable).

6. We understood that Ofcom, in its analysis, placed no weight on the elasticities of demand derived from its own study (because of small sample sizes and stated preference bias).

Sky research

7. Sky provided us with data from two consumer research exercises carried out in late summer 2009:

   (a) One sought to evaluate options for changing the Sky Movies offer and considered how changes would influence customer churn (*Sky Movies pricing and packaging research*).

   (b) The second was commissioned by Sky to report on the use of consumer research to carry out a hypothetical monopolist test; to consider in this context the likely impact of research bias (and identify best practice mitigating techniques); and, using best practice primary research, to quantify consumer reaction to a SSNIP for various products in the UK TV market (*Research bias and the hypothetical monopolist test: a report from Human Capital*).[4]

8. The *Sky Movies pricing and packaging* research suggested, among other things, that [✂].

9. This research also indicated that [✂].

10. This research also yielded some results on price sensitivity as consumers were asked about their purchase intentions under five price scenarios. Our analysis of the results suggested that a £[✂] increase in the price of Sky Movies packages was associated with a decline from [✂] to [✂] in the percentage of Sky customers subscribing to Sky Movies. This represented a decline of about [✂] per cent in volume in response to an increase in total package price of [✂] to [✂] per cent (the precise percentage depended on the specific scenario under consideration). However, Sky said that it was necessary to adopt a cautious approach to the interpretation of price 'elasticities' reported in research undertaken for business purposes. In Sky's view, the nature of the research undertaken, while suitable for the commercial purposes for which it was intended, typically made such elasticities unreliable as measures relevant for competition analysis. We noted that there were some counterintuitive results among individual groups of consumers (implying that a price increase was associated with an increase in volume) and that this might be a further reason for caution.

[4] Human Capital is a strategy/research/development consultancy. The market research was carried out by KAE. The report is available at http://stakeholders.ofcom.org.uk/binaries/consultations/third_paytv/responses/Annex_5.pdf.

11. The Human Capital report for Sky included the results of an Internet survey (with 6,000 respondents) which asked Sky Sports and Sky Movies subscribers what they would do if the total price of their pay-TV package was increased by 5 and 10 per cent. The survey covered both Sky and Virgin Media subscribers.[5] The results (for respondents who were 'definitely sure' of their responses) are shown in Table 1.

TABLE 1 **Response of pay-TV subscribers to 5 and 10 per cent increase in price of Sky Sports and Sky Movies packages**

		Response				*per cent*
Price change %	*Focal product*	*Continue current subscription at higher price*	*Cancel pay TV or move to a new provider*	*Retain existing subscription but make changes within 'focal product'*	*Upgrade to Top Tier*	*Downgrade and cease subscription to 'focal product'*
5	Dual Sports	82.2	8.6	3.4	0.4	5.5
	Dual Movies	74.0	8.4	3.4	0.0	14.2
	Top Tier	78.1	8.6	2.5	N/A	10.8
	Dual Sports & Top Tier	77.7	8.8	6.7	N/A	6.7
	Dual Movies & Top Tier	76.4	8.7	4.2	N/A	10.6
10	Dual Sports	55.0	22.4	4.7	1.3	16.6
	Dual Movies	40.1	23.7	6.7	0.0	29.5
	Top Tier	54.5	19.4	5.6	N/A	20.5
	Dual Sports & Top Tier	54.1	20.6	12.0	N/A	13.4
	Dual Movies & Top Tier	50.9	20.7	8.7	N/A	19.7

Source: Research bias and the hypothetical monopolist test: a report from Human Capital.

12. The Human Capital report stated that, for all the SSNIPs tested, it found widespread and significant switching behaviour. In its 2010 Pay TV Statement, Ofcom accepted that the results of this survey suggested that, at current prices, further price rises may be unprofitable (Ofcom noted that this depended also on precisely how critical loss factors were calculated). However, Ofcom said that there were a number of limitations to the analysis. Ofcom said that:

(a) It would expect true consumer preferences to be such that further price rises would always be unprofitable. This was because Sky was the only supplier of Sky Sports and Sky Movies and, in such circumstances, Sky would be expected to set prices such that a further price rise would be unprofitable. Ofcom considered that, in these circumstances, consumer research was unlikely to be informative as to the market boundaries.

(b) Current retail prices were above the competitive level, which increased consumers' sensitivity to further price rises (due to the cellophane fallacy).

(c) Notwithstanding the efforts in the Human Capital report to address stated preference bias, it remained concerned that stated preference bias was a fundamental problem with surveys of this type. While Sky had cited a number of cases where competition authorities had relied on such surveys and Ofcom itself placed some weight on a 2007 Sky survey in its Third Pay TV Consultation, Ofcom believed that there was still significant uncertainty about the reliability of

[5] Our understanding was that the price increase was applied only to respondents' current package and not to any packages offered by other pay-TV retailers even if they included Sky Sports and Movies products.

these survey results. Ofcom said that this was in addition to its primary concern about the cellophane fallacy.

13. Overall, Ofcom found this type of evidence to be inconclusive in this case.

Analysis for hypothetical retail monopolist over Sky Movies

1. In this appendix, we set out our assessment of the implications of seeking hypothetically to separate retailing of Sky Movies from other aspects of traditional pay-TV retailing and focusing only on stand-alone retailing of Sky Movies packs. We undertook this assessment because we considered it was only under this assumption that we could meaningfully consider the hypothetical monopolist test for Sky Movies without also considering other aspects of the broad pay-TV retail market (see paragraphs 4.51 and 4.52).

2. In our August 2011 provisional findings, we considered a hypothetical situation where there were one or more pay-TV platforms retailing pay-TV access and pay-TV content other than Sky Movies and a stand-alone provider of Sky Movies packs retailing to subscribers of these pay-TV platforms. We noted that such a stand-alone Sky Movies broadcaster/retailer would have to negotiate access terms with the pay-TV platforms (with their installed bases of existing subscribers), and its negotiating position would be weak as the pay-TV platforms would (at least over time) be able to compete with the stand-alone Sky Movies retailer by bidding for FSPTW rights directly from the studios.[1] We noted in addition that it would not be in the interests of a pay-TV platform for the retail price of Sky Movies to exceed the competitive level (because higher content prices make a platform less attractive to consumers). In the light of these points, we considered that the existing pay-TV platforms in this scenario would be likely to prevent the stand-alone Sky Movies retailer from imposing a SSNIP. On the basis of this reasoning, we took the view that a hypothetical stand-alone Sky Movies retailer would not be able profitably to impose a SSNIP, which would suggest that an appropriate market definition should be broader than Sky Movies packs.

3. In its comments on our August 2011 provisional findings, BT pointed out that stand-alone retailers could access Sky's platform. BT said that the hypothetical monopolist retailer of Sky Movies would be able to gain access to the largest existing pay-TV platform (Sky) on regulated terms via conditional access. BT added that the retailer would have no relationship with Sky other than for the payment of its (regulated) access fees and thus the retail price set by the hypothetical monopoly retailer would be entirely independent of the views of Sky or other retailers on Sky's platform. BT said that it was reasonable to expect that (given the retailer is assumed to be a monopoly) it would then set prices at a level that would maximize its profits, ie above the competitive level. BT said that, consequently, the existing pay-TV platforms/ retailers would have no ability to prevent this hypothetical retail monopolist over Sky Movies from imposing a SSNIP over its product. However, we considered that it was difficult to draw meaningful inferences from the possibility of retailing via regulated access as there had been very little actual regulated access to Sky's platform (see Appendix 5.2).[2] In any case, it appeared to us that, even with regulated access, a stand-alone Sky Movies retailer would still face competition from traditional pay-TV

[1] It is much more common for channel providers to wholesale their channels to pay-TV platforms than to retail on those platforms (the main exception in recent years being Setanta—see Appendix 5.2). Therefore, it was more plausible that a hypothetical stand-alone monopolist of Sky Movies would wholesale its content to pay-TV platforms than act as a retailer.

[2] In its response to our revised provisional findings, BT said that a critical reason why there had been relatively little independent pay-TV retailing on Sky's platform to date was due to the fact that competing retailers had not had access to key content which would make such independent retailing viable—in BT's view, this would no longer be the case in the hypothetical situation we had envisaged. However, we did not see evidence that content was the critical reason why there had been relatively little independent pay-TV retailing on Sky's platform to date. Indeed, it seemed to us that if content was all, or nearly all, that mattered in pay-TV retailing, there would be no need for Sky to have its own pay-TV platform: it could just retail its content over the pay-TV platforms of others.

retailers (ie the pay-TV platforms), with their incumbent subscriber bases, for the rights directly from the studios when they came up for renewal. We recognized that a stand-alone retailer of Sky Movies with medium- or long-term studio contracts would, over the term of those contracts, face no constraint from the possibility of others acquiring rights directly and may consequently have an apparent ability to price above the competitive level during the term of the contracts. However, we expected that pay-TV platforms would have negotiated similar medium- or long-term contracts with the stand-alone Sky Movies retailer at the time when competitive bidding was taking place and thus we did not believe that this factor would enable a hypothetical stand-alone retailer of Sky Movies profitably to impose a SSNIP.[3]

4. In its comments on our revised provisional findings, BT said that we had not given due regard to the fact that Sky's incentives as a platform provider to carry the output from the hypothetical retail monopolist would change. Under such circumstances, BT's view was that Sky may have a strong incentive to ensure that content was carried on its platform in the event that it believed it would make its platform more attractive than rival pay-TV retailers' platforms, or conversely under the scenario that the hypothetical retail monopolist of Sky Movies retailed on all other platforms, Sky may wish to ensure that this content was retailed on its platform so as not to be at a competitive disadvantage. However, we observed that it was equally the case that a hypothetical stand-alone Sky Movies retailer would have a strong incentive to ensure that its content was carried on the platforms of traditional pay-TV retailers. Hence, the point that traditional pay-TV retailers might also have an incentive to carry Sky Movies content did not in itself imply that a hypothetical stand-alone Sky Movies retailer would be able to impose a SSNIP.

5. At the time of our August 2011 provisional findings, we only considered the retail supply by the hypothetical monopolist retailer of Sky Movies packs over traditional pay-TV platforms. We did not consider supply by such a retailer OTT, using the open Internet. Given our finding that the barriers to acquiring subscribers for an OTT pay-TV retailer were likely to be lower than for a traditional pay-TV retailer (see Section 7), in the event that a stand-alone retailer of Sky Movies were to distribute its product OTT, it might be able to attract more subscribers and so strengthen its position when bidding for rights in the next round. Furthermore, due to the ability of consumers to access Sky Movies outside of a traditional pay-TV bundled service, Sky Movies might become less significant to traditional pay-TV retailers and they might be less concerned about bidding for rights and establishing their own service in response to a SSNIP by the hypothetical monopolist stand-alone retailer. We reflected on whether these considerations, prompted by the market developments since our August 2011 provisional findings, indicated that a hypothetical monopolist retailer of Sky Movies packs would now be able profitably to impose a SSNIP. In this context, we took the following points into account. First, we reasoned that any power of a hypothetical monopolist retailer of Sky Movies was likely to derive from it having most FSPTW content given the importance of FSPTW content to the appeal of Sky Movies (see Appendix 6.2).[4] However, our assessment of the importance to consumers of FSPTW content changed following our August 2011 provisional findings (see Section 6). In particular, we noted that other attributes of a pay-TV movies service appeared to be important to more consumers than the recency of the movies offered. Secondly, we noted that it was likely that, due to switching barriers and consumer inertia (see

[3] We noted that the stand-alone retailer's ability to win FSPTW rights might be strengthened if there were a number of pay-TV platforms with similar numbers of subscribers, which might face coordination difficulties and/or transaction costs in supplying content to each other's subscribers. However, this point was not of much relevance to the UK where one pay-TV platform (Sky) has the majority of subscribers and another platform (Virgin Media) has nearly all the remaining subscribers (see Section 5).
[4] A hypothetical monopoly retailer of Sky Movies would have most FSPTW content because Sky Movies has, exclusively, the FSPTW content of the six major studios.

paragraph 5.45), the traditional pay-TV platforms would remain the principal form of distribution for Sky Movies, at least for the foreseeable future. This expectation was supported by [✄]. For these reasons, despite the advent of OTT services, we were not persuaded that we should change our view that a hypothetical stand-alone retailer of Sky Movies packs would not be able profitably to impose a SSNIP.[5]

6. In its comments on our August 2011 provisional findings, BT disagreed more generally with our analysis of whether a stand-alone Sky Movies retailer would be able profitably to impose a SSNIP, highlighting that, in its view, we had mis-specified our assessment and rationale for dismissing the existence of a narrow product market. In BT's view, by definition, a hypothetical monopolist retailer of Sky Movies would be the only retailer with an existing installed subscriber base for a movie product with FSPTW movies content when it came to bidding for the rights next time round, and so would be in a position to outbid all other platform operators or retailers. BT said that the stand-alone retailer of Sky Movies: *(a)* would have greater certainty around the take-up of its movie services; and *(b)* would not face the same delays in building a subscriber base as a rival. BT said that, in this respect, the hypothetical monopolist retailer of Sky Movies would be in a systematically stronger position than any other potential bidders to bid for FSPTW movie rights. BT added that, in the event that we had correctly specified the issues around a hypothetical monopolist channel provider versus a hypothetical monopolist retailer of Sky Movies movie content, and correctly considered the likely constraints faced, it would have been apparent that a hypothetical monopolist retailer over Sky Movies would be able profitably to impose a SSNIP, indicating that a narrow market definition of Sky Movies (packs) was appropriate.

7. We were not persuaded by BT's view as we considered that traditional pay-TV retailers (ie the pay-TV platforms which were also existing retailers of other pay-TV content), with their incumbent subscriber bases, would be in a position to bid against the stand-alone Sky Movies retailer for FSPTW rights. Consequently, for the reasons set out in paragraph 3 above, we did not believe that a hypothetical stand-alone retailer of Sky Movies would be able profitably to impose a SSNIP.

8. In its response to our revised provisional findings, BT said that we had failed to grasp that a hypothetical monopolist retailer of Sky Movies would be the only retailer with any Sky Movies subscribers, regardless of the fact that it may be distributed over different platforms. In BT's view, while other pay-TV retailers may have subscribers, they would not have any Sky Movies subscribers, ie they would not have any subscribers willing to pay the associated premium to subscribe to a movies service containing FSPTW movie rights.[6] However, in our view this was not correct. Under the assumptions we set out, traditional pay-TV retailers (ie the pay-TV platforms which were also existing retailers of other pay-TV content) would have an existing customer relationship with the Sky Movies subscribers as they would already be retailing basic pay-TV content (and also in many cases Sky Sports) to those customers.

9. BT also said that our assessment of the impact of OTT retailing on the price that a hypothetical stand-alone monopolist could charge (see paragraph 5) was inconsistent with our analysis of the barriers to LOVEFiLM and Netflix acquiring FSPTW rights (see Section 7). Our analysis in Section 7 reflected the fact that the prospect of gain-

[5] We recognized that there could be circumstances where there was a narrow retail market for content (eg if a hypothetical monopolist supplier of content had a sustainable advantage over all other potential bidders for that content and its substitutes). However, we did not believe that this was currently the case with regard to movies as Sky's advantages when bidding for movie content were derived from its incumbency position as a pay-TV platform with a large base of relevant customers as well as from being the retailer of Sky Movies.

[6] BT added that it was unreasonable to believe that it was a straightforward exercise to migrate non-premium movie subscribers (who had to date shown no interest in subscribing to a premium movies service) to paying a substantial premium for a movie service in order to cover the associated rights cost.

ing additional subscribers as a result of offering the FSPTW rights of a major studio might enable an OTT pay-TV retailer to have a realistic prospect of outbidding Sky for those rights. Some of these additional subscribers would be likely to be from among Sky Movies subscribers, but some might be those who would not otherwise subscribe either to Sky Movies or an OTT service, and others might be gained from competing OTT services. Thus, our analysis in Section 7 envisaged that some previous or continuing Sky Movies subscribers would be attracted to the OTT retailer's service if it had FSPTW rights, but it did not envisage that all of them would be. In particular, we noted that some switching barriers and inertia effects continued to operate for a traditional pay-TV subscriber taking up an OTT service as an additional service, even though such barriers/effects were lower than for switching to a different traditional pay-TV retailer. Therefore, we did not see any inconsistency between our analysis in Section 7 and our view in paragraph 5 above that, due to factors such as switching barriers and consumer inertia, the advent of OTT retailing did not as yet in itself imply the removal of the constraint that traditional pay-TV retailers imposed on a hypothetical stand-alone Sky Movies monopolist.

10. In its response to our revised provisional findings, BT also suggested that there was an inconsistency between our reasoning that traditional pay-TV platforms would remain the principal form of distribution for Sky Movies, at least for the foreseeable future (see paragraph 5 above) and our view regarding Sky's launch of Sky Movies on Now TV that it was a relevant development affecting our assessment of the significance of FSPTW content to consumers' choice of pay-TV retailer (see Section 6). BT said that it was unreasonable for us to attach such weight to this development if we believed that traditional pay-TV platforms would remain the principal form of distribution for Sky Movies, at least for the foreseeable future. However, as we noted in Section 6, we found that not all consumers would regard Sky Movies on Now TV as an effective substitute for Sky Movies on traditional pay TV, although some would. We did not believe that there was any inconsistency between traditional pay-TV platforms remaining the principal form of distribution for Sky Movies, at least for the foreseeable future, and some (but not all) consumers regarding Sky Movies on Now TV as an effective substitute for Sky Movies on traditional pay TV. We also noted that Sky's forecasts for Sky Movies on Now TV envisaged [✂], compared with about [✂] currently on traditional pay-TV platforms (see paragraph 5.157).

11. A further point made by BT in its response to our revised provisional findings was that it was inappropriate for us to support our market definition with points concerning the importance of FSPTW content to consumers' choice of movie service (see paragraph 5 above). BT said that this conflated two distinct parts of our assessment of our theory of harm: *(a)* defining the relevant market; and *(b)* establishing the importance of FSPTW movies content/Sky Movies within that relevant market. In BT's view, this latter step was only relevant in the event that we concluded that a narrow retail market for FSPTW movie services/Sky Movies did not exist (ie in order to assess the relative importance of Sky Movies within a broad retail pay-TV market) and could not be used to prove that a narrow market did not exist. We disagreed. We note in our guidelines that, in practice, the analysis of market definition and the assessment of competition overlap significantly and they should not be viewed as two distinct chronological stages.[7] In this inquiry, the importance of FSPTW content was relevant to both market definition and the assessment of competitive effects within the market. In particular, the importance of FSPTW content to consumers' choice of movie service was highly relevant to whether there was a narrow market definition since Sky's having FSPTW rights from the major studios was the principal reason for considering whether it might be appropriate to define a market limited to Sky Movies. Indeed, the

[7] CC3, paragraph 1.22.

centrality of FSPTW content to market definition was apparent from BT's own statement in its response to our revised provisional findings that 'there is a separate, narrow, genre-based retail market ... for the retailing of channels/packages containing FSPTW movies from the six major studios'.

12. Virgin Media said in its responses to our August 2011 provisional findings that our analysis of a narrow retail market was wrong because it was in effect an analysis of demand-side substitution at the wholesale level. Virgin Media said that, by definition, a hypothetical stand-alone retailer of Sky Movies could not be constrained by other retailers as, by assumption, it would not have substitutable content. BT made a broadly similar point in its response to our August 2011 provisional findings.[8] However, in our view, a hypothetical stand-alone retailer of Sky Movies would be constrained by pay-TV platforms which had access to pay-TV subscribers, which would be in a position to bid successfully for relevant content.[9] Furthermore, while pay-TV platforms would not have perfectly substitutable content, they would still have access to other content such as FSPTW movies from non-major studios, SSPTW movies, TSPTW movies and library movies, and we found that other attributes of a pay-TV movies service were important to more consumers than the recency of the movies offered. In our view, the key fact in determining the appropriate retail market definition was that pay-TV competition was for subscribers and was across many pay-TV products. However, we acknowledged that the position of a hypothetical stand-alone retailer of Sky Movies using the pay-TV platforms of other pay-TV retailers to reach customers was similar to that of a hypothetical stand-alone wholesaler of Sky Movies to other pay-TV retailers/platforms. Indeed, we recognized that it was much more common for channel providers to wholesale their channels to pay-TV retailers/platforms than to retail on those platforms and, for this reason, it was more plausible that a hypothetical stand-alone monopolist over Sky Movies would wholesale rather than seek to retail its service.

13. In its response to our revised provisional findings, Virgin Media said that, in assuming that a stand-alone retail monopolist would not have Sky's other attributes (ie its pay-TV platform and large numbers of subscribers to basic pay-TV channels and Sky Sports), we had set up an entirely artificial test to assess whether the control of Sky Movies on its own and without any bundling advantages and incumbency advantages gave rise to market power. On this point, we noted that, in our revised provisional findings, we had stated that the idea of a hypothetical retail monopolist over just one specific type of pay-TV content was rather artificial since content was almost always bundled together, and traditional pay-TV retailers also provided the pay-TV platform.[10] However, we believed that, although artificial, this approach remained appropriate for assessing whether Sky Movies on its own (ie Sky Movies packs) was a separate retail market. Further, if, as Virgin Media's comments implied, bundling and incumbency advantages were important, this in turn implied a need to assess retail competition within a wider frame of reference than just Sky Movies.[11]

14. We remained of the view (see paragraph 4.52*(b)*) that the idea of a hypothetical retail monopolist over just one specific type of pay-TV content was rather artificial since content was almost always bundled together, and there was very little self-retailing by

[8] BT said that we had mis-specified our assessment and rationale for dismissing the existence of a narrow product market in this case. In particular, BT highlighted that we had *(a)* conflated the issues of a hypothetical monopolist channel provider and a hypothetical stand-alone retailer of Sky Movies; *(b)* not correctly considered the position of a non-vertically-integrated platform operator and a hypothetical stand-alone monopoly retailer of Sky Movies; and *(c)* as a result, not correctly considered the likely (lack of) constraints that a hypothetical stand-alone monopolist retailer of Sky Movies would face.
[9] We discuss BT's more detailed points in paragraphs 3 & 6.
[10] Revised provisional findings, paragraph 4.43. The same statement was in our January 2011 working paper on market definition and our August 2011 provisional findings.
[11] We understood Virgin Media's view to be that the relevant retail market was Sky Movies packages. We discuss this in paragraphs 4.56 & 4.57.

broadcasters/content aggregators on traditional pay-TV platforms. The resulting lack of data (both on the hypothetical stand-alone monopoly price and on the competitive stand-alone price) inevitably made assessment difficult. Nevertheless, as set out above, we believed that the evidence showed that it was unlikely that a hypothetical stand-alone retail monopolist of Sky Movies would be able profitably to impose a SSNIP over the competitive price.

Review of the Seabright report[1]

Introduction

1. Sky provided us with a study which it had commissioned from Professor Paul Seabright to do the following:

> We would like you to conduct an econometric study to measure the extent to which variations in the geographical availability of television services broadcast via the Digital Terrestrial Television ("DTT") platform affect households' willingness to subscribe to Sky, as compared with how variations in the geographical availability of cable television affect households' willingness to subscribe to Sky. Your study should consider separately subscriptions to Sky for (i) basic television only; (ii) any premium package; (iii) premium sports only; (iv) premium movies only; and (v) premium sports plus movies. For the avoidance of doubt, at this stage, we do not require you to express any conclusions on the definition of any relevant market which could be drawn from the results of your study.

The letter of instruction also referred to similar evidence submitted to the CC in the context of the investigation of Sky's acquisition of a stake in ITV but requested that Professor Seabright conduct his study independently of this previous study using any further variables or data necessary.[2]

2. The data to carry out the study was provided by Sky to Professor Seabright. Annex A describes the data used.[3]

3. The study is described in Professor Seabright's report (see footnote 1). Professor Seabright's econometric comparison across postcode districts suggested that both access to DTT and access to cable had a statistically significant effect on the percentage of households subscribing to Sky's basic and premium packages. We summarize Professor Seabright's results under the headings 'ordinary least squares (OLS) regression' and 'instrumental variable (IV) regression' in Table 1.[4] The figures showed the estimated effect of access to DTT and cable on Sky subscriptions—for example, the top left figure suggested that, on an 'other things equal basis', an average of [✂] per cent fewer households subscribed to Sky's basic packages in postcode districts with access to DTT than in districts without such access. The report used data on *access* to DTT and cable, not use or awareness of access.

---

[1] Professor Seabright carried out his work with the assistance of two other professors at the Toulouse School of Economics. References to Professor Seabright and the Seabright report should be regarded as encompassing also the work of one or both of his colleagues. The summary report of the findings is at:
http://stakeholders.ofcom.org.uk/binaries/consultations/second_paytv/responses/7_Sky_Annex_5_Part_1.pdf.
The technical report is at:
http://stakeholders.ofcom.org.uk/binaries/consultations/second_paytv/responses/8_Sky_Annex_5_Part_2.pdf.
[2] Paragraph 4.77 of the CC report reads as follows: 'In 2006/07, BSkyB carried out an econometric study to assess the specific effect of the availability of DTT on the demand for pay-TV services. [✂]'
[3] We noted that the subscriber data related to February 2007 and February 2008 but Freeview and cable availability related to December 2005. Sky told us that no material change in DTT coverage occurred between 2002 and the end of 2008.
[4] As explained in the Seabright report, the instrumental variable (IV) results sought to adjust for any bias in OLS estimates due to endogeneity of access to DTT by using distance to transmitter as an instrumental variable.

TABLE 1 **Estimated effect of access to DTT and cable on Sky subscriptions, February 2008**

per cent of households

	Access to DTT				*Access to cable*			
Dependent variable	*Seabright OLS*	*Seabright IV*	*Chesher OLS**	*CC OLS†*	*Seabright OLS*	*Seabright IV*	*Chesher OLS**	*CC OLS†*
Basic packages	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Premium packages:								
—Sports-only	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
—Movies-only	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
—Sports & movies	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
—All premium	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
All packages‡	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: Seabright report, comments by Andrew Chesher and CC calculations. The regressions included control variables not shown in this table. All effects (except DTT for sports and movies packages) were statistically significant.

See paragraph 4(b)*. Effects from Chesher's OLS regression including as explanatory variables both DTT availability (DTT) and the product of DTT availability and distance to DTT transmitter (DTT*DTRANS); additionally figures in square brackets reflected the inclusion of district indicators as well. We calculated the estimated effect as the sum of the DTT coefficient and the DTT*DTRANS coefficient multiplied by approximate average value of DTT*DTRANS. A comparable figure for cable was not available to us.
†Effects from the CC's OLS regression including as explanatory variables the DTT availability (DTT), the product of DTT availability and distance to DTT transmitter (DTT*DTRANS), and the product of DTT availability and the altitude (DTT*ALT)—see Annex B. We calculated the estimated effect as the sum of DTT coefficient, the DTT*DTRANS coefficient multiplied by weighted average value of DTRANS, and the DTT*ALT coefficient multiplied by the weighted average value of ALT.
‡CC calculations (see Annex B; for Seabright IV and Chesher OLS we calculated total effect as sum of coefficients for basic and all premium packages).

Professor Chesher's comments

4. Ofcom asked Professor Andrew Chesher to comment on the Seabright report.[5] We have not summarized all Professor Chesher's comments here, but noted the following:

   (a) Professor Chesher pointed out that the availability of cable may be endogenous because cable infrastructure may have been installed more comprehensively in areas where demand for pay-TV services was predicted to be high. Professor Chesher said that, if access to cable was endogenous, then all the estimates reported in the Seabright study would be potentially biased. Though it was not possible to determine the direction of bias, Professor Chesher suggested that some care was needed in comparing the sizes of the estimated coefficients on access to DTT and cable. Neither Professor Seabright nor Professor Chesher was able to find a suitable instrument to get around the problem, so the issue of cable endogeneity in the analysis remained. However, we concluded that any bias from cable endogeneity was unlikely to be very serious for the following reasons. First, although access to cable was likely to have been determined by economic factors including taste for pay TV, it seemed to us that variations in taste for pay TV were likely to be much less important than cost issues in determining access to cable. Second, Professor Seabright's regression included variables to control for TV demand, suggesting that any remaining unobserved variation in taste would be very small. Third, we considered whether there were any factors determining both demand for satellite and supply of cable, which could be a source of omitted variable bias but found that the most obvious such factor was population density which was included in the regression. We also noted that any further such factors would be picked up in Professor Chesher's specification with postal area dummies added (see subparagraph *(c)* below), and Professor Chesher's note suggested that, when the dummies were added, the

[5] See http://stakeholders.ofcom.org.uk/binaries/consultations/third_paytv/annexes/annex7.pdf.

OLS estimates barely changed, which suggested that any effect was likely to be small.

(b) In the context of the IV estimates, Professor Chesher pointed out that the distance to the nearest transmitter might have a direct effect on Sky subscriptions, as DTT signal quality was better the smaller the distance to the transmitter. To allow for this, Professor Chesher recalculated the OLS equations adding an additional explanatory variable: access to DTT times distance to transmitter. This seemed to us to be a sensible step because Professor Seabright's equations already included explanatory variables related to signal quality (altitude and distance to Continental Europe (see paragraph 7*(a)*(i) below)). Table 1 also presents this aspect of Professor Chesher's results to the extent they were available to us (these results only cover access to DTT and not access to cable). Professor Chesher found that the additional explanatory variable was statistically significant, suggesting that it had a direct effect on subscriptions to Sky and consequently was not a valid instrumental variable.

(c) Professor Chesher also considered alternative specifications of the equations which grouped postcode districts together (to control for local effects) and used unweighted data rather than data weighted by number of delivery points per postcode district. Overall, Professor Chesher found that the estimated coefficients for Sky's basic subscriptions packages were generally robust but that this was less true for Sky's premium subscriptions packages. Professor Chesher stated that plausible model reformulations led to estimates of the effect of access to DTT on the demand for Sky's premium services of the order of one-half of the value headlined in Professor Seabright's study.

5. Professor Seabright criticized Ofcom's interpretation of Professor Chesher's comments in its third pay-TV consultation where Ofcom said that Professor Chesher had raised 'concerns' about the study's methodology (Ofcom did not repeat its 'concerns' in its pay-TV statement).[6]

6. However, as regards Professor Chesher's comments themselves, Professor Seabright stated that they constituted a thoroughly professional document with the main points of which he had no disagreement. His response to Ofcom concluded:

> [Professor Chesher] did not dispute the strong and robust effect of DTT availability on demand for Sky's basic packages, and the questions it raised about premium packages did not lead Professor Chesher to conclude that there was no significant effect of DTT availability on demand for them. [Professor Chesher] has suggested that this effect on demand may be smaller than we have estimated. We and he accept that we are in a zone of legitimate scientific uncertainty. However, [Professor Chesher] has not suggested that the effect of DTT availability is small enough to ignore completely, still less that our own estimates are unreasonable or the result of a less than rigorous methodology.

CC comments and further analysis

7. Our own analysis led us to make the following additional points:

(a) As is normal practice, Professor Seabright included in his equations other variables, known as 'control' variables, to reflect the fact that factors other than

[6] http://stakeholders.ofcom.org.uk/binaries/consultations/third_paytv/responses/Annex_3.pdf.

access to DTT and cable might affect Sky subscriptions. Twelve of these variables were to do with household characteristics (average income and age of occupants in the district) and one was the percentage of district population living in multi-dwelling units, and it seemed uncontroversial that these would affect the percentage of households in the district subscribing to Sky.[7] We were less clear about why the other five control variables (mentioned in italics in points (i) and (ii) below) were expected to affect directly the percentage of the district households subscribing to Sky. Moreover, it seemed to us that they might affect access to both DTT and cable and that this might have implications for the analysis:

(i) It seemed to us that *distance to Continental Europe* and *altitude* may proxy for DTT signal strength. If so, presumably they were only relevant for households with access to DTT and should enter multiplicatively with access to DTT (and any effect would then need to be taken into account in assessing the effect of access to DTT).

(ii) It seemed to us that *population density*, and possibly *latitude* and *longitude*, might be factors associated with access to cable. Because of the heavy costs of building a cable network, we would expect cable to be available disproportionately in districts with high population density, for example in the South-East of England. If so, the inclusion of these variables might be reducing the estimated effect of cable. However, the counterargument was that these variables directly affected Sky subscriptions because there were more alternatives to watching TV in higher population density areas.

(b) Professor Seabright stated that his preferred specification was the IV regression that used distance to the nearest transmitter as an instrument for access to DTT. IV regression was necessary if access to DTT was endogenous, ie if unobserved differences in the demand for Sky were correlated with factors that also affected access to DTT. We were unclear why *access* to DTT should be endogenous since it would seem to depend only on technological/geographical factors. We accepted that *use* of DTT might be endogenous (because consumers who liked to watch a lot of TV would be more likely both to subscribe to Sky and to watch additional channels on DTT), but we did not see why *access* to DTT should be regarded as endogenous, nor did we see that the data on access had been affected by usage. Our understanding was that access to DTT was based on interrogating postcode checkers for availability of Channel 5 (see Annex A) and hence had not been affected by the quality of household reception equipment. We also saw no evidence of any kind that the location of DTT transmitters was affected by factors correlated with demand for Sky that would imply there was an endogeneity problem with access to DTT.

8. In the light of the above, it seemed to us that access to DTT could be treated as exogenous and that consequently there was not a need to use an instrument for access to DTT (paragraph 7*(b)*); furthermore, it appeared to us that there were problems with the instrument used by Professor Seabright as it might have had a direct role in determining demand for Sky subscriptions (see paragraph 4*(b)*). We therefore preferred the OLS results to the IV results which used an instrument for access to DTT but not for access to cable.

[7] Presumably the percentage of households (rather than population) in multi-dwelling units would be a better measure, given that we were seeking to explain the percentage of households subscribing to Sky. Another possibly relevant factor (which was not included) was the percentage of households in a conservation area. Like the proportion of multi-dwelling units, this might affect households' ability to attach a satellite dish to their dwelling.

9. Reflecting this point, and the point in paragraph 7*(a)*(i), we calculated regressions with additional explanatory variables of access to DTT interacting with distance to transmitter (as in Professor Chesher's equation), altitude and distance to Europe. The results showed that the interaction of access to DTT with distance to transmitter and altitude had significant negative effects, supporting the hypothesis that distance to transmitter and altitude might be a proxy for DTT signal strength. But the interaction term between distance to Europe and DTT coverage was not significant, so the hypothesis that distance to Europe was a proxy for signal strength was not supported. We included in Table 1 the estimated effects from a specification including access to DTT interacting with distance to transmitter (as in Professor Chesher's equation) and altitude. This is shown in Table 1 under the column 'CC OLS'.

Interpretation of results

10. Professor Seabright concluded that Freeview was an important competitive constraint on Sky, and that it was more important than cable as a constraint on Sky's basic packages and as important as cable as a constraint on Sky's premium packages.[8] Sky said that the Seabright Report showed that Freeview had caused a significant impact on demand for pay-TV subscriptions, which confirmed why Sky had acted as it had. Sky said that it had had to work extremely hard to mitigate these effects. We discuss other evidence on constraints on Sky in Section 4. We note that the success of Freeview up to mid-2004 led Sky to change its packaging of, and marketing approach for, basic channels in 2004/05.

11. The results of the econometrics (see Table 1) show the effect of a change in the percentage of households with access to DTT and cable on Sky's average penetration (the percentage of households subscribing to the relevant Sky packages). To put this in context, Table 2 shows Sky's existing average penetration and what the econometrics suggest it would be if hypothetically no households had DTT/cable and also if all households had DTT/cable. We computed Table 2 on the basis of our preferred results (CC OLS in Table 1). On this basis, the results suggested that access to both DTT and cable had material effects on Sky penetration, and that the two were of similar overall importance.[9] Hence, we accepted that the results appeared to be of economic as well as statistical significance.[10]

[8] Paragraph 15 of the summary report.
[9] DTT was of more importance for basic packages, and cable for premium packages.
[10] Table 2 represents our own calculations: Professor Seabright carried out more complex calculations (which are not shown here) of the impact of access to DTT on willingness to pay for Sky, which assumed that Sky's own price elasticity of demand was –1.5 or –2.5.

TABLE 2 **Impact of estimated effects of access to DTT and cable on Sky subscriptions**

per cent of households

		*DTT effects**		*Cable effects**	
	Existing average	*If no DTT*	*If full DTT*	*If no cable*	*If full cable*
Basic packages	[✂]	[✂]	[✂]	[✂]	[✂]
Premium packages:					
—Sports-only	[✂]				
—Movies-only	[✂]				
—Sports & movies	[✂]				
—All premium	[✂]	[✂]	[✂]	[✂]	[✂]
All packages (approx)†	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC calculations based on Seabright report.

At February 2008, average access to DTT was [✂] per cent and average access to cable was [✂] per cent. We calculated the hypothetical Sky penetration for no DTT/cable as {existing average penetration}-{average access}{estimated effect shown in Table 1} and for 100 per cent DTT/cable as {existing average penetration}+{1-average access}*{estimated effect shown in Table 1}.
†We calculated total effect as sum of effects for basic and all premium packages.

12. We considered three further points:

(a) To what extent did the estimated effect of DTT reflect FTA channels?

(b) How should we have interpreted the calculated effects for premium packages?

(c) What were the implications for market definition?

We discuss these points in turn.

To what extent did the effect of DTT reflect additional FTA channels?

13. In 2008, there were two suppliers of pay-TV channels via DTT (TUTV and BT Vision). In addition, a further supplier (Tiscali TV, subsequently TalkTalk TV) provided pay-TV channels via IPTV and, as part of its pay-TV service, BT Vision also provided VOD via IPTV. In principle, competition from these suppliers as well as additional FTA channels could have accounted for the DTT effects. This was because competition from pay-TV channels on DTT was correlated with access to DTT.[11] In practice, however, competition from these suppliers in 2008 appeared to have been weak (as reflected in a very small penetration) and was unlikely to have had much impact on Sky's penetration.[12] We accepted therefore that the estimated effect of DTT largely reflected additional FTA channels rather than pay TV on DTT and IPTV.

How should we have interpreted the calculated effects for premium packages?

14. The OLS results, which we preferred (see paragraph 8), suggested that access to DTT had a smaller impact on Sky's subscriptions than access to cable (see Table 1). Professor Chesher found that the estimated coefficients for Sky's premium subscriptions packages were less robust than for Sky's basic subscriptions packages (see paragraph 4*(c)*).

[11] It is also possible that competition from IPTV is correlated with access to DTT (this would be the case, for instance, if the good broadband access required by IPTV tended to be found in the same areas that had access to DTT).
[12] We raised this point with Professor Seabright and Sky. Professor Seabright confirmed that he had considered the constraint on Sky from pay-TV channels provided over DTT to be small, and hence his interpretation of the results was that the constraint of DTT on Sky came from the FTA channels on DTT.

15. It was also not immediately obvious to us why DTT made consumers less likely to subscribe to *premium* packages:

(a) Consumers without DTT may be more willing to pay for Sky *basic* packages than those with DTT if they attach value to the additional FTA channels on DTT.[13] (It seemed plausible that they did, among other things because of the cross-promotion of additional FTA channels on the original five channels.) Consequently, there were some consumers who were likely to regard the additional FTA channels on DTT as substitutes for Sky's basic packages.

(b) However, the additional FTA channels on DTT did not tend to be specialist movies or sports channels (there was only one Freeview movies channel (FilmFour) and no Freeview sports channel). It was therefore not immediately obvious why any consumers would regard the additional FTA channels on DTT as substitutes for Sky's premium packages.

16. Nevertheless, we found there were three reasons why DTT might reduce Sky's premium subscriptions (or equivalently why not having DTT might increase Sky's premium subscriptions):[14]

(a) Even though not specialist movies or sports channels, the additional FTA channels on DTT might nevertheless show content which consumers regard as substitutable for the content on Sky's movies channels (the additional FTA channels on DTT broadcast a considerable number of movies).[15] If so, some consumers subscribing to Sky Movies packages in the absence of DTT might not do so once they have access to DTT.

(b) Some consumers who value premium channels at between the relevant charge for premium channels and the total package price and also attach significant value to the additional FTA channels would be willing to pay for a premium Sky subscription only in the absence of DTT. For example, a consumer (uninterested in sport) willing to pay £10 for the additional FTA channels,[16] £10 for all basic pay channels (Sky's 6 mix)[17] and £20 for dual movies would be willing to pay £40 for the 6 mix + dual movies package without DTT but only £30 with DTT. Since this package was priced in 2008 at £38 (see Table 3), the consumer would be willing to pay for it in the absence of DTT but not if DTT became available.

---

[13] Subscribers to all Sky's packages receive all the FTA channels on DTT. They also receive extra FTA channels that are available on satellite and not on DTT. Other ways of getting additional FTA channels include Freesat and cable.

[14] Sky also said that there was the potential for there to be a chain of substitution linking FTA TV, basic-only pay-TV packages and premium pay-TV packages.

[15] We noted in Section 2 that digital channels which are not subscription movie channels account for about one-third of all movies on TV (however, this includes basic pay channels as well as additional FTA channels).

[16] Sky pointed out that such a household might choose to purchase Sky's 'Freesat from Sky' proposition (an STB and installation for a one-off fee), and just receive FTA TV services. Sky said that, in part, this depended on whether the customer was able to take advantage of a subsidized STB/installation offer available to new Sky subscribers. Even if able to do so, the customer might choose to take advantage of the subsidized offer, subscribe for the minimum initial period (12 months) and then cancel the pay-TV subscription and continue to use the STB to receive FTA TV services broadcast via satellite.

[17] For the purposes of this example, it was also assumed that the consumer was willing to pay £1 for each of the basic mixes, so willing to pay £15 for basic with one mix, £16 for two mixes etc.

TABLE 3 **Sky prices, February 2008**

£

	1 mix	2 mix	3 mix	4 mix	5 mix	6 mix
Basic package prices	16	17	18	19	20	21
Incremental charges for premium channels						
1 premium channel (eg single movies)	10	10	10	9	9	9
2 premium channels (eg dual movies)	18	18	18	17	17	17
3 premium channels (eg dual movies + single sport)	22	22	22	21	21	21
4 premium channels (top tier)	25	25	25	24	24	24
Premium package prices(basic package price plus charge for premium channels)						
1 premium channel (eg single movies)	26	27	28	28	29	30
2 premium channels (eg dual movies)	34	35	36	36	37	38
3 premium channels (eg dual movies + single sport)	38	39	40	40	41	42
4 premium channels (top tier)	41	42	43	43	44	45

Source: Sky.

Note: Sky's prices have changed since February 2008 and sports channels are now more expensive than movie channels. Also, the incremental charge for premium channels is now the same across all basic packages (ie the 1 to 6 mixes shown in the table).

(c) Given that premium packages are basic packages plus an incremental charge for premium channels (see Table 3), Sky could be successful in selling on premium packages to any subscribers who originally just wished to take out a basic subscription for the additional FTA channels.

17. In relation to the second and third of these reasons, the underlying impact of DTT arises because it reduces consumers' willingness to pay for services provided in basic packages. Professor Seabright was asked by Sky to look *separately* at basic packages and premium packages, which consist of a basic package plus premium TV channels. Therefore, only if the first reason above was important would Professor Seabright's results suggest that the incremental charge for premium channels specifically is constrained by DTT.[18]

18. Another point we considered was that Professor Seabright's results suggested that the effect of access to DTT on premium packages was smaller than on basic packages. However, over time the proportion of Sky's subscribers taking basic packages increased and, since access to DTT had increased, this was the opposite of what would have been suggested by Professor Seabright's results. It might be that the explanation for this was that over time other things had not been equal. In particular, as access to DTT increased, the FTA broadcasters launched new channels only available on DTT and via pay-TV platforms and cross-promoted them on the five PSB channels. As a result, demand for additional channels increased along with access to DTT and some of those consumers without access to DTT were induced to subscribe to basic pay-TV packages to get access to the additional FTA channels. Therefore, we believed that the econometric results were consistent with the growth in Sky's proportion of basic packages.[19]

[18] We raised this point with Professor Seabright. Professor Seabright said that his data had not enabled him to measure the substitutability between basic and premium packages. Hence he had not been able to test separately the willingness to pay for the basic and premium elements of the premium package.

[19] We raised this point with Professor Seabright and Sky. Professor Seabright agreed with our suggestion as to why the proportion of premium subscriptions had declined over time despite the increase in DTT. He said that in this sort of innovative product area, tastes changed quite rapidly over time and it was difficult to interpret time series data. This was a key advantage of his approach of using cross-sectional data. Sky added that, as well as tastes, there was also huge change in the products offered over time. Sky's view was that it was only as a result of a series of innovations and initiatives by Sky since 2004/05 that it had been able to maintain growth in its subscriber base, in the face of intensified competition from Freeview (and other competi-

What is the implication for market definition?

19. We asked Professor Seabright about his study's implications for market definition. Professor Seabright said that, as his study did not lead to elasticity estimates, it did not show that FTA TV was in the same market as pay TV, though it was entirely consistent with this conclusion.

20. Sky said that Professor Seabright's study indicated that FTA TV services imposed on Sky a similar competitive constraint as the provision of pay-TV services via cable. As the latter had always been considered to be in the same relevant market at the retail level as DTH satellite pay-TV services, Sky said that Professor Seabright's study indicated that multi-channel FTA TV services were in the same relevant retail market as pay-TV services. The generally accepted conceptual approach to market definition is the hypothetical monopolist test[20] and whether pay-TV retailing is too narrow a market is a question that can, in principle, be answered by the hypothetical monopolist test.[21] If the regression results discussed in this appendix were the sole source of information about substitutability, the result that DTT imposes a similar constraint on Sky to that imposed by cable might raise a question as to whether a candidate market consisting of Sky and DTT was as valid as a candidate market consisting of Sky and cable to which to apply the hypothetical monopolist test. However, we considered that there was sufficient other information to establish that a retail market consisting of Sky and cable (and also other pay-TV retailers competing for subscribers) was a better candidate for the hypothetical monopolist test than one consisting of Sky and DTT (see Section 4, which also discusses the packages included in the market). The relevant question was then whether pay-TV retailing was too narrow a group of products to be a market.

21. We attempted to use the results in Tables 1 and 2 to assess whether pay-TV retailing was too narrow to be a market. In this context, the relevant issue seemed to be whether a hypothetical pay-TV retail monopolist would be able profitably to impose a SSNIP, usually taken to be 5 per cent. The figures in Table 2 suggested that Sky's average penetration in the absence of cable would be [✂] per cent, compared with actual penetration of [✂] per cent. For the purposes of this exercise, we inferred from this that if Sky were unavailable, [✂] per cent of Sky's subscribers would transfer to cable [✂]. In the light of this, we assumed that, if Sky increased prices by a SSNIP, [✂] per cent of its lost sales volume would go to cable[22] with the remaining [✂] per cent of lost sales volume accounted for by Sky's customers either ceasing to subscribe or reducing the cost of their packages by taking fewer products.

22. We also assumed that Sky was profit maximizing (ie its existing prices at the time the analysis was undertaken were at the point where it was just unprofitable for Sky to increase prices); that the own-price elasticity for Sky implied by these assumptions was [✂],[23] which was [✂] of –1.5 to –2.5 used by Professor Seabright in his study;[24] and that the effect of a SSNIP by cable was similar to the effect of a SSNIP by Sky.[25]

- - - - - - - - - -

tors). Sky said that it set these views out in its submission to Ofcom in February 2010 entitled 'Trends in charges for pay TV services, the quality of services provided to consumers and subscriber numbers'.

[20] www.competition-commission.org.uk/rep_pub/rules_and_guide/pdf/cc3.pdf.

[21] We discuss the hypothetical monopolist test in Section 4.

[22] In other words, we assumed a diversion ratio of [✂] per cent.

[23] This was the elasticity implied by our central estimate of margin in Annex B to Appendix 8.1. We assumed that this elasticity reflected also reductions in advertising revenue to the extent that they affected Sky (an increase in the retail price of pay TV might be expected to reduce the number of subscribers and hence reduce advertising revenue at some point in the supply chain).

[24] Professor Seabright's technical report, paragraph 52.

[25] We assumed that the absolute loss in volume from cable to satellite from a SSNIP was the same as the loss in volume from satellite to cable (since cable penetration was lower, this implied that the percentage loss was greater). We also assumed that the percentage reduction in cable volume from cable customers ceasing to subscribe or reducing the cost of their package by taking fewer products was the same as for satellite.

Using these assumptions, we made an illustrative calculation of the profitability of a SSNIP for a hypothetical monopoly combining satellite and cable companies, as shown in Table 4.[26]

TABLE 4 **Illustration of hypothetical pay-TV monopoly**

	Satellite	*Cable*	*Hypothetical monopolist*
Assumptions			
Initial penetration (%)*	30	10	40
Implied own-price elasticity†	[✂]	[✂]	[✂]
—Due to competition between cable & satellite	[✂]	[✂]	[✂]
—Due to other factors	[✂]	[✂]	[✂]
Initial volume assumption	100	33	133
Initial price assumption	1.00	1.00	1.00
Variable cost‡	[✂]	[✂]	[✂]
Effect of 5% price increase			
Revenue change§	[✂]	[✂]	[✂]
Cost saving§	[✂]	[✂]	[✂]
Profit change¶	[✂]	[✂]	[✂]

Source: CC calculations.

*Assumed satellite penetration of 30 per cent [✂]. Cable penetration was assumed to be one-third of satellite. (Ofcom data for 2008Q1 (2010Q2) showed satellite pay-TV penetration of 33.7 (36.5) per cent and cable penetration of 12.4 (13.0) per cent.)
†[✂]
‡[✂]
§Effect of SSNIP on volume assumes straight-line demand curve.
¶Revenue change less cost change.

23. The illustrative calculations in Table 4 suggested that it would be profitable for a hypothetical pay-TV monopolist to impose a price increase of 5 per cent. Although Table 4 suggested that the 5 per cent price increase was only modestly profitable, we believed that various assumptions were likely to understate profitability. For example, we did not take account of pay-TV retailers other than cable and we assumed a straight-line demand curve, whereas assuming a constant elasticity demand curve would imply a smaller volume effect and hence higher profitability of price rises.[27] Additionally, based on the regression results, we assumed a [✂] per cent diversion from satellite to cable, but this seemed low given that cable passes around 50 per cent of homes, including presumably Sky subscribers.[28] For instance, the impact of cable access on satellite in the regression was likely to be reduced by the terms on which premium channels were supplied by Sky to Virgin Media. Therefore, although there were uncertainties, it seemed that the estimates from the Seabright report were

[26] Other assumptions are as shown in Table 4. We did not seek to take into account the other pay-TV retailers (which are small —see paragraph 13).
[27] With linear demand and the other assumptions in Table 4, the most profitable price increase was of about [✂] per cent, while with constant elasticity demand the most profitable price increase was of about [✂] per cent.
[28] Based on data from Sky and Virgin Media for December 2010 and assuming Virgin Media's coverage was 50 per cent, we estimated Virgin Media's penetration in postcodes where it had coverage to be [✂] per cent (depending on whether or not Virgin Media's M subscribers were included) and total (Sky+ Virgin Media) penetration in these postcodes to be [✂] per cent with Sky's penetration in other postcodes at [✂] per cent. Using a similar approach to that in paragraph 21, we might infer from this that if Virgin Media were unavailable, between [✂] and [✂] per cent of Virgin Media's subscribers would transfer to Sky {between (1–([✂]–[✂])/[✂]) and (1–([✂]–[✂])/[✂])}. This was higher than the implied diversion from cable to satellite in Table 4 which was only [✂] per cent [✂] and was therefore consistent with the suggestion that the assumed satellite to cable diversion ratio in Table 4 was low. Using the Sky penetration of [✂] per cent in postcodes with Virgin Media coverage, we estimated, using a similar approach to paragraph 21, that the raw figures for December 2010 implied that if Sky were unavailable, [✂] per cent of its subscribers would transfer to Virgin Media [✂]—we describe these as raw figures because penetration was not adjusted for the effects of any other factors such as household characteristics and income. If we used a [✂] per cent satellite to cable diversion ratio in Table 4, the implied cable to satellite diversion ratio was [✂] per cent, which was more consistent with the figures mentioned previously for the percentage of Virgin Media subscribers transferring to Sky if Virgin Media was unavailable ([✂] per cent). Maintaining the other assumptions but increasing the satellite to cable diversion ratio in Table 4 to [✂] per cent made it more profitable for a hypothetical monopolist to increase price: with linear demand the most profitable price increase was about [✂] per cent, while with constant elasticity of demand the most profitable price increase was about [✂] per cent.

consistent with a hypothetical monopolist being able profitably to impose a SSNIP, and hence with the relevant market being limited to pay TV.

24. In its response to our August 2011 provisional findings, Sky made the following points relevant to our analysis in paragraphs 21 to 23:

(a) It made no sense to infer a diversion ratio between satellite and cable from the information found in the Seabright study. As a matter of principle, one could not use differences in penetration rate 'with' and 'without' a given rival to infer what the diversion ratio with respect to this rival was likely to be.

(b) The analysis did not appear to be robust. Even at face value, the single set of results barely supported the claim that a single supplier of pay-TV via satellite and cable in the UK would be able to impose a SSNIP.

(c) The duopoly benchmark used in the CC's version of the SSNIP test did not reflect the actual situation in a number of important respects, including the vertical links between Sky and Virgin Media (ie the wholesale relationship).

25. Our views on these points were as follows:

(a) We agreed that a diversion ratio (interpreted as the proportion of satellite customers ceasing to subscribe in response to a 5 per cent price increase who would divert to cable, and vice versa) could not simply be inferred from the Seabright results which related to what subscribers would do if satellite was unavailable (see paragraph 21). Nevertheless, we regarded our figure of [✂] per cent diversion ratio as a reasonable lower assumption given the Seabright results.

(b) We did not regard our analysis as more than suggestive. We regarded our analysis as suggesting that it would be profitable for a hypothetical monopolist to impose a 5 per cent price increase, noting that our assumptions understated the profitability of such a price increase (see paragraph 23).

(c) We agreed that our analysis was based on simple assumptions and did not reflect every aspect of reality. We did not believe any constraints on Virgin Media arising from the vertical links between it and Sky were relevant to this analysis because such vertical links were a potential feature of the market we were seeking to define and attempting to take them into account in this analysis could introduce a circularity.

26. Overall, we believed that our illustrative calculations suggested that the regression results were consistent with a hypothetical pay-TV monopolist being able profitably to impose a SSNIP and hence with a market no wider than pay TV. However, none of this contradicted the proposition that the availability of FTA channels on DTT was some constraint on pay-TV suppliers.

Conclusions

27. Based on our understanding of Professor Seabright's report and our analysis of the data, we found the following:

(a) The results suggested that the availability of FTA channels on DTT was a statistically and economically significant constraint on Sky's basic packages and (though there was more uncertainty about the size of the effect) on Sky's premium packages. Taking account of all packages (basic and premium), the

results suggested that the constraint from FTA channels on DTT was approximately similar in size to the constraint from cable.

(b) Nevertheless, our illustrative calculations suggested that the regression results were consistent with a hypothetical pay-TV monopolist being able profitably to impose a SSNIP and hence with a market no wider than pay TV.

Data provided by Sky to Professor Seabright for his econometric study

1. We asked for information on the variables and sources of data that Sky provided to Professor Seabright. This is set out below.

2. Sky told us that the person who was responsible for collecting the data that was provided to Professor Seabright no longer worked at Sky and, as a result, there were some gaps in the source of data for two of the variables: population density of postcodes and the 'altitude' variable.

A. Subscriber data

3. Subscriber data was drawn from Sky's subscriber management systems, and related to February 2007 and February 2008. This was combined with data on the number of households in each postcode (based on the number of delivery points in each postcode provided to Sky by Clarity Blue in December 2005) to provide penetration figures.

B. Freeview and cable availability

4. These were based on [✂].

C. Household characteristics

5. This data was from the Acxiom Infobase Lifestyle Universe database for the period June to September 2005. The Acxiom lifestage variables are defined as follows.

A1	Lifestage 18–24
A2	Lifestage 25–34
A3	Lifestage 35–54
A4	Lifestage 55–64
A5	Lifestage 65–74
A6	Lifestage 75+
K1	Lifestage 25–34, no child under 16
K2	Lifestage 25–34, children
K3	Lifestage 35–54, no children under 16
K4	Lifestage 35–54, children
KA1	Lifestage 25–34, youngest child 0–4
KA2	Lifestage 25–34, youngest child 5–10
KA3	Lifestage 25–34, youngest child 11–16
KA4	Lifestage 35–54, youngest child 0–4
KA5	Lifestage 35–54, youngest child 5–10
KA6	Lifestage 35–54, youngest child 11–16

D. Average income

6. This data set was provided to Sky by Experian Business Strategies and related to March 2006.

E. MDU percentage

7. This data set was provided to Sky by Clarity Blue and related to June 2006.

F. Latitude and longitude of points within postcodes

8. This data set was provided to Sky by Ordnance Survey under licence.

G. Distance to Continental Europe

9. This data set was created by Sky using coordinates for a number of Continental European locations (Calais, Cherbourg-Octeville, The Hague, Dieppe, Perros-Guirec) and data on the latitude and longitude of points in each postcode.

H. Distance to nearest transmitter

10. This data set was created using coordinates for DTT transmitters and data on the latitude and longitude of points in each postcode. We were unable to locate the source for the coordinates used by Professor Seabright but noted that they were widely available. (See, for example: www.ofcom.org.uk/static/reception_advice/dtt_pocket_guide_2-8.pdf.)

CC OLS regression for any Sky subscription

Dependent variable	*Any Sky package in 2008*			
Regressors	*Coefficient*	*Std error*	*Coefficient*	*Std error*
Access to DTT	–0.105	0.004	–0.099	0.009
Access to cable	–0.108	0.003	–0.106	0.003
Average income (£'000 per year)	0.005	0.000	0.005	0.000
Living in multi-dwelling units	–0.035	0.009	–0.036	0.009
Lifestage 18–24	0.301	0.137	0.260	0.138
Lifestage 25–34, no child under 16	–0.239	0.114	–0.237	0.114
Lifestage 25–34, youngest child 0–4	5.081	0.371	5.075	0.368
Lifestage 25–34, youngest child 5–10	0.811	0.351	0.813	0.349
Lifestage 25–34, youngest child 11–16	–1.613	0.473	–1.560	0.470
Lifestage 35–54, youngest child 0–4	–2.979	0.379	–3.031	0.378
Lifestage 35–54, youngest child 5–10	1.656	0.251	1.707	0.249
Lifestage 35–54, youngest child 11–16	0.625	0.216	0.598	0.215
Lifestage 55–64	–0.214	0.130	–0.174	0.129
Lifestage 65–74	1.069	0.157	0.963	0.157
Lifestage 75+	–1.044	0.111	–0.966	0.111
Population density (people per sq mile/100,000)	0.123	0.028	0.126	0.028
Distance to Continental Europe (miles)	0.000	0.000	0.000	0.000
Latitude (population centre)	0.170	0.079	0.110	0.080
Longitude (population centre)	–0.057	0.028	–0.040	0.028
Altitude	–0.024	0.009	0.063	0.019
Nearest DTT transmitter distance (mi/100)			–0.035	0.032
(Distance to transmitter)*(access to DTT)			0.104	0.041
Altitude*(access to DTT)			–0.110	0.025
Constant	0.256	0.060	0.231	0.061
N	2,777		2,777	
Adjusted R-squared	0.6854		0.6899	

Source: CC.

Other evidence relevant to substitutability

Sky's competitor monitoring

1. [✂], prior to our August 2011 provisional findings, we reviewed [✂]:[1]

   (a) [✂]

   (b) [✂][2] (see example in Figure 1) [✂].[3]

FIGURE 1

[✂]

Source: [✂].

   (c) [✂][4]

   (d) [✂][5,6]

   (e) [✂][7]

2. Overall, in our August 2011 provisional findings, we said that this material suggested Sky's key competitors were Virgin Media and BT, and perhaps TalkTalk (though if TalkTalk was a key competitor, it was only so in broadband and not in TV). We also said that this material suggested Sky had a number of other more distant competitors including: FTA broadcasters (with which Sky competed for viewers and advertisers), Freeview and Freesat (which facilitated and promoted the sale of equipment enabling viewing of more FTA channels), other broadband suppliers, other service providers or potential service providers (such as LOVEFiLM) and alternative actual or potential providers of access to content (such as Apple, Google, Microsoft and YouView).

3. We also reviewed Sky's weekly competitor updates for the period 18 January 2010 to 25 February 2011.[8] [✂][9] Table 1 summarizes the frequency of mentions of competitor companies in customer forums. In our view this provided some indication of the salience of each company as a competitor to Sky as Sky would be most interested in the views of customers of its closest competitors and hence we would expect the closest competitors to appear most frequently. (Table 1 also shows the total number of bullets relating to each of these companies in the weekly competitor updates as a further measure of the salience of each company as a competitor.) Additionally, Table 1 shows similar information for these companies' developments (from the first slide of the weekly competitor updates) as a further indicator of salience. However, as these tended to cover a wide range of organizations, including, for example, mobile phone manufacturers and regulators, they appeared to us to be somewhat less useful in judging the salience of the organization as a competitor than the infor-

[1] [✂]
[2] [✂]
[3] [✂]
[4] [✂]
[5] [✂]
[6] [✂]
[7] [✂]
[8] Sky also provided us, for a similar period, with [✂].
[9] [✂]

mation from reactions in customer forums. Table 1 again suggested that Virgin Media and BT were Sky's closest competitors, though the BBC also appeared prominently in the monitoring of developments.

TABLE 1 **Percentage of Sky's weekly competitor updates in which other companies are mentioned and total number of bullets relating to those companies, 18 January 2010 to 25 February 2011**

	Competitor customer reactions in forums		*Competitor developments*	
Company	*Percentage of mentions*	*Total bullets*	*Percentage of mentions*	*Total bullets*
Virgin Media	[✂]	[✂]	[✂]	[✂]
BT	[✂]	[✂]	[✂]	[✂]
BBC	[✂]	[✂]	[✂]	[✂]
O2	[✂]	[✂]	[✂]	[✂]
Freesat	[✂]	[✂]	[✂]	[✂]
ITV	[✂]	[✂]	[✂]	[✂]
TalkTalk	[✂]	[✂]	[✂]	[✂]
Freeview	[✂]	[✂]	[✂]	[✂]
YouView	[✂]	[✂]	[✂]	[✂]
TUTV	[✂]	[✂]	[✂]	[✂]
Plusnet	[✂]	[✂]	[✂]	[✂]
Five	[✂]	[✂]	[✂]	[✂]
Orange	[✂]	[✂]	[✂]	[✂]
Seesaw	[✂]	[✂]	[✂]	[✂]
Apple	[✂]	[✂]	[✂]	[✂]
AOL	[✂]	[✂]	[✂]	[✂]
LOVEFiLM	[✂]	[✂]	[✂]	[✂]
Google	[✂]	[✂]	[✂]	[✂]
Other		[✂]*		[✂]

Source: CC analysis of data provided by Sky.

*Other organizations mentioned in customer forums were: UPC (Irish cable company mentioned in two reports), Humax, BE, Samsung, Very Tangy TV, Ofcom and DCMS (all mentioned in one report).

4. We also reviewed other Sky documents including CEO updates and 'competitive landscape' presentations. It appeared to us that these documents were broadly consistent with the regular competitor monitoring documents but that the competitive landscape documents took a more strategic view. These documents indicated some concern over the constraints imposed by FTA broadcasters, for example in statements such as [✂]. We also reviewed some earlier documents (dating from before September 2009). However, it appeared to us that these earlier documents were of less relevance to assessing current competitive constraints, though we noted that Freeview appeared of more importance as a competitor in these documents. Sky provided evidence that in 2003/04 it had begun to find it increasingly difficult to attract new subscribers due to the success of Freeview (which by the end of 2004 had already attracted around 4.6 million households) and the significant expansion in FTA TV which affected the demand for combined premium and basic channel packages. Sky told us that it was this challenge which led it to change its packaging of, and marketing approach for, its basic channels in 2004/05 (the new packaging, introduced in September 2005, involved six entertainment packs and the new marketing approach put more emphasis on Sky's basic pay channels, such as Sky 1, rather than just on providing its subscribers with a lot of channels, and premium movies and sport).[10]

[10] Sky referred us to its submission to Ofcom dated February 2010 (http://stakeholders.ofcom.org.uk/binaries/broadcast/reviews-investigations/pay-tv/trends.pdf). In this submission, Sky said that its other responses to the success of Freeview included: *(a)* moving into the provision of telecommunications services; (*b*) spending more on customer acquisition and retention; *(c)* investing significantly in customer service; *(d)* introducing Sky's new 'Freesat from Sky' proposition in June 2004; *(e)* investing in innovative new services and driving demand for them, such as Sky+, HDTV, online TV services, enhanced electronic programme guide (EPG) functionality (including a new EPG), VOD services and mobile TV; *(f)* seeking to develop a

5. In our August 2011 provisional findings, we said that Sky's competitor monitoring suggested that other pay-TV retailers (Virgin Media and BT) were its closest competitors, and a more significant constraint on Sky's pay-TV products than other companies (eg FTA broadcasters).[11]

6. In its comments on our August 2011 provisional findings, Sky said that our approach failed to appreciate that the competition faced by pay-TV retailers from FTA TV arose from the aggregate of the programming provided to consumers for free. Sky said that the competitive constraint it (and other pay-TV retailers) faced from FTA TV arose from the totality of the 20 TV channels (excluding time-shifted versions, and other services) broadcast by the BBC, ITV, Channel 4 and Five, together with the substantial number of FTA TV channels broadcast by other smaller broadcasters. Sky said that, accordingly, an approach of attempting to identify particular companies or other operators as competitors to Sky was bound to underestimate the competitive constraint faced by pay-TV retailers, including Sky, from the services provided, collectively, by broadcasters of FTA TV. We agreed that it was the aggregate constraint of FTA broadcasters which was of interest; however, we noted that the BBC, ITV and Channel 4 accounted for a high proportion of FTA viewing so Sky's interest in these three particular FTA broadcasters was informative.[12]

7. Sky also said that we had failed to recognize that a substantial number of references to BT and Virgin Media in these documents related to their telecommunications services. Sky said that we could not rely on the numerous references in these documents that related entirely to telecommunications services provided by Virgin Media and BT in relation to identifying Sky's 'closest competitors' in terms of its pay-TV services. We agreed that some of the references in Sky's documents were to telecommunications services but the analysis in our August 2011 provisional findings took account of this. Figure 1 above [✂], in paragraph 2, we noted that our provisional findings stated that if TalkTalk was a key competitor, it was only so in broadband and not in TV. Sky also said that the documents we had reviewed had a marketing focus and were biased towards those of Sky's competitors which were major advertisers and against FTA broadcasters which did not need to engage to the same extent in paid-for advertising as they could use their own channels and were promoted for free every day in newspaper and magazine TV listings. However, we did not attach much weight to those parts of the documents which were concerned specifically with advertising.

8. Sky also said that the documents focused on developments related to products and platforms rather than other developments and were affected by BT starting to sell Sky Sports in 2010. Sky added that our approach of counting the number of times that companies were mentioned was a crude measure and a poor indicator of the salience of a company as a competitor. We noted that this latter point mainly applied to the [✂]. In our view, while we were aware of the limitations of using these documents to discern the extent of competition, we regarded them as providing a useful general indicator of which companies Sky perceived to be its competitors.

- - - - - - - - - -

new DTT-based pay-TV service; and *(g)* seeking to increase the attractiveness of the pay-TV proposition, for example through substantial additional investment in Sky's own channels (both basic and premium), changes in Sky's strategy in relation to rights acquisition and exploitation for Sky One, and seeking to focus the amounts Sky pays for carriage of third party basic pay-TV channels on those channels which made the greatest contribution to differentiating Sky's pay-TV service from FTA TV services in a positive way.

[11] We also noted that, [✂], but that our principal concern was with constraints operating at the time of our inquiry [✂] and that therefore we did not need to reach a view on [✂] to have affected market definition.

[12] BARB data for January to March 2012 showed that the share of viewing for the BBC was 31 per cent, ITV was 23 per cent, Channel 4 was 12 per cent, Sky's pay-TV channels was 7 per cent, Channel 5 was 6 per cent and for all the remaining channels was 22 per cent.

9. Sky also said that our analysis did not have any regard to its [✂], which had as a key focus combating the decline in viewing of pay-TV channels in homes that subscribed to Sky's pay-TV services. We accepted that a concern with viewing of pay-TV versus FTA TV in Sky homes might have suggested that Sky regarded FTA TV as a constraint on its pay-TV subscription revenue. However, the interpretation of this point was complicated by Sky's role as a pay-TV broadcaster as well as a pay-TV retailer. In our view, it was entirely consistent for pay-TV retailers to compete primarily with each other for subscribers but also to be concerned with the quality of the pay-TV channels they offered as supplied to them by pay-TV broadcasters. As the appeal of pay-TV channels was relevant to its activity as a broadcaster, Sky's concern with a decline in the appeal of pay-TV channels did not in itself necessarily imply that FTA TV was a constraint on pay-TV subscription revenue. However, we also noted the [✂].

10. At the same time as responding to our August 2011 provisional findings, Sky provided us with further [✂].[13] We reviewed these documents but it was not clear to us that they were more relevant for our purposes [✂]. In our view, the detailed [✂] provided to us previously was likely to be more relevant to determining the appropriate market definition than [✂].

11. Sky said that [✂] undermined entirely our conclusion that Virgin Media and BT were Sky's closest competitors, with other firms being more distant competitors, and strongly supported Sky's view that FTA TV broadcasters were among Sky's most significant competitors. We did not agree. We continued to attach most weight to the documents reviewed in paragraph 1 as these documents appeared to have been prepared specifically to provide detailed consideration of Sky's competitors. Overall, on the basis of these documents in particular, and with some weight placed on the other material, it appeared to us that Sky regarded Virgin Media and BT as its closest pay-TV competitors.

Advertising

12. We asked Sky to explain its policy regarding advertising by pay-TV retailers on its channels. Sky said it was able to determine which advertisements were shown only in relation to its wholly-owned TV channels and certain third party channels on whose behalf Sky sold advertising airtime (subject to the contractual arrangements in place between Sky and third party channel owners). Sky said that it accepted all advertising on all these channels with two relatively limited exceptions:

    (a) advertisements that included invitations to viewers to watch programmes on other channels that were time and date specific; and

    (b) in relation to Sky's wholly-owned channels only: [✂].

13. We asked Sky whether it anticipated that the launch of Now TV would result in any change to its approach to the acceptance of advertising on its channels and Sky stated that [✂].

14. Sky said that, prior to January 2012, it did not accept [✂] advertising of pay-TV services on its wholly-owned channels by Virgin Media[14] and BT, or advertising by Freesat and Freeview; and, if these operators were not yet advertising on Sky's wholly-owned channels, this might be a legacy of its past approach. Sky added that a

[13] [✂]
[14] Sky noted, however, that, [✂].

significant number of TV channels, both pay and FTA, on its platform were provided by other broadcasters (including ITV, Channel 4, Channel 5, Discovery, and Viacom) and pay-TV retailers could advertise on these channels without restriction.

15. Sky told us that its approach to advertising did not differentiate between the OTT pay-TV retailers of LOVEFiLM and Netflix and the traditional pay-TV retailers of Virgin Media and BT. Sky told us that its lack of differentiation between *(a)* online and traditional pay-TV rivals, and *(b)* pay and FTA rivals, in relation to its acceptance of advertising was evidence that: (i) Sky considered all these services to compete with its own services; and (ii) further supported an ‘all TV’ retail market, including pay and FTA services, both traditional and OTT, which it said, ought to be taken into account in our analysis of both market definition and competition at the retail level.

16. We considered that it was difficult to draw many inferences from Sky’s advertising policy given the changes to this policy in January 2012, during the course of our inquiry.

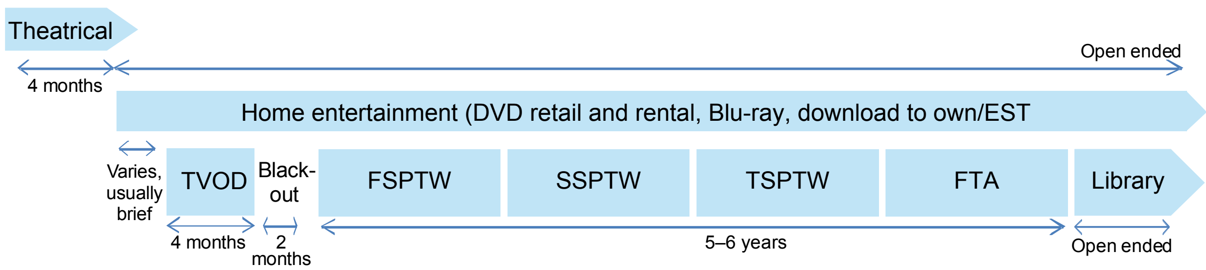
17. With regard to Sky’s submission as to the relevance of its advertising policy to whether FTA TV should be included in the same market as pay TV, it appeared to us that [✂]. We did not agree that this evidence supported Sky’s view with respect to an ‘all TV’ retail market as it was important to distinguish competition between pay-TV retailers for subscribers and competition between broadcasters for advertising and viewers.

Movie windows and demand-side substitutability

1. The studios divide movie rights into distinct 'windows'. Figure 1 illustrates these windows for a typical movie theatrically released in the UK by a major studio. Most movies are released in cinemas (theatrical window);[1] about four months later, the 'home entertainment' window starts (DVD/Blu-ray sale and rental and EST) and, shortly afterwards, the TVOD/PPV window starts.[2] The FSPTW currently starts about six months after DVD release and usually lasts for about 15 months. The FSPTW is usually followed by an SSPTW and sometimes by a TSPTW before movies start to be shown on FTA TV (the length of the SSPTW and TSPTW that we saw over the course of our inquiry varied). Older movies are regarded as 'library' movies. As illustrated in Figure 1, the home entertainment window continues indefinitely once it has started. Through the course of our inquiry we saw a number of changes to the windowing structure adopted by studios. In particular, for some movies, we saw the emergence of a new third pay window (the TSPTW) after the SSPTW.

FIGURE 1

Typical movie release windows in the UK



Source: CC (not to scale).

2. We considered that these windows were a form of price discrimination by release date. In our view, it would only be profitable for a studio to price discriminate in this way if it obtained greater lifetime revenue by having a separate FSPTW than without a separate FSPTW (ie if FSPTW movies were included with FTA movies and sold to the highest bidder, whether a pay-TV bidder or an FTA bidder). It seemed to us that this implied that a studio's movies in the later (FTA) window were not close substitutes for its movies in the earlier (FSPTW) window, because if they were close substitutes there would be no significant revenue benefit in retaining separate windows. A similar argument would suggest that a studio's movies in an earlier window (eg TVOD/PPV) were not close substitutes for the same studio's movies in a later window (eg FSPTW). It might still be possible for the movies of other studios in another window to be a close substitute for the FSPTW movies of the first studio, but this did not seem consistent with each studio generally having the same windowing structure with the same release dates. We also observed that the pattern of movie windows, in particular the existence and approximate length and timing of a separate FSPTW, was similar in other countries to the UK. It appeared to us that this similarity across geographic markets in the structuring of movie licensing through movie

[1] There is no 'theatrical' (ie cinema) window for a movie that is released straight to DVD or straight to TV.
[2] As illustrated in Figure 1, the TVOD window lasts about four months for most movies distributed by the six major studios. For some movies released by some studios, TVOD sales can also occur concurrently with some or all of the pay-TV, FTA and library windows.

windows supported the idea that movies in other windows were not close substitutes for FSPTW movies.

3. The argument set out in the previous paragraph applied to substitutability between the FSPTW and windows with later or earlier release dates. It did not apply to the home entertainment window which, as shown in Figure 1, overlaps with the FSPTW. However, if the strength of movie rights competition was similar across different windows, we would have expected studio prices to be at the point where a change in FSPTW revenue from a marginal change in prices would be offset by an associated change in revenue from other windows. If movies in other windows were closely substitutable for FSPTW movies, we would have expected an exogenous change affecting the value of FSPTW rights to have had relatively little impact on studios' total revenue, as any loss of FSPTW revenue would have been broadly offset by gains in revenue from the other windows (because, if movies in the other windows were close substitutes for FSPTW movies, such an exogenous change would have been similar to a marginal change).[3] To put it another way, if movies in other windows were closely substitutable for FSPTW movies, the withdrawal of the FSPTW would have made little difference to studios' total revenue since they would have been able to recoup most of the lost FSPTW revenue from movies in other windows.

4. This point is illustrated in Table 1, which assumes that DVD sales are a close substitute for sales by an FSPTW subscription service. (The specific assumptions in Table 1 are that the studio gets FSPTW revenue of £1 per subscriber and DVD average net revenue of £2 per DVD; and that each former FSPTW subscriber purchases 0.5 additional DVDs per month from that studio.)

TABLE 1 **Illustration of effect on a studio of loss of FSPTW revenue when DVDs are a close substitute**

	FSPTW movie service	*DVDs*
Basis of charging	*Per month*	*Per DVD*
Existing average price (£)	10	6
Studio's net revenue per subscriber/DVD*	1	2
Existing number of subscribers ('000)	5,000	
Change in studio revenue from loss of FSPTW	–5,000	
Increase in studio's DVD sales (per month)		2,500
Increase in studio's revenue from DVD sales		5,000

Source: CC calculations.

*Studio's revenue net of DVD production costs.

5. Hence, if movies in the other windows were closely substitutable for FSPTW movies, we would have expected the effect on total studio revenue of a change in the value of FSPTW rights not to be very great and the studios not to be very concerned. However, the six major studios did seem to be very concerned with the value of their FSPTW rights.[4] It appeared to us that this concern was indicative that, in the upstream rights market, movies in other windows (including the home entertainment window) were not close substitutes for movies in the FSPTW.

[3] This would not be the case if the strength of movie rights competition differed between windows. However, we did not see evidence of such differences: the same studios competed with each other to sell movie rights in each window; and, while in the FSPTW the studios faced a strong buyer (Sky) and this may not have been the case for the other windows, we did not see clear evidence that this had depressed prices for FSPTW rights (see Section 9).
[4] The particular concern submitted to us by most of the studios was that, in the event of regulatory intervention which required Sky to sell its Sky Movies content at low prices to other retailers, the strength of bidding against Sky for FSPTW rights might fall.

6. At the time of our August 2011 provisional findings, we regarded Sky Movies as effectively the only pay-TV product with FSPTW content and we therefore inferred from the studios' concern about the value of their FSPTW rights not only that movies in other windows were not close substitutes for FSPTW movies in the upstream rights market but also that Sky Movies (at that time the only pay-TV product with FSPTW content)[5] did not have close substitutes. Since our provisional findings, LOVEFiLM and Netflix have launched and actively marketed their OTT products with FSPTW content (from non-major studios). However, it appeared to us that the argument in our August 2011 provisional findings remained relevant to the substitutability for Sky Movies of downstream products other than the OTT services of LOVEFiLM and Netflix. (We discuss the extent of the substitutability between the OTT services of LOVEFiLM and Netflix and Sky Movies in Appendix 4.2.)

Comments of parties on our working paper and August 2011 provisional findings

7. Sony Pictures said that its concern was specifically that the value it lost (and other studios lost) as a result of regulatory intervention would not be recouped in other windows. Sony Pictures said that this value would flow away from content producers to free-riders. Sony Pictures said that, consequently, its concern (and, it assumed, the concern of other studios) about a reduction in the value of FSPTW rights could not in any way be used as evidence of a lack of substitutability of content between windows. In Sony Pictures' view, there could be perfect substitutability and these concerns would nonetheless arise. However, we did not agree as it was not clear to us that these concerns would arise if products in other windows were close substitutes for the products in the FSPTW. If products in one or more other windows were close substitutes, the studios would not need to be concerned about the strength of bidding for FSPTW rights, and would be able to prevent value flowing away to free-riders. This is because:

   (a) the studios could simply withdraw FSPTW rights and recoup the value from rights in other windows; and

   (b) the close substitute product(s) would establish a price for FSPTW rights; consequently each studio would know the price of the FSPTW rights and would not need an auction to determine the price.

   Hence, we continued to infer from the studios' concern over the value of their FSPTW rights that products in other windows were not close substitutes.[6]

8. Sky submitted that, in a 2002 report by Europe Economics for the European Commission, it was stated that it was important to base an assessment of whether different windows were in different markets on an analysis of substitutability, rather than just the existence of different release formats or windows.[7] We agreed that an assessment could not be based just on the existence of different release formats; however, as set out above, we believed that it was possible to make some inferences concerning substitutability[8] from the existence of windows with non-overlapping

---

[5] BT told us that, in the past, its Vision Film product had sometimes included some FSPTW movies (see Appendices 4.2 & 4.12).

[6] In its response to our August 2011 provisional findings, [✂]. We agreed that these statements were plausible but, for the reasons set out in paragraphs 3 to 6 we believed they were only valid if products in other windows were not close substitutes for FSPTW products.

[7] Paragraph 2.2.45, Market Definition in the Media Sector, Economic Issues, Report by Europe Economics for the European Commission, DG Competition, November 2002.

[8] As in the rest of this appendix, we are referring here to demand-side substitutability. Market definition would depend on supply-side as well as demand-side substitutability.

release dates, and also from the extent of studios' concern about the value of the rights in a specific window.

9. We recognized that movie studios were concerned with maximizing the lifetime value of their movies across all possible windows and viewing mechanisms. However, as set out above, we believed it was relevant that the six major studios seemed very concerned with what they perceived as a threat to the value of their FSPTW rights, which would not have much impact on lifetime revenue if products in other windows were close substitutes for FSPTW products.

10. Sony Pictures pointed out that the windowing structure changed over time and new windows emerged as new delivery mechanisms emerged or became more or less important. Similarly, Disney said that studios had experimented with alternative windowing structures and might adjust existing release windows further. We accepted that the windowing structure changed over time in response to many factors, but we saw no evidence to suggest that the FSPTW was likely to disappear in the foreseeable future.

11. In its response to our August 2011 provisional findings, Warner said that there was every reason for a studio to be concerned about the value of rights in a particular window, even where there were other substitutable ways of selling rights, since a reduction in value for one window would be likely to lead to reductions in values for other windows, thereby significantly affecting overall values (and revenues). Warner said that it would be particularly concerned if our analysis of this matter led us to construct remedies which reduced the value of its rights in any one or more windows on the false premise that a loss of revenue in one window could be easily recovered in another non-substitutable window. In Warner's view, such a remedy was likely to reduce revenues across all windows. However, this was a misunderstanding of the analysis in our August 2011 provisional findings. Our view was that, if products using rights from other windows were close substitutes for FSPTW products, a reduction in the value of FSPTW rights would not have had much impact on total studio revenue. However, in our view, products using only rights from other windows were not close substitutes for FSPTW products (see Appendix 4.1). Hence we believed that a reduction in the value of FSPTW rights was likely to impact on total studio revenue and was a factor that would need to be taken into account in assessing any remedies (were we to do so).

12. In its response to our August 2011 provisional findings, Warner also said that, if FSPTW rights were withdrawn from the market altogether, the substitution of demand into alternative, substitutable products, following the withdrawal of FSPTW rights from the market, would recover some, but not anywhere near all, of the revenue lost by the withdrawal of those rights. Warner said that the extent of the replacement effect would tend to be larger the greater the substitutability between the other rights and the FSPTW rights. [✂] However, as stated above, our purpose was to consider whether any inferences about whether rights from other windows were close substitutes for FSPTW rights could be drawn from the major studios' concern about the value of their FSPTW rights. We were not concerned in this context with remedies and, since our view was that products using rights from other windows were not close substitutes for FSPTW products, we agreed that a reduction in the value of FSPTW rights was likely to impact on studios' total revenues.

Summary

13. If movies in other windows were closely substitutable for FSPTW movies, we would have expected the effect on total studio revenue of a change in the value of FSPTW rights not to be very great (because what the studios would lose in their licensing of

FSPTW rights they would gain in the licensing of other rights). Consequently, we would have expected the studios not to be very concerned with changes to FSPTW prices. However, the six major studios appeared to us generally to be very concerned with the value of their FSPTW rights. In our August 2011 provisional findings, we inferred that this was evidence suggesting that products with movie content from other windows were not close substitutes for Sky Movies (which, at that time, we regarded as effectively the only product with FSPTW movie content). Subsequent to our August 2011 provisional findings, LOVEFiLM and Netflix launched OTT products with FSPTW content (from non-major studios) so Sky Movies was no longer the only pay-TV product with FSPTW content. In our view, the argument in our August 2011 provisional findings remained relevant to the substitutability for Sky Movies of downstream products without FSPTW content, ie all products except the OTT products of LOVEFiLM and Netflix. (We consider whether the OTT products of LOVEFiLM and Netflix are close substitutes for Sky Movies in Appendix 4.2.)

Survey data on reasons for subscribing to Sky Movies

1. This appendix summarizes survey data available at the time of our provisional findings in August 2011 on consumers' reasons for subscribing to Sky Movies and for cancelling their subscriptions.

Ofcom research

2. In Ofcom's 2007 research, Sky Movies subscribers were asked to rate the importance of five different aspects of the Sky Movies service. The results (reproduced in Table 1) showed that, at 42 per cent, the most popular 'must-have' feature was a wide range of films. A smaller proportion of respondents thought that the other factors were 'must have' (around 30 per cent). Ofcom also split out the results for marginal customers from this group. This showed that marginal subscribers placed a lower value on features of premium movie channels than infra-marginal subscribers.

TABLE 1 **Analysis of preferences of Sky Movies subscribers**

	% of sample who indicated this was 'must have'		
Aspect of Sky Movies	*All Sky Movies subscribers*	*Marginal subscribers*	*Infra-marginal subscribers*
Wide range	42	36	48
Can pay monthly	31	30	32
Access to new releases	30	22	35
Convenience of not renting a DVD	30	28	31
Films at all times	27	22	29

Source: Figure 42, Annex 14 to the First Pay TV Consultation and Figure 24, Annex 6 to the Second Pay TV Consultation. Marginal or price sensitive subscribers are those who said they would switch away in response to a price rise.

3. Ofcom's 2008 Willingness to Pay Survey asked respondents several questions about their decision to purchase or not purchase Sky Movies, and then went on to ask specific questions about their willingness to pay for different channel packages. This research found that:

   (a) Sky Movies subscribers were generally more interested in watching films than the average pay-TV subscriber,[1] with 10 per cent saying that they were passionate about films compared with 7 per cent for the entire sample; and only 18 per cent saying that they had no interest in films compared with 37 per cent for the entire sample. 54 per cent of Sky Movies subscribers said that they were interested in watching all films, compared with 40 per cent for the entire sample; and 16 per cent said that they were only interested in watching the latest film releases, compared with 13 per cent for the entire sample.[2]

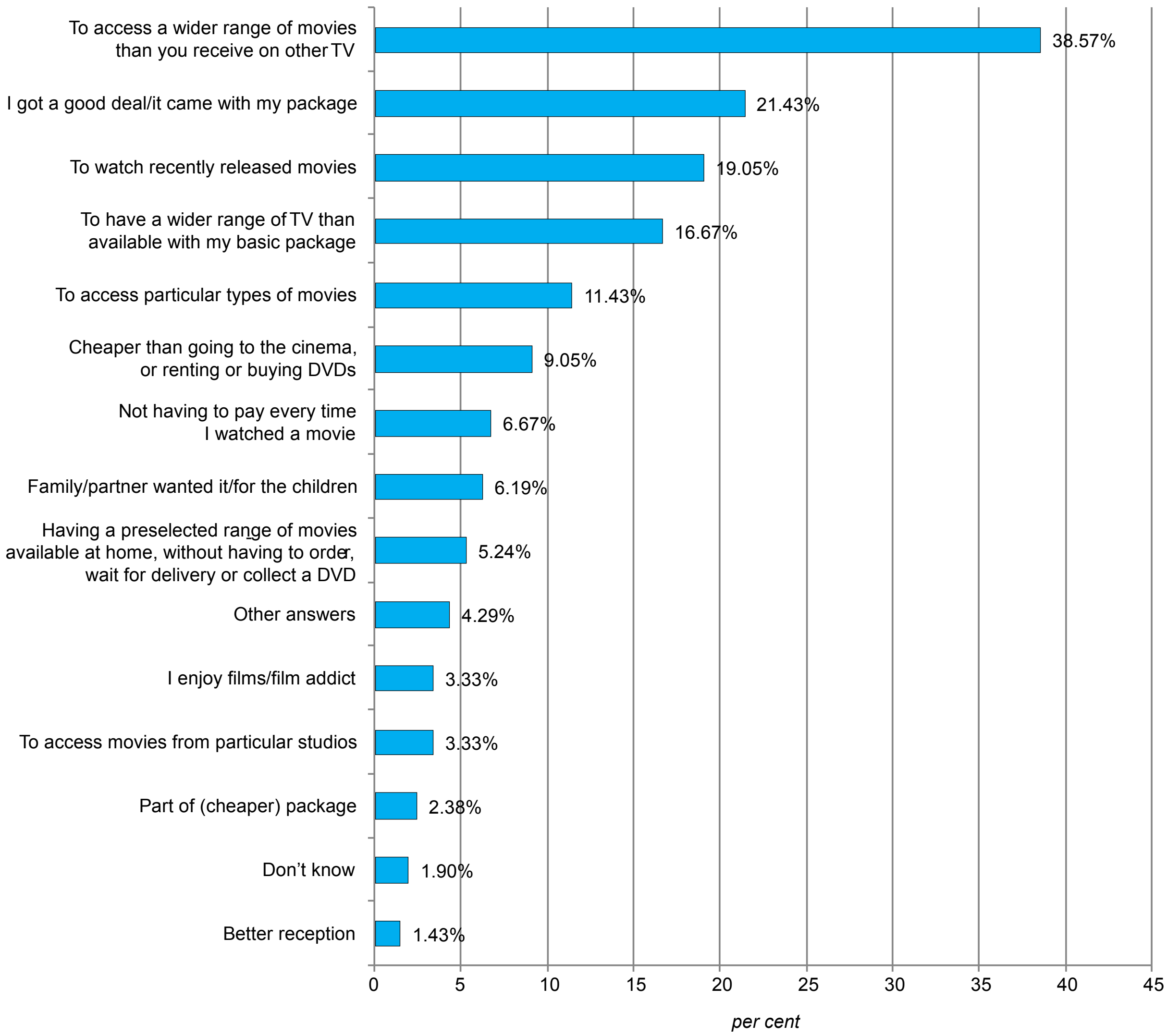
   (b) As shown in Figure 1, the most frequently-cited reason for originally choosing to subscribe to Sky Movies was to access a wider range of movies than received on other TV (37 per cent of respondents). 19 per cent of respondents said that it was to watch recently-released movies; 17 per cent said that it was 'to have a wider

[1] All adults aged 15+ who had a TV in their household and who were solely/jointly responsible for making the purchasing decision regarding the supplier for their TV service.
[2] Figure 11 from Annex 10 to Second Pay TV Consultation, Q11a 'How interested are you in watching films?'. Base: All adults aged 15+ who had a TV in their household and who were solely/jointly responsible for making the purchasing decision regarding the supplier for their TV service (1,474), Sky Movies subscribers (210).

range of TV than available with my basic package'; and 11 per cent said that it was to access 'particular types of movies'. 9 per cent said that it was 'cheaper than going to the cinema, or renting or buying a DVD' and 7 per cent said that it was so they did not have to pay every time they watched a movie.

FIGURE 1

Reasons why people originally subscribed to Sky Movies



Source: Ofcom (2008 Willingness to Pay Survey).

(c) The survey also asked reasons for *not* subscribing to Sky Movies. The two most popular answers were 'not interested in paying to watch movies on TV' (39 per cent of Sky customers, 42 per cent of Virgin Media customers) and 'Sky Movies is too expensive' (27 per cent for both groups). 13 per cent of Sky customers (20 per cent of Virgin Media customers) said that they did not subscribe because there were enough movies that they wanted to watch on other channels; 9 per cent of Sky customers (4 per cent of Virgin Media customers) preferred to watch the latest films sooner, in the cinema or on DVD; and 6 per cent of Sky customers

(2 per cent of Virgin Media customers) thought it cheaper to go to the cinema or rent a DVD.[3]

Sky research

4. At the time of our provisional findings in August 2011, we had seen no research from Sky showing customers' reasons for subscribing to Sky Movies. However, we had seen some analysis from Sky of its customers' satisfaction with Sky Movies, which might have been expected to provide some insight into why customers continued to subscribe (see Table 2). The analysis showed that [✂].

TABLE 2 **Sky customers' satisfaction (CSI scores) with Sky Movies**

	April–June 2010	*April–June 2009*
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]
[✂]	[✂]	[✂]

Source: [✂].

Note: [✂].

5. We also saw the results of some research by Sky into its former customers' reasons for leaving Sky Movies (see Appendix 4.1, Table 3). [✂]

6. In early 2008, Sky sought to understand how, among other things, shortening the current release window to match DVD release on various ranges of titles would impact customers (in total, 15 different scenarios were considered). Both qualitative and quantitative research was conducted. [✂][4]

7. Sky also carried out an analysis of the behaviour of its subscribers who had cancelled their Sky Movies subscription but who had remained with Sky.[5] Sky identified [✂] households on its Skyview panel that:

   (a) were subscribers to a package including Sky Movies in the 12-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 12-month period from April 2007 to March 2008 ('Year 2'); and

   (c) did not subsequently restore Sky Movies to their subscription in the following 12 months ('Year 3').

[3] Figure 9 from Annex 10 to Second Pay TV Consultation, Q10a Why do you not subscribe to Sky Movies? Why else? Base: All adults aged 15+ who had pay TV but do not subscribe to Sky Movies and who were solely/jointly responsible for making the purchasing decision regarding the supplier for their TV service (543), Sky (346), Virgin Media (192).
[4] SBO is Sky Box Office, Sky's PPV service.
[5] Sky noted that it would be desirable also to analyse behaviour of Sky Movies subscribers who cancelled entirely their Sky subscription, [✂].

8. Sky compared 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 ensured that comparisons were not affected by seasonal differences in viewing. [✂]

FIGURE 2

[✂]

Source: Sky.

FIGURE 3

[✂]

Source: Sky.

9. Sky said that its analysis provided strong evidence, based on consumers' actual behaviour, of the substitutability of movies outside the FSPTW, and other types of programming, with movies in the FSPTW. Sky also noted that its analysis did not take into account increased viewing of movies and other programmes via other methods (such as PPV, DVDs or the Internet), which represented further potential substitutes for Sky Movies.

Movies on pay TV survey—A research report prepared for the CC by GfK NOP

As part of the movies on pay-TV market investigation, the CC commissioned GfK NOP to undertake a market research survey to understand better what drives pay-TV subscriber decisions, how important movies are in the decision to purchase pay TV, and how consumers might change their decision if new movie services were offered.

The resulting survey report is attached.

Films on Pay TV Survey

A research report prepared for

The Competition Commission

February 2011

Provided by: GfK Consumer Services

Your contact:

David Rodgers

Phone: +44 (0)20 7890 9779, Fax: +44 (0)20 7890 9744
e-Mail: david.rodgers@gfk.com

Table of Contents

1 **Executive Summary** **1**
2 **Background and Research Objectives** **5**
3 **Research Design** **6**
4 **Survey Findings** **8**
4.1 Respondent Profile 8
4.2 TV and Film Viewing 11
4.3 Pay TV Services 19
4.4 Sky Movies 33
4.5 Consumer Interest in Different Film Packages 39
4.5.1 Appeal of Different Features 39
4.5.2 Propensity to Buy a Film Service (Derived) 50
4.5.3 Provider Influence on Propensity to Buy 55

Appendix

A - Questionnaire

B - Film packages shown to derive propensity to purchase

C - Summary findings from the qualitative survey

1 Executive Summary

1. The Competition Commission (CC) is investigating the supply and acquisition of Subscription Pay TV Movie Rights and the wholesale supply and acquisition of packages including Core Premium Movies channels. As part of this investigation the CC commissioned GfK NOP to undertake a market research survey to help better understand what drives Pay TV subscriber decisions, how important films are in the purchase decision, and how they might change their decision if new film services were offered.

2. Interviewing was conducted among those who were:
   - Responsible for making decisions about TV services in the household (solely or jointly)
   - Had a Pay TV service
   - Or only had free-to-air (FTA) channels but would consider Pay TV in the next 2-3 years, and were interested in watching films

3. 807 nationally representative interviews were conducted face-to-face in respondents' homes. A further 235 boost interviews were carried out among specific sub-groups of TV users to ensure sufficient for separate analysis (these boost interviews were down-weighted at the analysis stage back to their natural proportion), making a total 1,042 interviews.

4. Just over half (54%) of those interviewed were Sky users, the majority being those who did not subscribe to Sky Movies. Virgin Media users accounted for a quarter (26%) of the audience, again predominantly comprising those without Sky Movies, whilst 15% had FTA only. 4% bought a service from another Pay TV provider: BT (3%), Talk Talk (1%) and Top-Up TV (less than 1%).

5. A high proportion of both Sky and Virgin Media users had subscribed to a Pay TV service for many years, the former notably so (nearly half had bought a Pay TV service for at least ten years). Greater choice of TV programmes was the main reason why people bought into Pay TV, with six in ten mentioning this spontaneously. The next most frequently mentioned reasons were: to watch more sports and that it was bought as part of a bundled service with telephony and/or broadband. Mention of film watching was at a lower level, spontaneously by only a third as many who mentioned sports.

6. One in four (24%) had switched previously from another Pay TV provider (including lapsed users who now had FTA). Most Sky customers had not used another provider, 9% (of the total sample) had switched into Sky compared with 45% who had Sky but had never previously bought another Pay TV service. 7% had switched into Virgin Media from another Pay TV provider whilst 19% had only ever used Virgin Media. 6% were FTA viewers who had previously used a Pay TV service.

7. Amongst those who still had a Pay TV service, the main reasons for switching provider were cost, that is “cheaper TV” or switching to a “cheaper bundle of TV/telephony/broadband services”. The reason for switching varied by customer type, with those switching into Virgin Media much more likely to mention cost reasons (notably for bundled services) whilst Sky customers tended to highlight programme range and the sports package more often than others. Cost of Pay TV services was the key reason why FTA users had stopped buying Pay TV.

8. A large majority of Virgin Media TV customers bought the bundle of telephony and broadband services as well as TV from the company (81%). In contrast, Sky customers were much more likely to have only TV services from the company (68%). The profile of other Pay TV users was closer to the Virgin Media than the Sky profile. About two in three of Virgin Media and Other Pay TV customers said having the bundle influenced their decision about which Pay TV provider to use, whilst among Sky customers with a bundle of services a higher proportion said it had no influence (45%).

9. Pay TV users were asked what level of saving would be required on the amount they spent in total with their TV provider (including the amount spent on telephony and broadband services, if applicable) to make them switch to another provider. One in five (21%) would not switch at any price and a further one in five (20%) did not know. Among the remainder, the saving (on their bundle of services) that would be required to make them switch was 32%, on average.

10. Pay TV users were more likely to think it easy rather than difficult to switch provider. However, apart from those who had done so, few had considered switching provider in the last two to three years. The main reasons why people had not switched or considered doing so were inertia (“too much hassle to change”) and satisfaction with their current provider.

11. The average household had watched 16 films in the last month, and two in three had someone in the household who had watched a film on DVD in the last month. FTA films were also watched with some regularity, 37% having watched one on Film 4 in the last month and 50% on another FTA channel. In one in three (34%) households someone had been to the cinema in the last month, and in one in six (17%) someone had watched a film on Sky Movies. Mentions of other subscription channels or PPV were at lower levels.

12. 25% of those interviewed had Sky Movies, and nearly half of these customers had bought it for over five years (and a quarter for over ten years). One in two (51%) thought that Sky Movies was important in their decision to have a Pay TV service with their provider, but only 17% said it was very important. Respondents were asked what they would do if their TV provider stopped offering Sky Movies, and 22% said they would stop using their TV service, although just half (56%) of these customers said they would switch to another provider with Sky Movies (rest would go FTA or to another provider without Sky Movies, or did not know what they would do).

13. One in four (26%) of those without Sky Movies had bought it previously, and 14% had considered taking a subscription in the last year. Four in ten (41%) said nothing would make them consider subscribing, and the only factor mentioned to any notable extent that would generate consideration was a reduction in the price.

14. A conjoint exercise was conducted to assess the interest in different types of film packages. The two most important attributes in driving consumer preference between the film packages tested were "How you watch a film" and "Price". Looking at the former, there was a strong preference for Pay-per-View on demand (PPV), rather than a monthly subscription package. Among the monthly subscription packages tested respondents preferred the on demand (watch anytime) option rather than the film being shown at the scheduled time, or on demand but only within one week of the scheduled time. The size of the library of films available to view was relatively unimportant, and the cinema release date of the films shown even less so.

15. The conjoint analysis provided a derived measure of propensity to buy. The (derived) proportion that would buy any combination of the film packages tested was not high. Just 13% would buy the package that respondents most preferred (most recent cinema release date (April 2009 – March 2010), the largest library, PPV, and £1 per film).

16. About half of Sky customers who would definitely/probably buy one of the film packages tested said they would be less likely to buy it if it was offered by another provider (this proportion did not vary by alternative provider considered). Virgin Media customers were slightly less resistant to the idea of changing provider, but at least four in ten said it was less likely they would buy the package if it was offered by someone other than Virgin Media. Very few indicated that they would be more likely to buy from an alternative provider (5% or less in all cases bar one) - for most of the remainder, provider had no impact on their propensity to purchase.

2 Background and Research Objectives

17. The CC is investigating the supply and acquisition of Subscription Pay TV Movie Rights and the wholesale supply and acquisition of packages including Core Premium Movies channels.

18. 'Subscription Pay TV movie rights' are defined as the rights licensed by the six largest Hollywood studios for the first period during which movies can be exhibited on subscription broadcast channels and/or subscription video on demand (SVOD) services in the UK. This period comes after the movies have been available to buy (DVD or download) or watch on a PPV basis but before they are more generally available e.g. on FTA broadcast channels.

19. 'Core premium movies channels' are defined as Sky's movie channels, i.e. television broadcast channels offered by Sky for wholesale and retail, which wholly or mainly comprise movies, and for which a subscription fee is levied.

20. As part of this investigation the CC commissioned GfK NOP to undertake a research exercise to help better understand what drives current Pay TV subscriber decisions, the reasons that non-subscribers have chosen not to subscribe and the offering that would tempt them.

21. The purpose of this research was to help understand why consumers chose the TV service they currently have, how important films are to the purchase decision, and how they might change their decision if new film services were offered by rivals. In particular, the survey was required to establish:

- What TV service they currently have, and why
- What knowledge they have of current/ future TV film offerings
- The extent to which they watch films: when; how often; on what media etc.
- Whether films are important to them – if yes how soon after release would they like access, and how wide a range of films do they require
- How interested they are in subscription video on demand, especially in the first subscription Pay TV window (FPTW)
- Whether they might move away from Sky if a rival FPTW service became available (and why/ why not)?

3 Research Design

22. A two-stage research approach was adopted. First, qualitative work was undertaken to understand general views of Pay TV services, to explore consumer language and to test possible questionnaire approaches. This comprised five mini-groups with different types of Pay TV and FTA users. The work was used to inform the design of the quantitative questionnaire, and as it was not a decision making tool in its own right the findings are not reported in detail in this document, although a summary of findings is appended.

23. The main stage quantitative survey provided the findings to meet the research objectives. The survey was conducted among those who were:
    - Responsible for making decisions about TV services in the household (solely or jointly)
    - Had a Pay TV service
    - Or had FTA only but would consider Pay TV in the next 2-3 years, and were interested in watching films

24. Questions were put on the GfK NOP Random Location Omnibus (RLO) to establish the demographic profile of this audience, and this was used in the design of the survey. It should be noted that the eligible audience for the survey represents 54% of the UK population (aged 16+ years.)

25. A cognitive pilot exercise of 15 interviews was carried out before the main stage quantitative fieldwork to test the survey questionnaire. The pilot took the form of an hour long pre-booked appointment, with the first half hour dedicated to going through the questionnaire and the second half a discussion with the respondent of the various sections or specific questions to check for clarity and comprehension and whether the responses reflected their true opinions. This pilot identified a few areas in which improvements could be made to the questionnaire, and these were implemented before the main fieldwork period.

26. 807 interviews representative of the eligible audience were carried out for the survey. Interviews were conducted face-to-face in respondents' homes with computer assisted personal interviewing (CAPI) machines, and the average interview lasted approximately 30 minutes. 70 sampling points (output areas) were selected on a nationally representative basis, and quotas were then set within each sampling point on age and working status within gender, in line with the demographic profile established from the Omnibus work. A further 235 boost interviews were conducted with specific sub-groups of TV users to ensure sufficient for separate analysis. These boost interviews were down-weighted at the analysis stage to their natural proportion so that the total sample can be described as representative.

27. The table of all interviews achieved (1,042) is shown below :

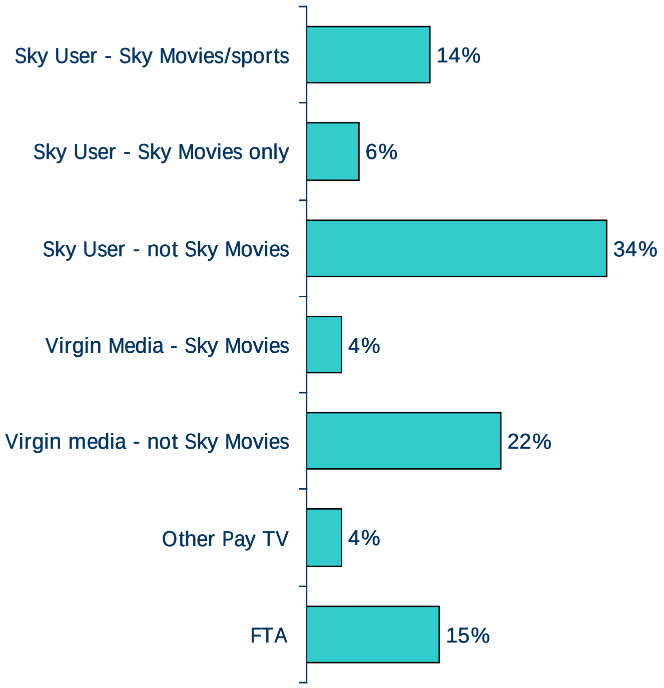
Respondent type	**Interviews from the main (representative) sample**	**Boost interviews**	**TOTAL**
Sky user – Sky Sports and Sky Movies subscriber	113	0	**113**
Sky user – Sky Movies only (not sports)	50	101	**151**
Sky user – not Sky Movies	272	0	**272**
Virgin Media user – with Sky Movies	36	72	**108**
Virgin Media user – not Sky Movies	177	0	**177**
Other Pay TV provider users	36	33	**69**
FTA only	123	29	**152**
TOTAL	**807**	**235**	**1,042**

4 Survey Findings

4.1 Respondent Profile

28. Just over half (54%) of those interviewed were Sky users, the majority being those who did not subscribe to Sky Movies. Virgin Media users accounted for a quarter (26%) of the audience, again predominantly comprising those without Sky Movies, whilst 15% had FTA TV. 4% bought a TV service from another provider – BT (3%), Talk Talk (1%) and Top-Up TV (less than 1%).

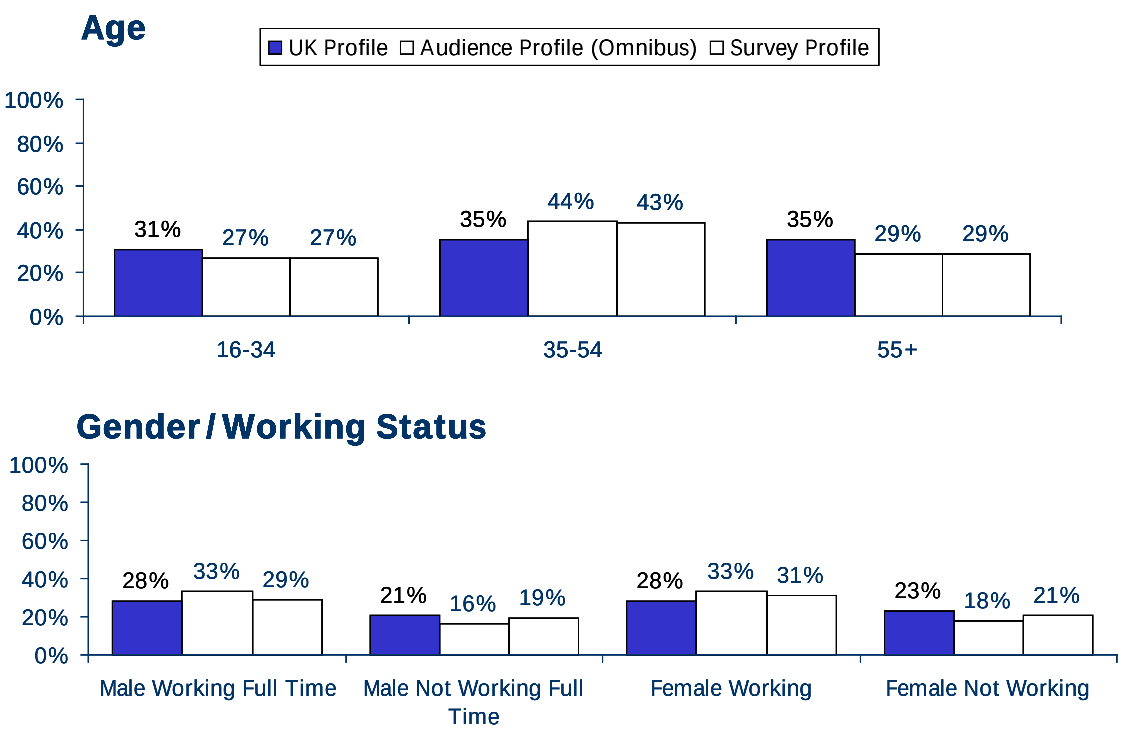
Figure 1: Pay TV Suppliers Used



Base: All (807)

29. The charts below show the demographic profile of the survey sample compared against the profile established from the Omnibus study (used to set quotas) and the profile of the UK adult population (aged 16+ years). There is a close match between the survey and Omnibus profile, indicating that the survey is demographically representative of those qualifying for interview. Comparing the survey profile against the general population profile, the survey profile is more likely to be aged 35-54 years and skewed towards households with children.

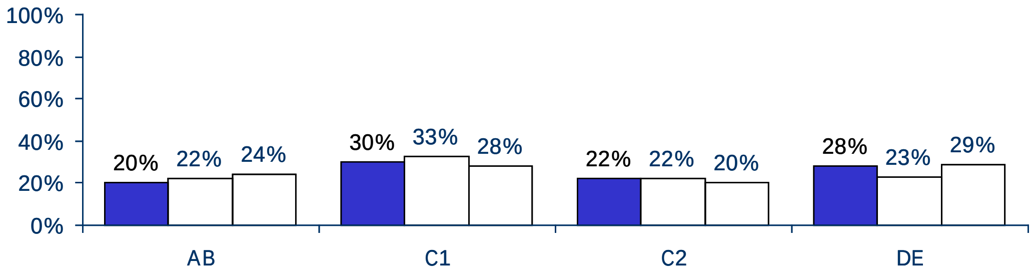
Figure 2: Demographics (1)



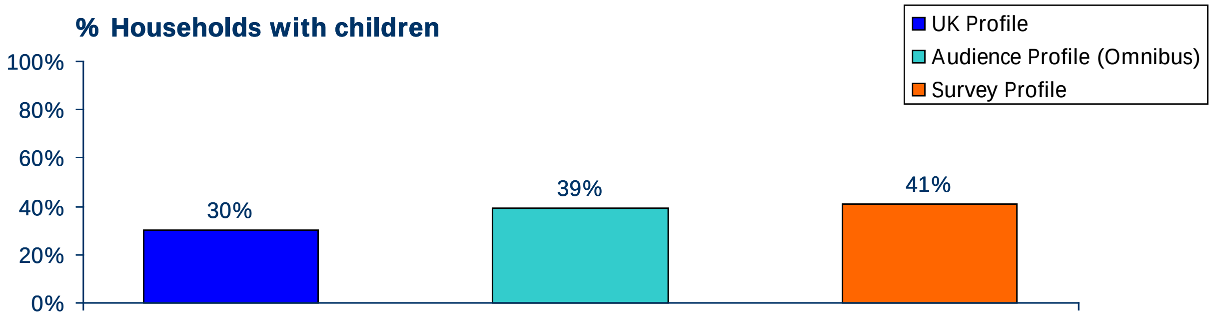
Base: Omnibus = c. 2,000; Survey profile = 1042

Figure 3: Demographics (2)

Social grade:



% Households with children



Base: Omnibus = c. 2,000; Survey profile = 1042

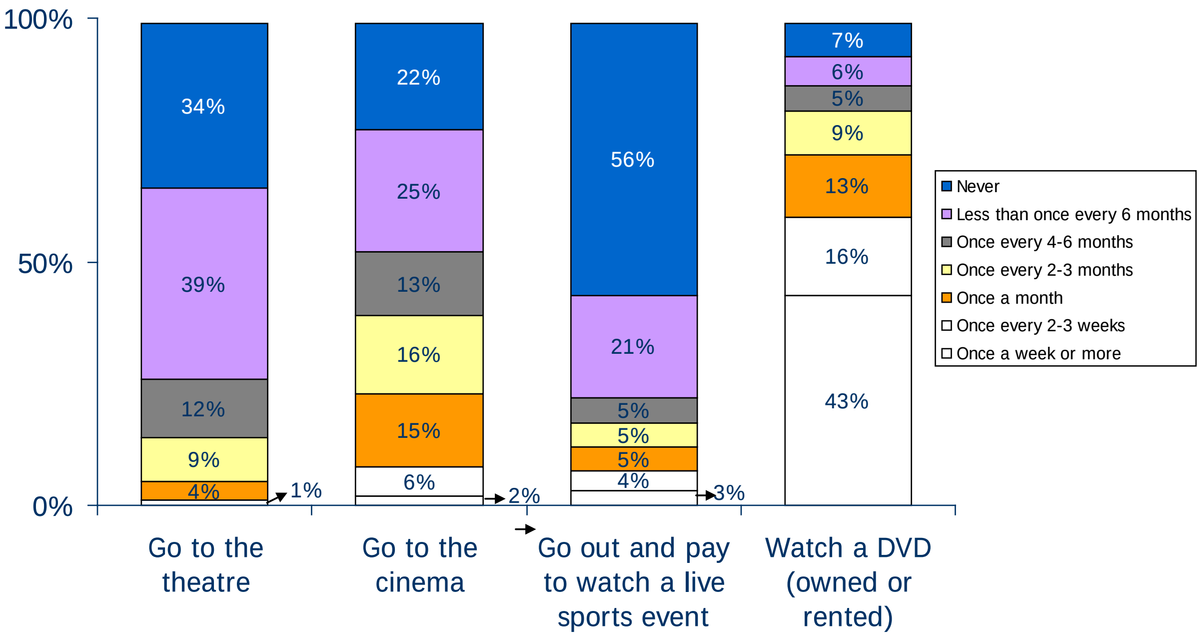
30. One in four (26%) of those interviewed had moved house in the last two to three years, and a some others had experienced another major life change (12% had a baby, 7% retired/stopped working, 7% started living with someone else, 6% had been made redundant, 5% had children who had left home). Just over one in two (55%) indicated that none of these events had happened to them in the last two to three years.

4.2 TV and Film Viewing

31. The first section of the questionnaire focused on general TV and film viewing behaviour. By way of introduction, respondents were asked how frequently they or anyone else in their household undertook various activities (described in the chart below). Noteworthy is that nearly half (43%) watched DVDs (either rented or bought) at least once a week, and the frequency of so doing did not vary according to the type of TV service received.

Figure 4: Q1 – Frequency of undertaking various activities

How often do you, or anyone in your household .....

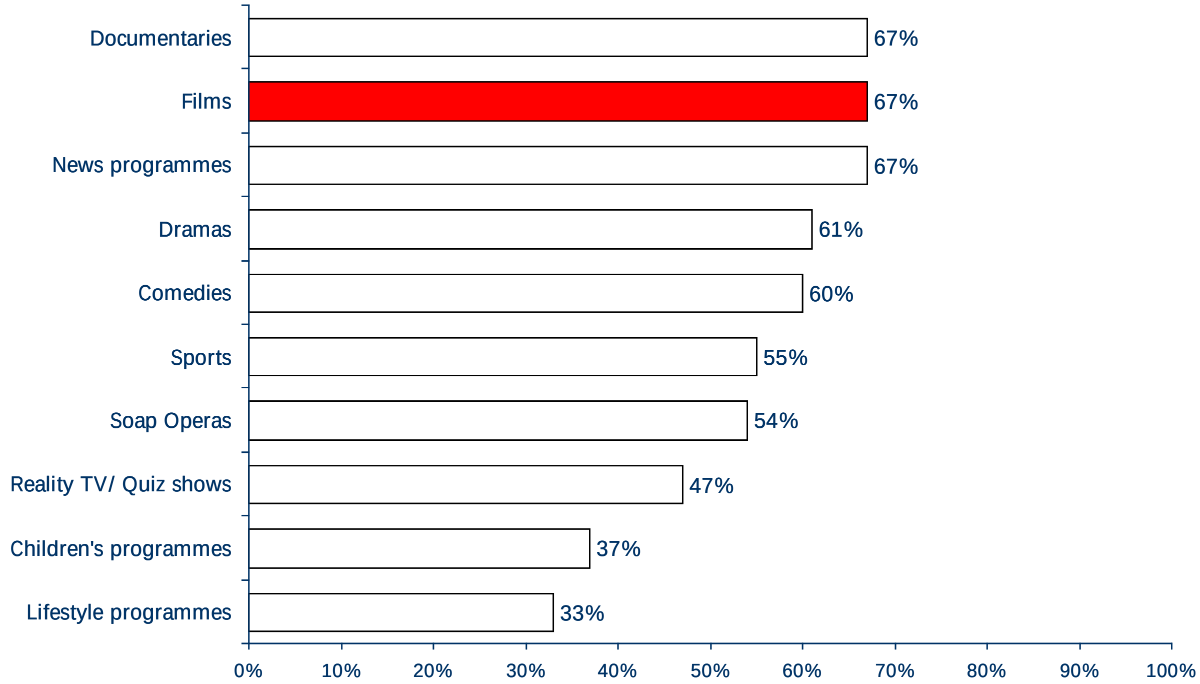


Base: All (1042)

32. Two in three households had someone who watched films on TV at least once a week. This is the same level as claimed to watch documentaries and news programmes

Figure 5: Q2 – % watch programme type once a week or more (anyone in household)

Which if any of the following would you say you, or anyone else in your household, watch regularly on TV, by regularly I mean at least once a week?



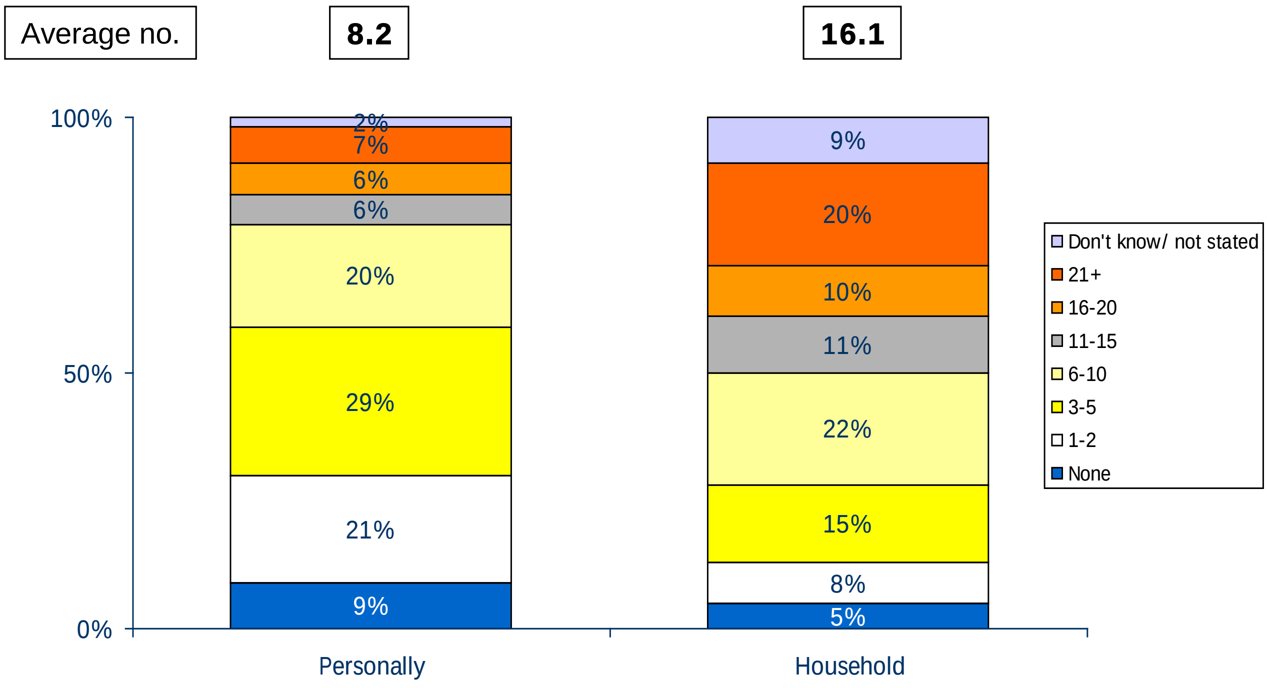
Base: All (1042)

33. Respondents were asked how many films they personally had watched in the last month (by any means) and how many had been watched by others in the household without them. Adding responses to the two questions gives the number of films watched by the household in total. At an individual level the average number of films watched in the last month was eight, and this figure doubled when assessed at the household level. However this average conceals a wide range of responses, with a third of those answering watching more than 15 films a month in the household, and about the same proportion watching five or less films (and 5% not watching any at all).

Figure 6: Q12ci/Q12cii – Number of films watched in the last month

Roughly how many films in total have you personally watched in the last month?

Roughly how many films in total have other people in your household watched without you in the last month?

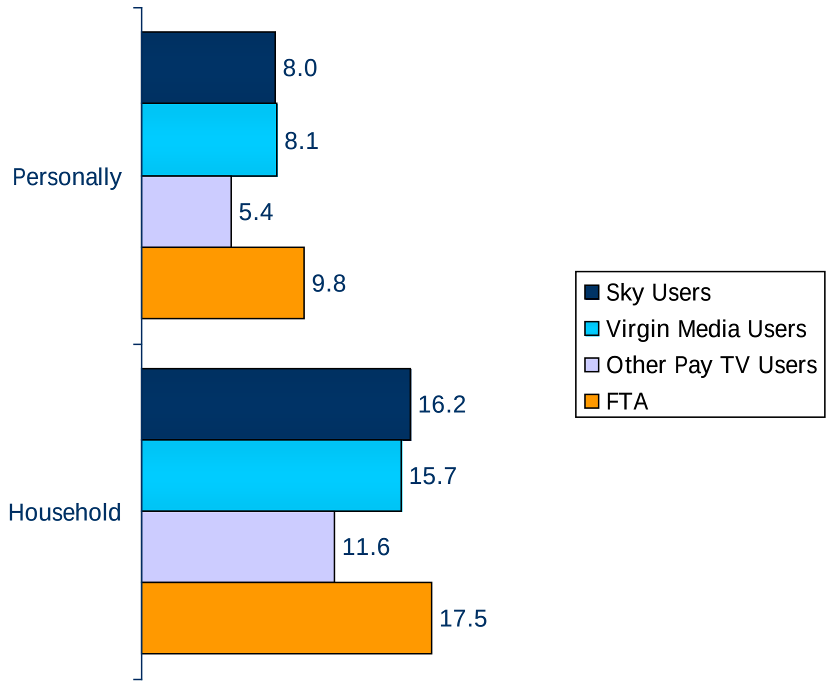


Base: All respondents (1042)

34. The average number of films watched (by any means) varied little by the type of TV service received. The (relatively small number of) Other Pay TV users interviewed were somewhat less likely to watch films, as shown in the chart below. However, those with Sky Movies tended to be heavier film viewers (average 21 films a month in the household) compared with lapsed users (19 a month) and those who had never subscribed to Sky Movies (13 a month).

Figure 7: Q12ci/Q12cii – Average number of films watched in the last month (any channel – at cinema, on DVD, on internet, on TV)

Roughly how many films in total have you personally watched in the last month?
Roughly how many films in total have other people in your household watched without you in the last month?



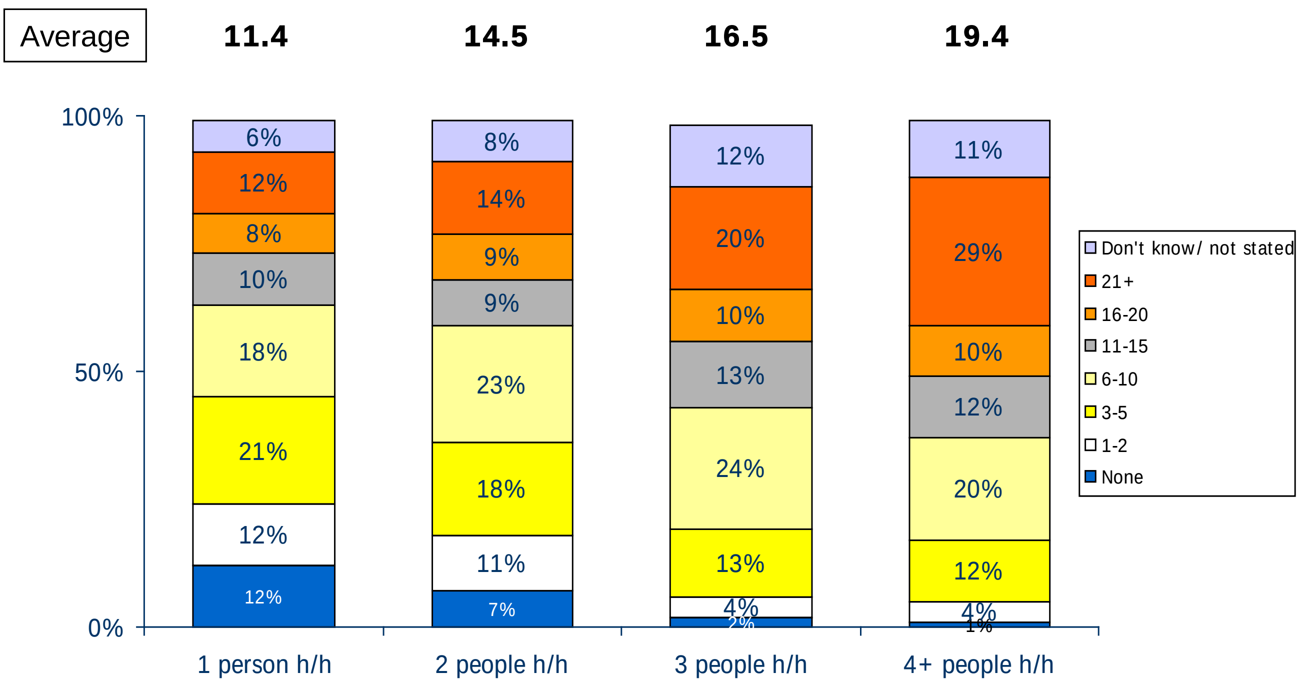
Base: All - Sky subscribers (536), Virgin Media Subscribers (285), Other Pay TV Subscribers (69), FTA (152)

35. Larger households tended to watch more films. Households with four or more members watched nearly 20 films a month (by any means), which compared with 11 films watched in single person households.

Figure 8: Q12ci/Q12cii – Number of films watched in the last month (household)

Roughly how many films <u>in total</u> have you <u>personally</u> watched in the last month?

Roughly how many films <u>in total</u> have <u>other people</u> in your household watched <u>without you</u> in the last month?

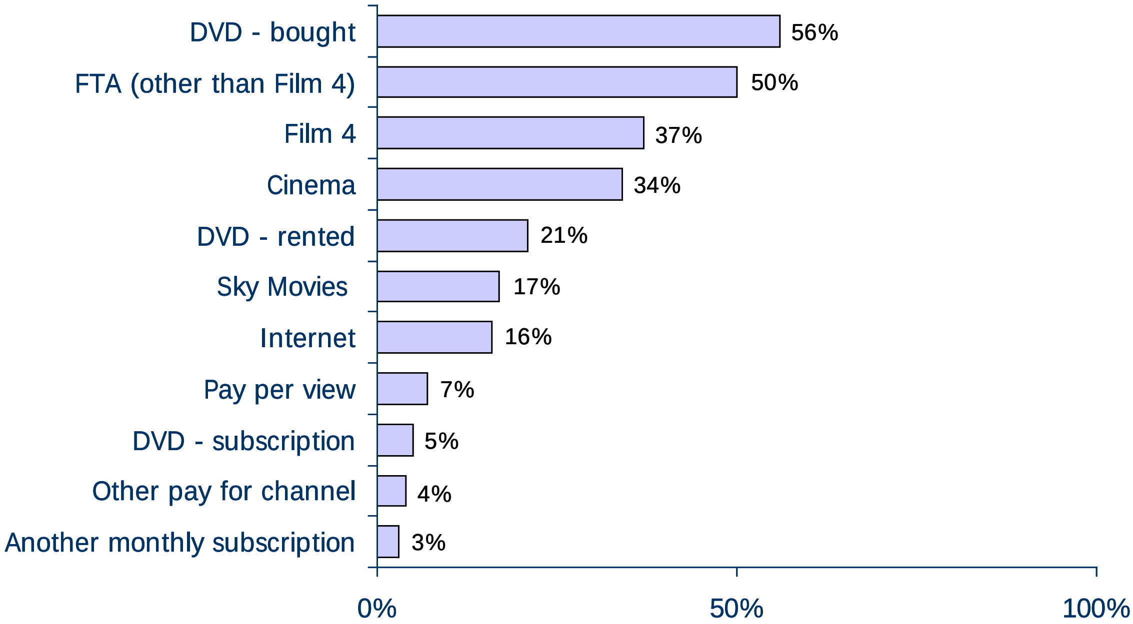


Base: All respondents (1042)

36. A high proportion watched films via DVD. Two in three (67%) had watched a film on DVD in the last month (either themselves or someone else in the household), these mostly being bought DVDs rather than rented or via a DVD subscription service. FTA films were also watched with some regularity, 37% having watched one on Film 4 in the last month and 50% on another FTA channel. In one in three (34%) households someone had been to the cinema in the last month, and in one in six (17%) someone had watched a film on Sky Movies. Mentions of other subscription channels or PPV were at lower levels.

Figure 9: Q12ai – Methods of watching films in last month (household)

In the last month, have you or anyone in your household watched a film in any of the ways described on this showcard?

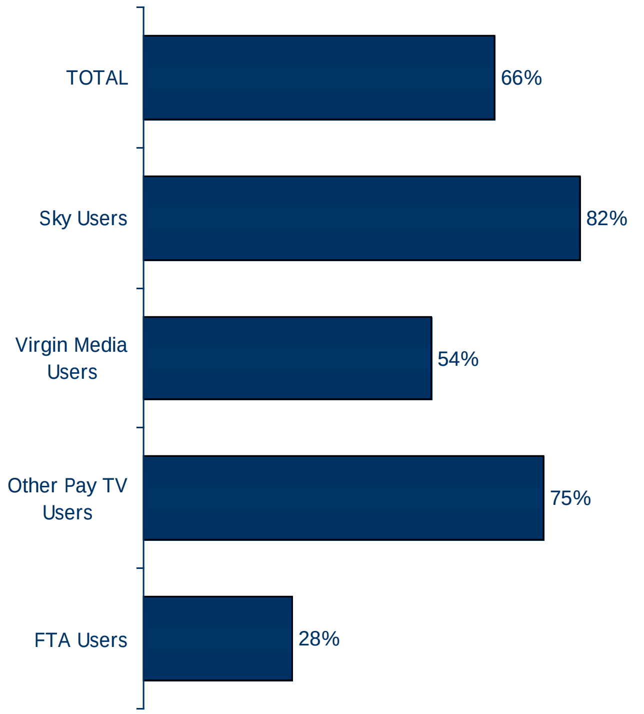


Base: All (1042)

37. Two in three (66%) had a facility to record programmes on their TV, this being somewhat higher among Sky users and lower among FTA users. Nearly everyone who had a recording facility claimed they knew how to use it (97% of those with the facility).

Figure 10: Q13 – % with facility to record programmes on TV

Do you have a facility to record or pause programmes on your TV, so that you can watch them later?

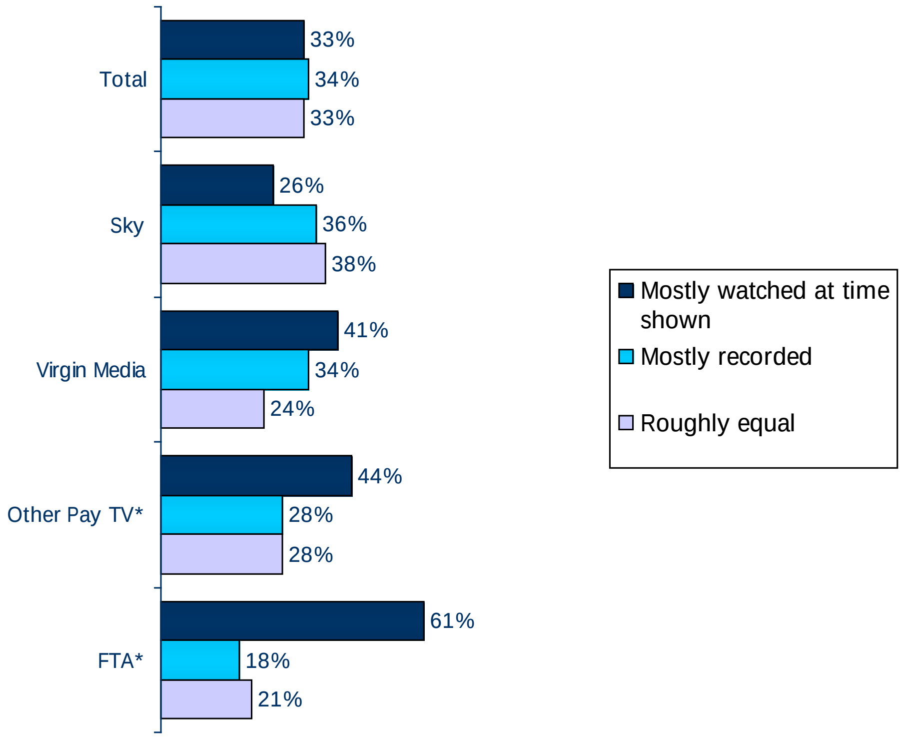


Base: All (1042) - Sky subscribers (536), Virgin Media Subscribers (285), Other Pay TV Subscribers (69), FTA (152)

38. Those who had watched films via FTA or a subscription in the last month and had recording facilities were asked how they had watched these films. There was an even split between those who tended to watch at the time the film was scheduled and those who recorded them and watched them later. Sky users were more likely to have recorded the films they watched, FTA users to have watched at the scheduled time.

Figure 11: Q14 – Method of watching films on TV in last month – those who have recording facility

(Apart from any pay per view / subscription video on demand films (IF WATCHED)), how did you and others in your household watch the films that you saw on TV in the last month? Did you tend to watch them live at the time they were transmitted, or record them and watch later, or did you do both equally?



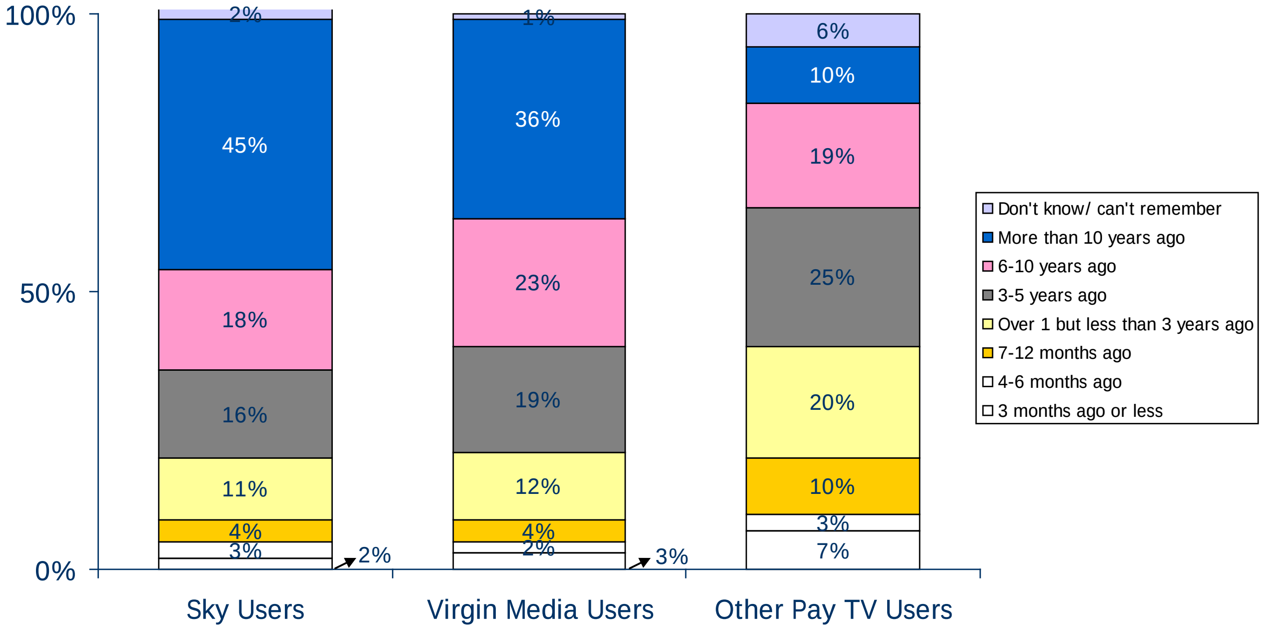
Base: Those who watched films via FTA or TV subscription channels in the last month and have recording facility – Total (505), Sky (308), Virgin Media (123), Other Pay TV (36)* and FTA (38)*. * caution low base size.

4.3 Pay TV Services

39. Pay TV users were asked when they first got a TV service that they paid for. A high proportion of both Sky and Virgin Media users had subscribed to a Pay TV service for many years, the former notably so (nearly half had bought a Pay TV service for at least ten years). Other Pay TV users were more likely to have started using a Pay TV service recently (within the last three years).

Figure 12: Q3 – When first got a Pay TV service

When did you <u>first</u> get a TV service that you pay for?



Base: All Pay TV users - Sky Users (536); Virgin media Users (285); Other Pay TV users (69)

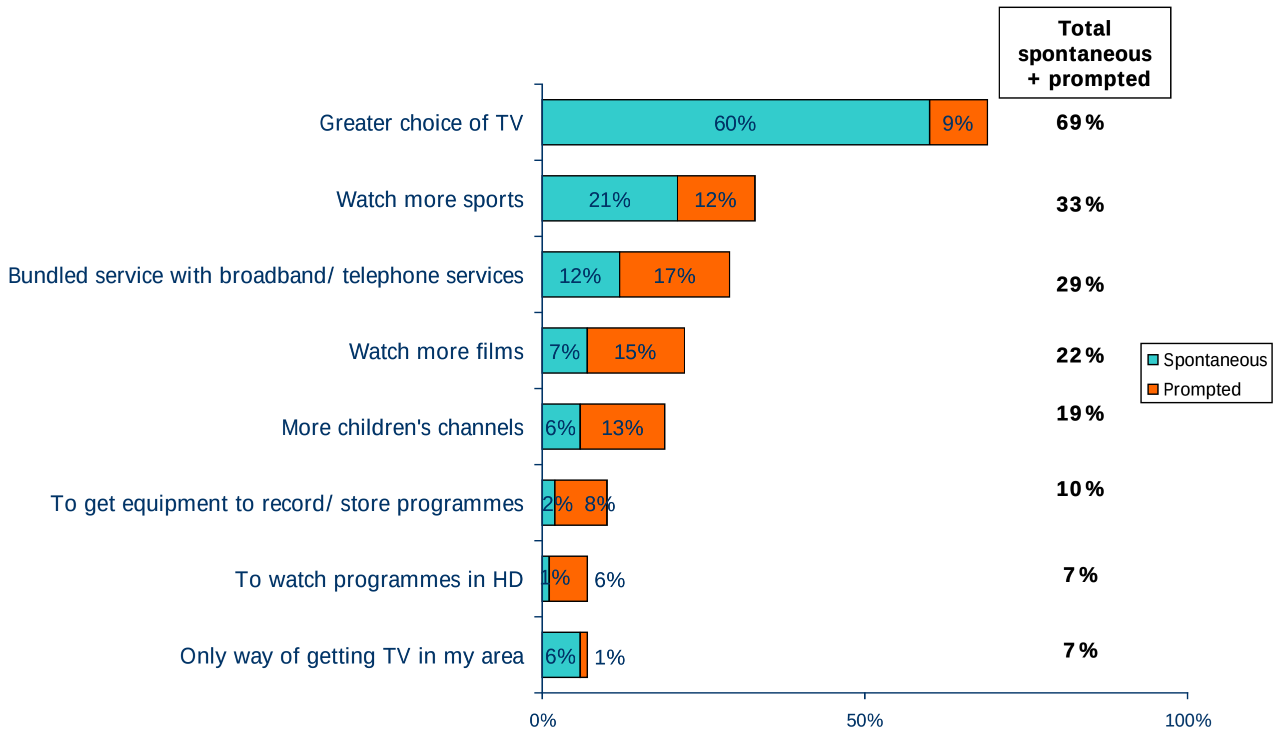
GfK NOP

40. Greater choice of TV programmes was the main reason why people bought into Pay TV, with six in ten mentioning this spontaneously. The next most frequently mentioned reasons were: to watch more sports and that it was bought as part of a bundled service with telephony and/or broadband. Mention of film watching was at a lower level, spontaneously by only a third as many who mentioned sports.

Figure 13: Q4/Q5 – Reasons first decided to get a Pay TV service

Why did you first decide to get a TV service that you pay for?

Here is a list of reasons given by some other people, which if any describe why you first paid for a TV service?

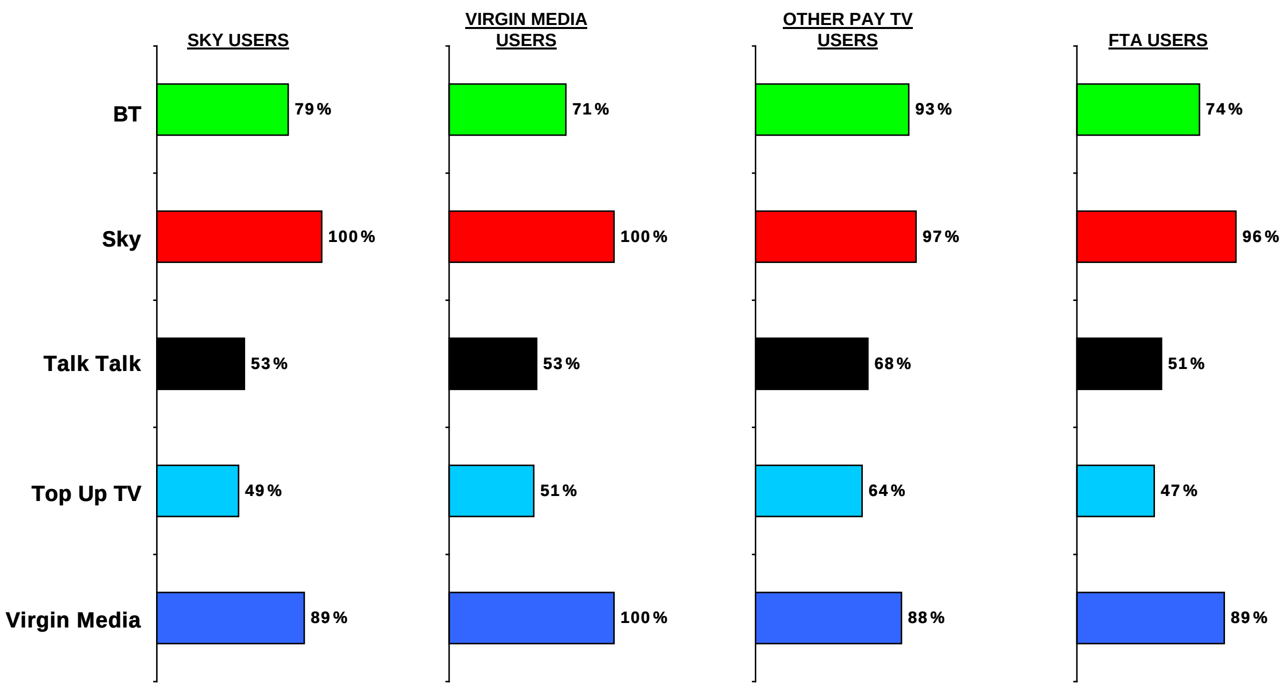


Base: All Pay TV subscribers (890)

41. Awareness of Pay TV providers was at a high level. Nearly everyone knew that Sky provided such services, and about nine in ten of non-Virgin Media subscribers knew that Virgin Media offered Pay TV services. Approximately three in four of those who did not use Other Pay TV providers knew that BT offered Pay TV, and about one in two knew that Talk Talk and Top-Up TV did so.

Figure 14: Q6 – Awareness of Pay TV providers

Did you know that you can get TV services from .....

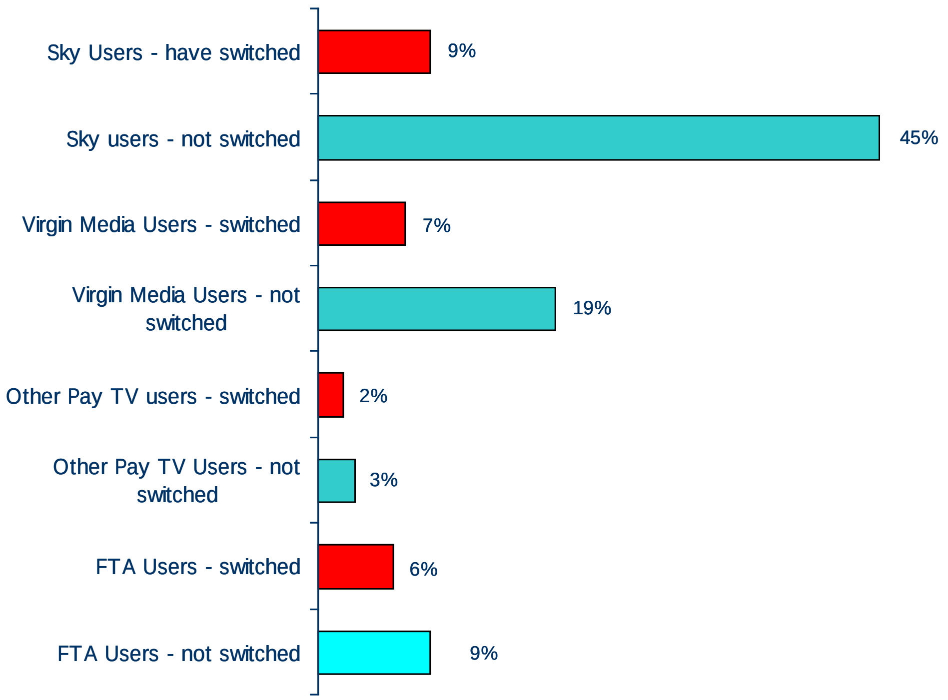


Base: All - Sky subscribers (536), Virgin Media Subscribers (285), Other Pay TV Subscribers (69), FTA (152)

42. One in four (24%) had switched previously from another Pay TV provider (this includes those lapsed users who now had FTA). Most Sky users had not used another provider, 9% (of the total sample) had switched into Sky compared with 45% who had Sky but had never previously had another Pay TV service. The ratio of switchers to non-switchers among Virgin Media customers was higher, 7% (of the total sample) had used another provider previously whilst 19% had not. Four in ten of all the FTA viewers interviewed were lapsed Pay TV users.

Figure 15: Q7a – Extent of switching between Pay TV providers

Have you ever bought a TV service from any of these providers?

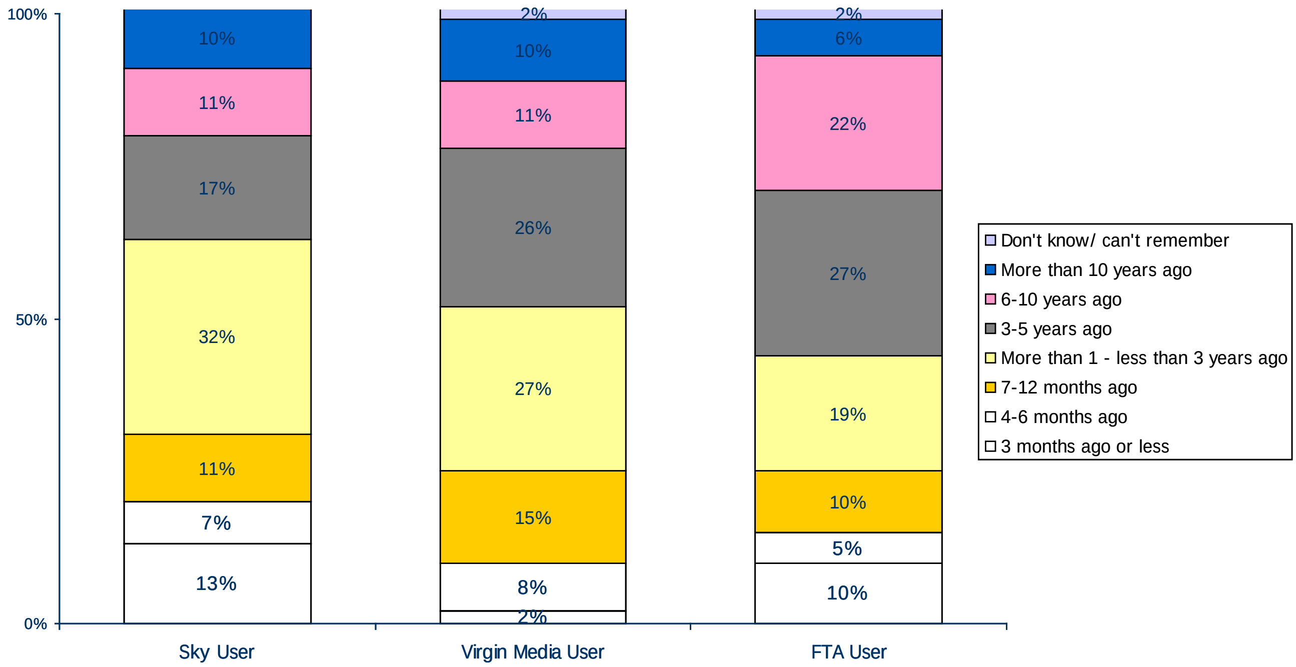


Base: All (1042)

43. Those who had switched from another Pay TV provider, and FTA respondents who previously used a Pay TV service, were asked how long ago they had most recently switched. A quarter of Virgin Media and FTA respondents had switched in the last year, and nearly a third of Sky customers. On the other hand, there was evidence of less recent switching activity, with over 20% switching more than five years ago.

Figure 16: Q7bi – When most recently switched from previous Pay TV provider

When did you most recently switch to (.......) for your TV service?

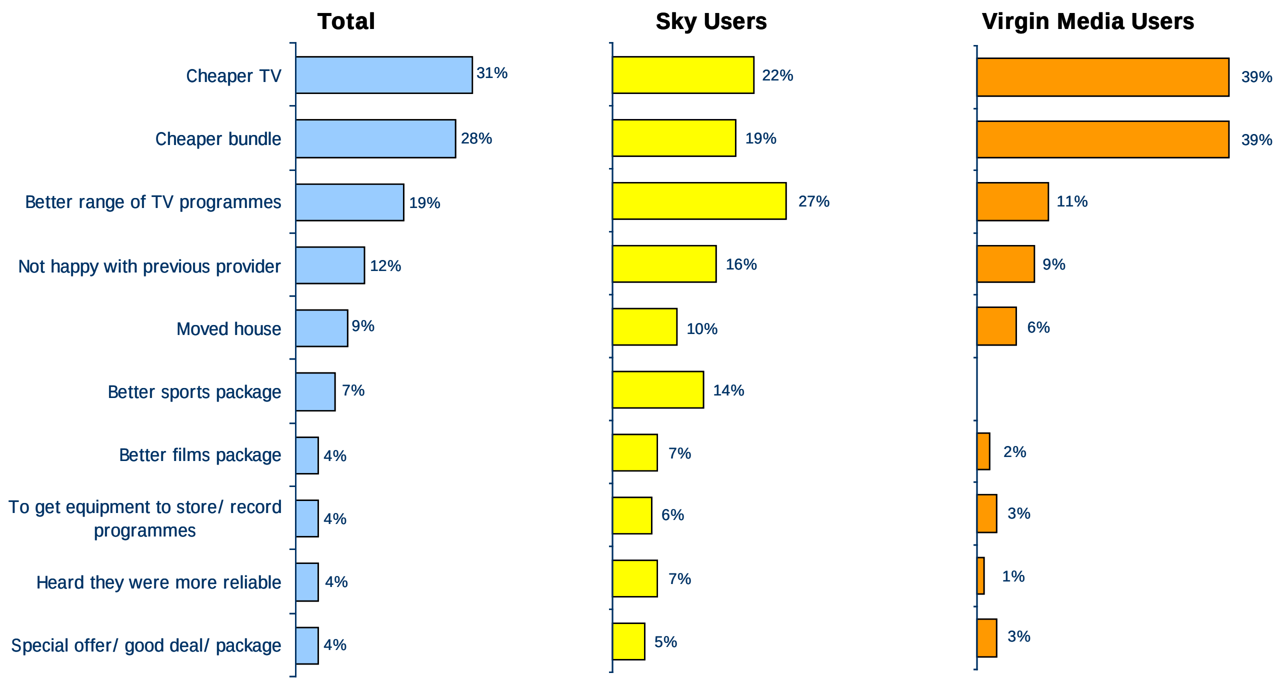


Base: All who have switched Pay TV provider or FTA who previously had a Pay TV service.
Sky subscribers (95), Virgin Media Subscribers (92), Other Pay TV Subscribers (29 - base too small to report), FTA (63)

44. Amongst those who still had a Pay TV service, the main reasons for switching provider were cost, that is "cheaper TV" or switching to a "cheaper bundle of TV/telephony/broadband services". There were some who spontaneously mentioned the better range of TV programmes as the reason for switching, and at a lower level mention of better sports and film packages. The reason for switching varied by customer type, with those switching into Virgin Media much more likely to mention cost reasons (notably for bundled services) whilst Sky customers tended to highlight programme range and the sports package more often.

Figure 17: Q7bii – Reasons for switching Pay TV service providers – spontaneous mentions

Why did you decide to switch to (…….) for your TV service?



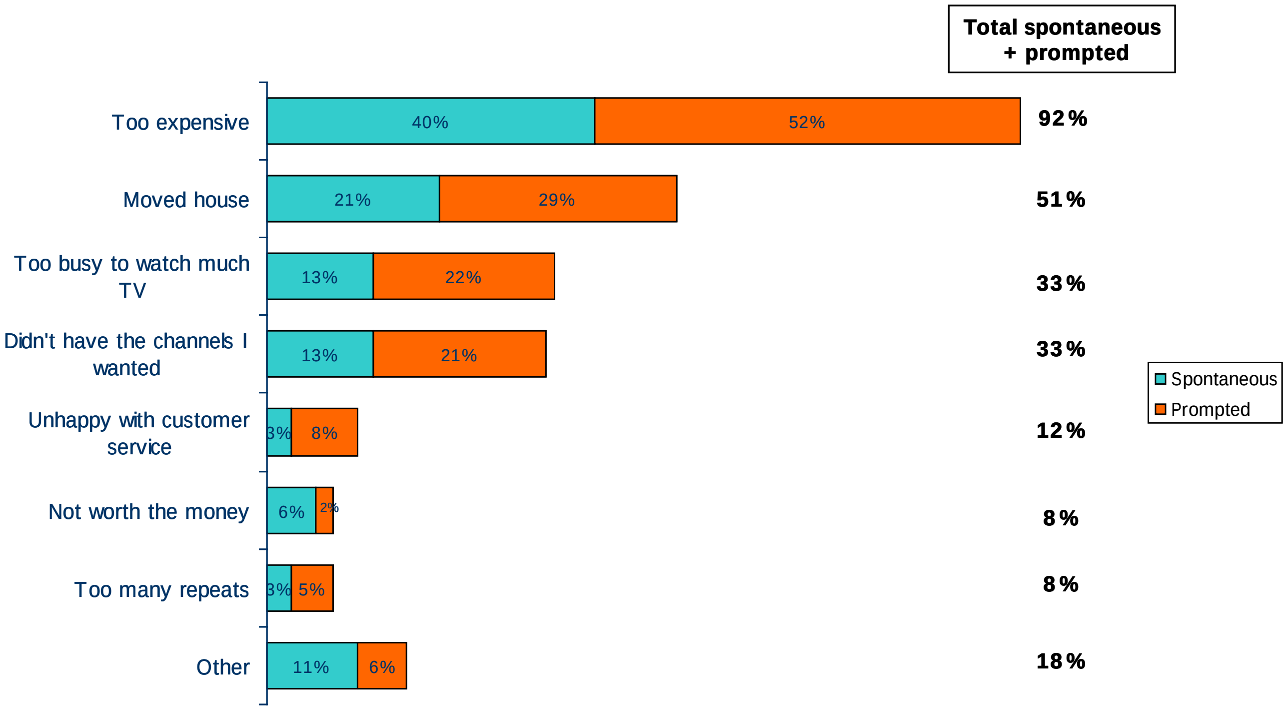
Note: Only responses 4% or more at total level are shown

Base: All who have switched Pay TV providers (216), Sky (95), Virgin Media (92)

45. Cost of Pay TV services was the key reason why FTA users had stopped buying Pay TV, and moving house was quite often the trigger for the decision. Some mentioned "not having the channels I want" and being "too busy to watch TV" as their reason for lapsing, whilst poor customer service did not feature as a factor to any notable extent.

Figure 18: Q7di – Reasons why stopped paying for a Pay TV service – FTA lapsed users

Why did you decide to stop having a TV service that you pay for?



Base: FTA lapsed Pay TV users (63)

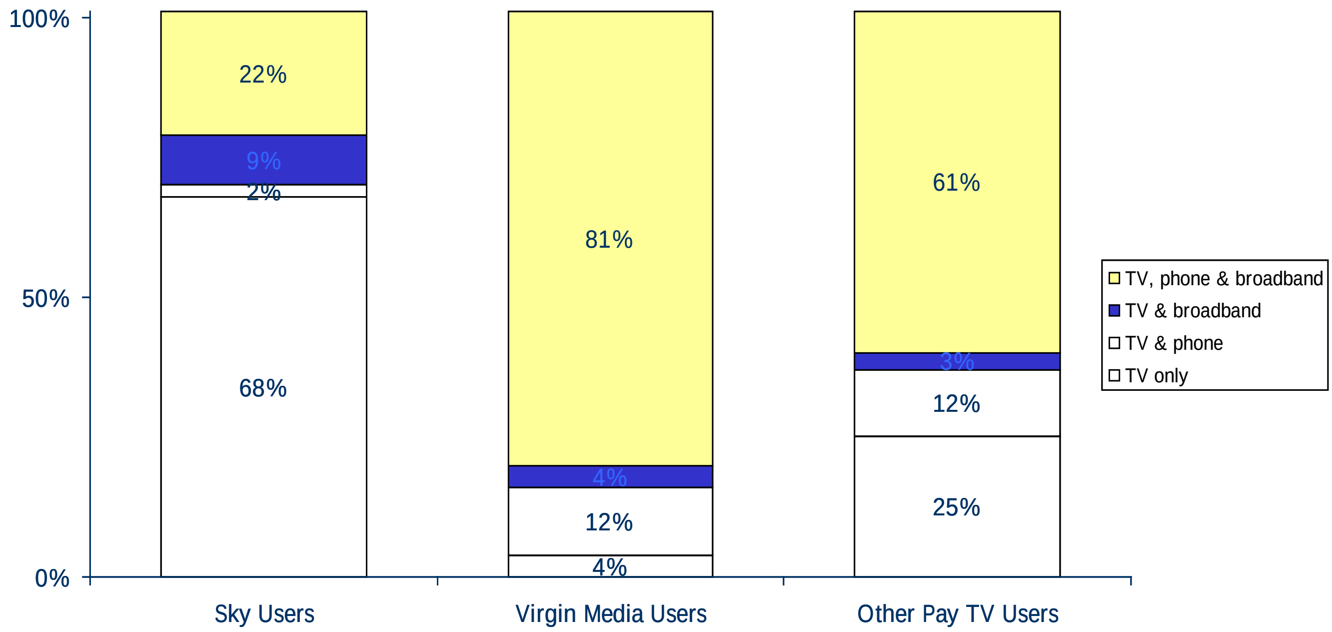
46. Pay TV users were asked from which company they bought their broadband, mobile phone, and landline phone services (if any). The chart below shows the proportion who bought these other services from the same company as provided their Pay TV. A large majority of Virgin Media TV customers bought the bundle of telephony and broadband services as well (81%). In contrast, Sky TV customers were much more likely to have only TV services from the company (68%). The profile of other Pay TV users was closer to the Virgin Media than the Sky profile.

Figure 19: Q7e/f/g – Other services bought from Pay TV provider

From which, if any, of these companies do you get a landline phone service?

From which, if any, do you get a mobile phone service?

From which, if any, do you get a broadband internet service?

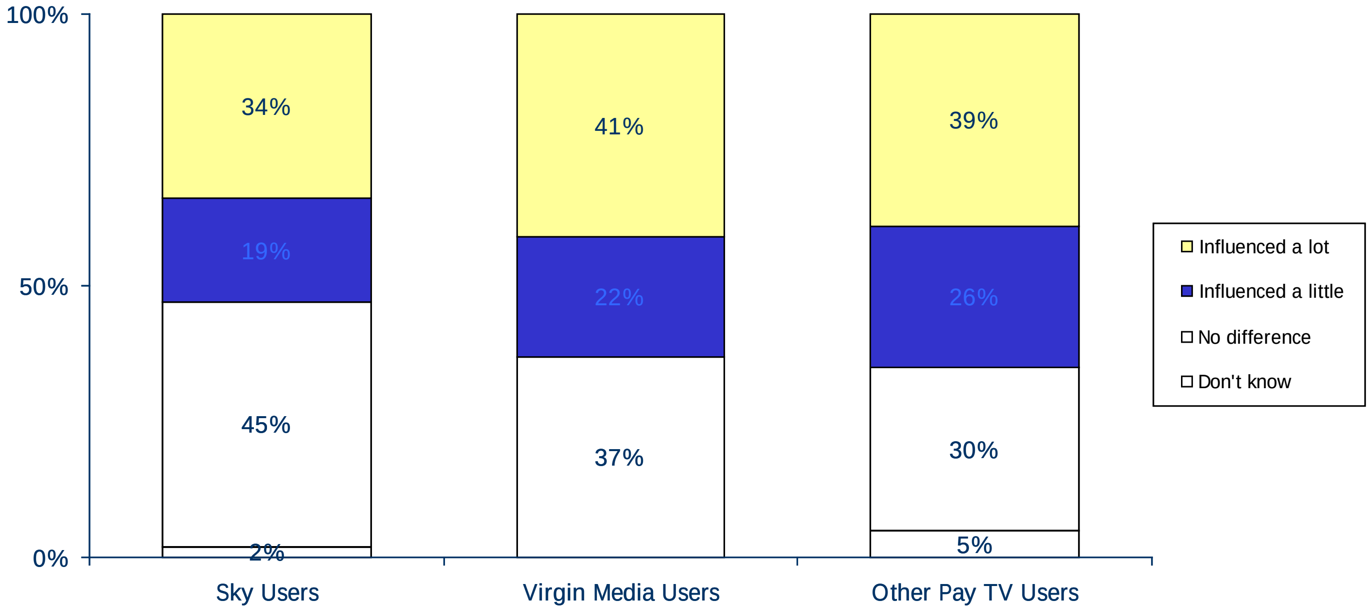


Base: All Pay TV Users - Sky subscribers (536), Virgin Media Subscribers (285), Other Pay TV Subscribers (69)

47. Those Pay TV users who had at least one other service with the company were asked whether having these other services influenced their decision to buy Pay TV from the company. About two in three Virgin Media and Other Pay TV customers said it influenced their decision, and in about 40% of cases it was seen as a strong influence. Amongst Sky customers with a bundle of services, a higher proportion said it had no influence (almost half, 45%).

Figure 20: Q7h – Influence of having other services on decision to use the same provider for Pay TV services (amongst those with bundled service)

You mentioned you have a (……) service from (……..) as well as a TV service. Did this influence you to get their TV service a lot, did it influence you a little, or did it make no difference?

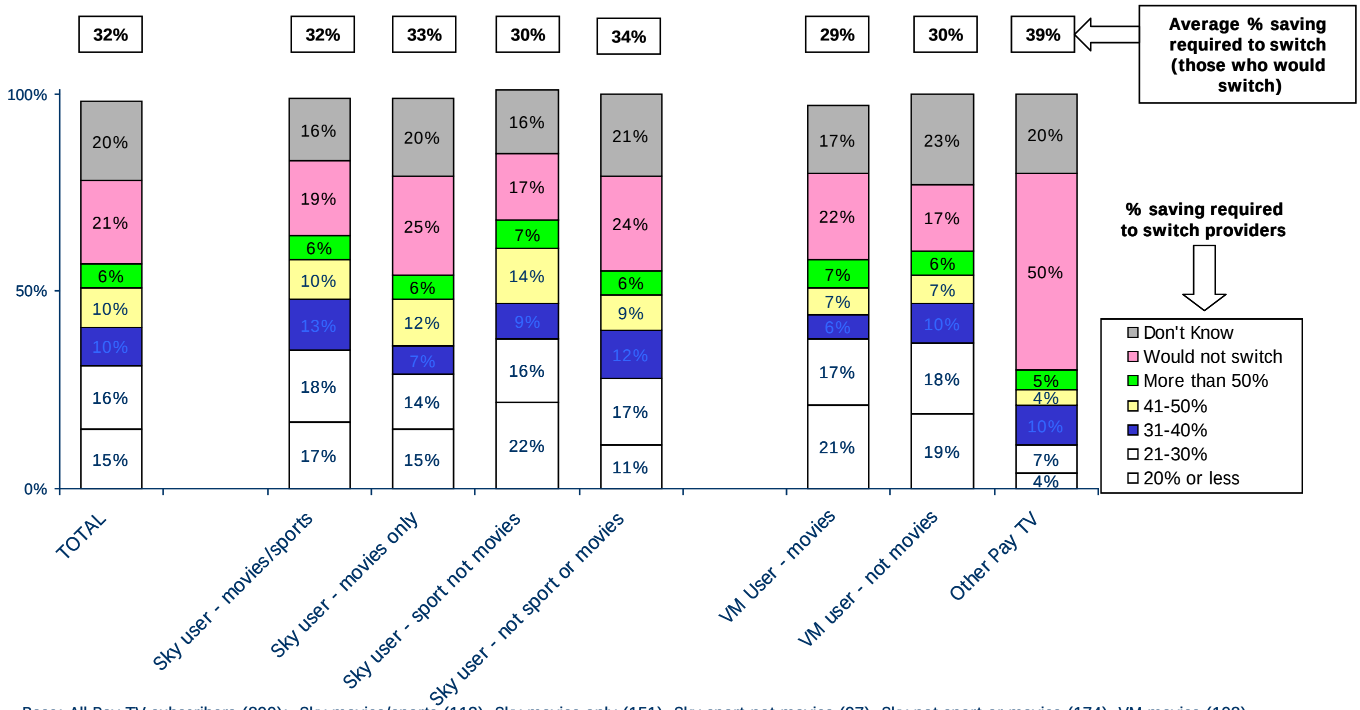


Base: All Pay TV subscribers who have another service with the same provider Sky (189), Virgin Media (275), Other Pay TV (61)

48. Pay TV users were then asked what level of saving would be required on the amount they currently spent with their TV provider to make them switch (assuming they did not have to pay any set-up costs). Respondents gave answers in £ terms and these have been converted to %s based on their response to the amount they paid in total to the provider (for all their services). Some respondents could not answer this question, and others did not give a credible response to this question and have also been classified as "don't know" (75 of the 1042 interviews). In a few cases (18) we inferred a different response from that given by the respondent and changed the data accordingly. 21% of those interviewed said they would not switch at any price and following the data cleaning we had a further 20% of cases with a "don't know" response. Among the remaining respondents, the average % saving (on their bundle of services) that would be required to make them switch to another provider was 32%. Interestingly, this average figure varied little by TV service bought.

Figure 21: Q7p – % saving required to switch (bundle) provider

If someone else offered you exactly the same TV and Broadband/Landline Telephone/Mobile telephone services (as Q7e-Q7g), how much cheaper would it have to be per month to make you switch? Assume you did not have to pay any set-up costs.



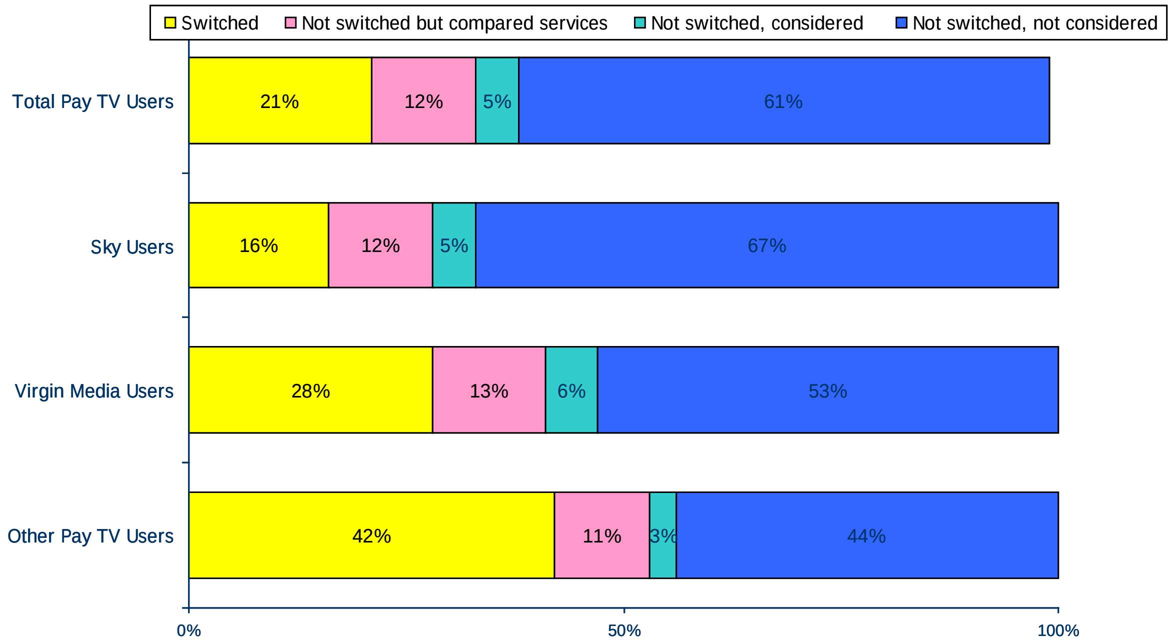
Base: All Pay TV subscribers (890): Sky movies/sports (113), Sky movies only (151), Sky sport not movies (97), Sky not sport or movies (174), VM movies (108), VM not movies (177), Other Pay TV (69)

49. Just over one in five Pay TV customers (21%) had switched from another provider in the last two to three years. Most of the other (non-switchers) had not considered doing so - just 12% had compared TV services from different providers, and a further 5% had considered switching but had not gone as far as comparing services. The proportion of Virgin Media customers who had switched from another provider was higher than the proportion of Sky customers who had done so, and higher still among the (relatively small number of) Other Pay TV customers. However, the finding that the majority had not considered other providers in the last two to three years was consistent across the whole sample.

Figure 22: Q7i/7j – Whether considered switching/ getting a new Pay TV provider in the last 2-3 years

Have you considered getting a TV service that you pay extra for in the last 2-3 years?

Have you compared TV services from different providers in the last 2-3 years?

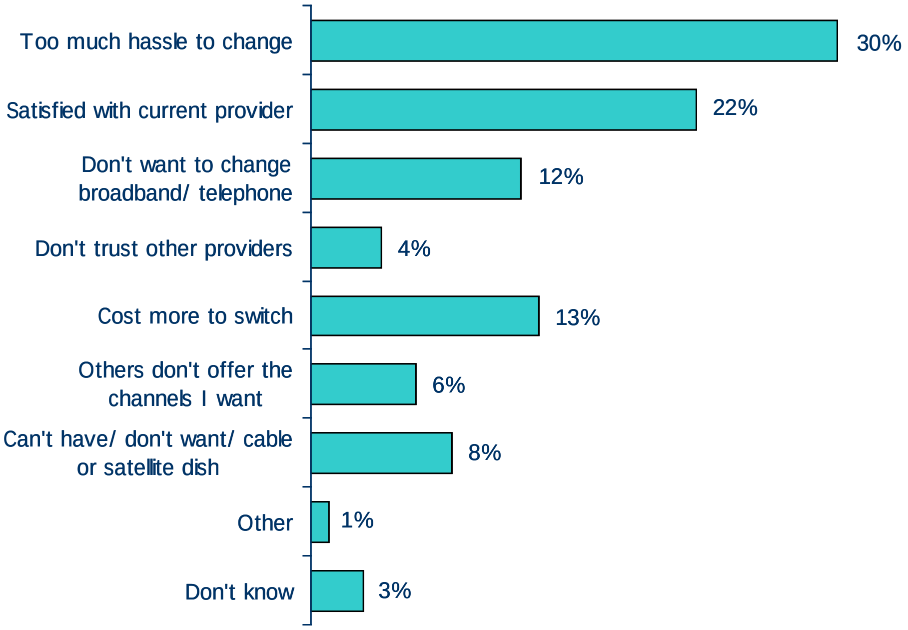


Base: Pay TV Users: Total (807), Sky subscribers (536), Virgin Media Subscribers (285), Other Pay TV Subscribers (69)

50. The main reasons why people had not switched or considered switching their Pay TV provider were inertia ("too much hassle to change") and satisfaction with their current provider.

Figure 23: Q7k – Reasons for not switching Pay TV provider – Spontaneous mentions (Pay TV Users)

Why have you not switched / not considered switching to another provider of TV services?

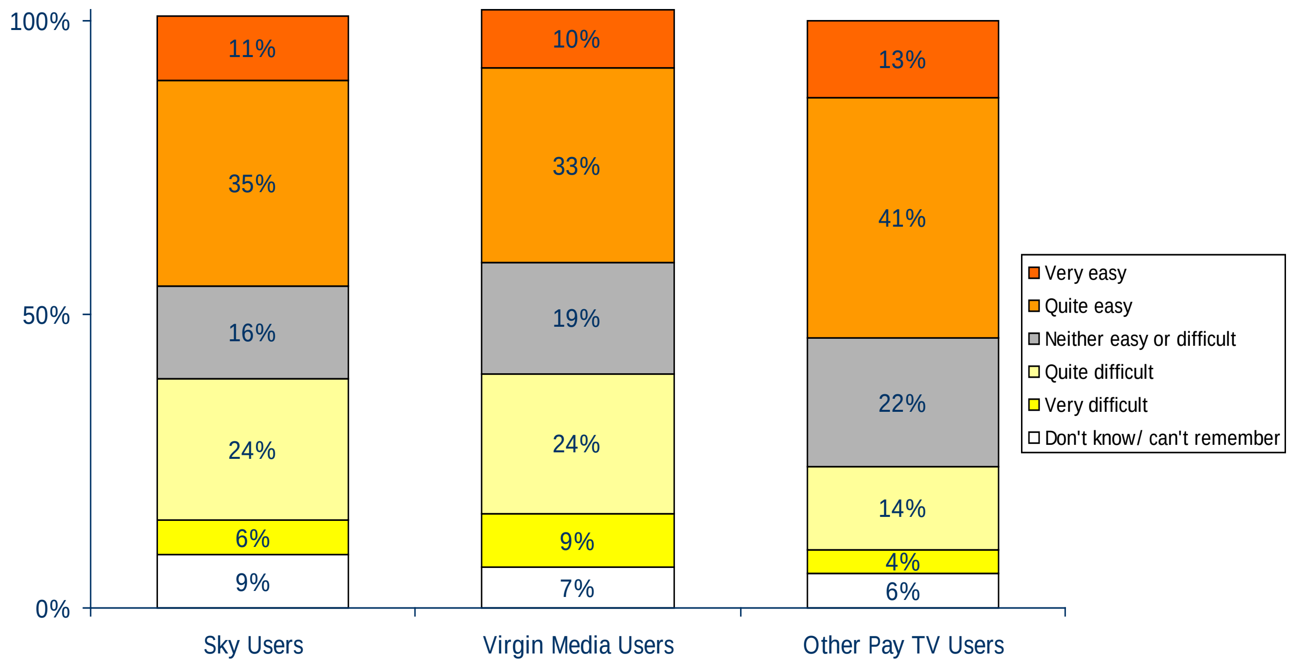


Base: All Pay TV users (890)

51. On balance Pay TV users were more likely to think it easy rather than difficult to switch providers, this was true of all customers but particularly those using Other Pay TV providers. Those who had previously switched were more likely to think it easy, but even among those who had never switched before more thought it easy than difficult (43% c.f. 32%). There was no difference in response by length of time had a Pay TV service.

Figure 24: Q7q – Ease of switching Pay TV providers (perception)

Thinking about what is involved in switching TV provider, how easy or difficult do you think it would be to switch?

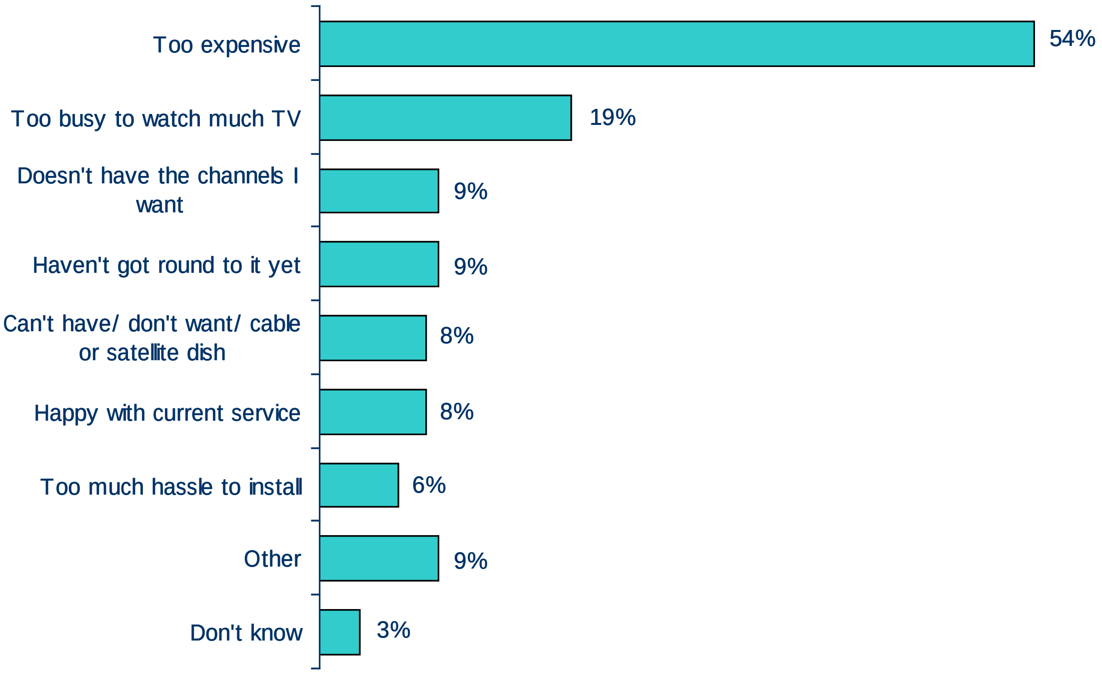


Base: All Pay TV Users - Sky subscribers (536), Virgin Media Subscribers (285), Other Pay TV Subscribers (69)

52. The cost of the service was the key factor explaining why FTA users were not subscribing currently to a Pay TV service (although by qualification to take part in the survey they would consider doing so in the next two to three years).

Figure 25: Q7n – Reasons for not getting a Pay TV service – Spontaneous mentions (FTA User)

Why have you not got / not considered getting a TV service that you pay for?



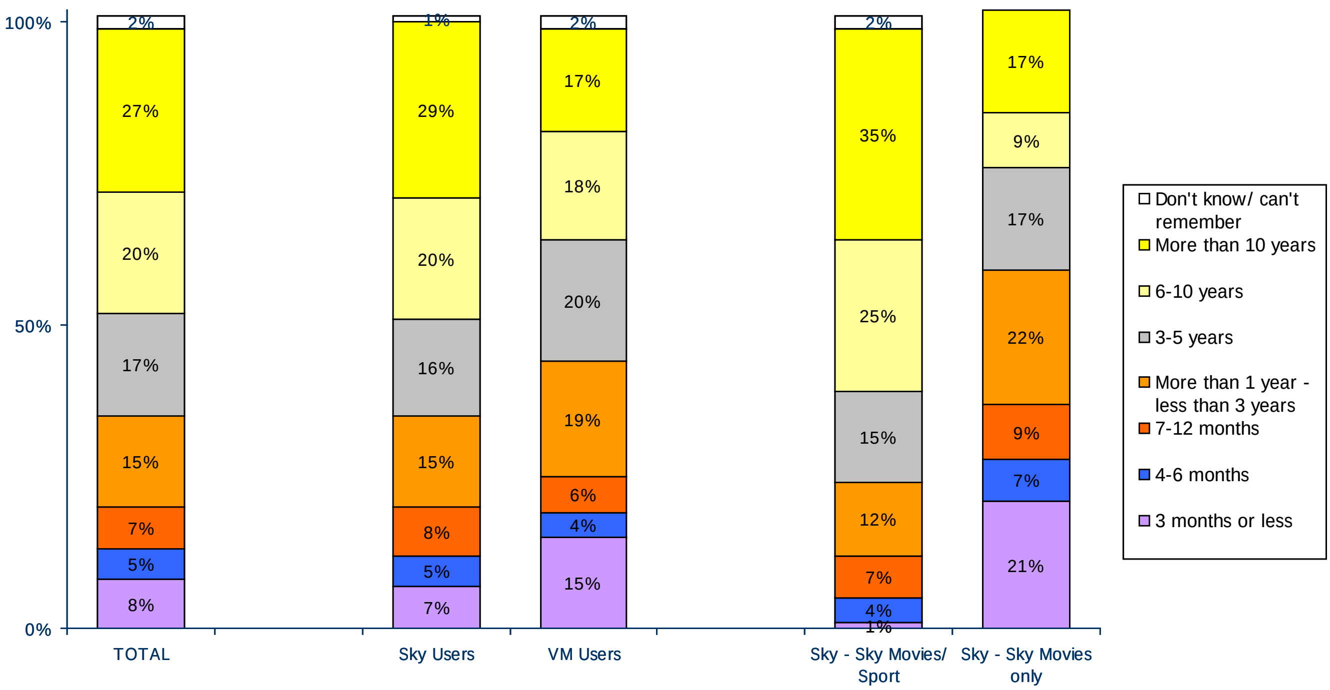
Base: All FTA Users (152)

4.4 Sky Movies

53. Those who had Sky Movies were asked a series of questions about their use of the service. Nearly one in two (47%) had bought Sky Movies on a monthly subscription basis for over five years, and one in four (27%) for over ten years. Those with the Sports and Movies package tended to have an even more longstanding relationship with Sky. Virgin Media customers who had a Sky Movies subscription were likely to have started using it more recently, but even here one in three (35%) had subscribed for over five years.

Figure 26: Q8a – Length of time subscribed to Sky Movies

How long have you had any Sky Movie channels on a monthly subscription basis?



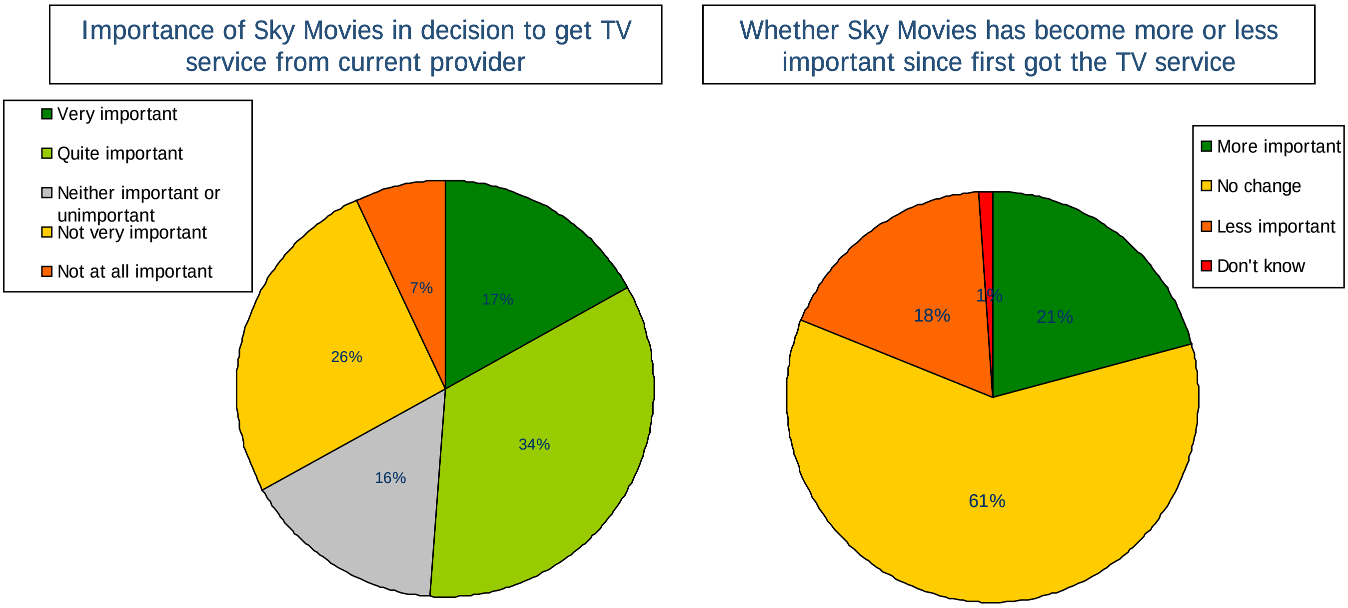
Base: Sky Movies subscribers – Total (375), Sky (264), Virgin Media (108), Sky – Sky Movies/ Sport (113), Sky – Sky Movies only (151), Virgin Media Movies (108)

54. One in two (51%) thought that Sky Movies was important in the decision to have a Pay TV service with their provider, although only 17% said it was very important. These figures varied little by the length of time subscribed to Sky Movies. Respondents were then asked whether this level of importance had changed for them since they first started getting a Pay TV service, and two in three (67%) said it had not, the remaining opinion splitting evenly between those who said Sky Movies had become more important to them and those who said less important.

Figure 27: Q8c/8d – Importance of Sky Movies

How important are Sky Movie channels in your decision to have a TV service from (.....)?

Would you say Sky Movie channels have become more important to you and your household since you first got a TV service that you pay for, less important, or has its importance not changed over time?



Base: All Sky Movies subscribers (375)

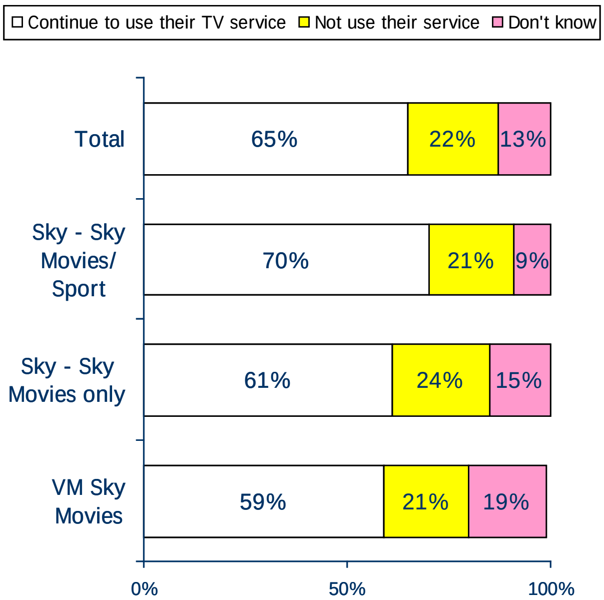
55. Respondents were then asked what they would do if their TV provider stopped offering Sky Movies. Two in three (65%) would continue to use the Pay TV service and 22% would stop (the other 13% were unsure). These figures varied little according to which Pay TV provider was used. However, those who had subscribed to Sky Movies for a long time (more than ten years) were more likely to say they would stop using the service (31%).

56. Those who said they would stop using the service were asked subsequently whether they would change to another provider of TV services that you pay for, or whether they would stop paying for a TV service and just pay the licence fee instead. Most would stay with Pay TV but only just over half (56%) with a provider that offered Sky Movies.

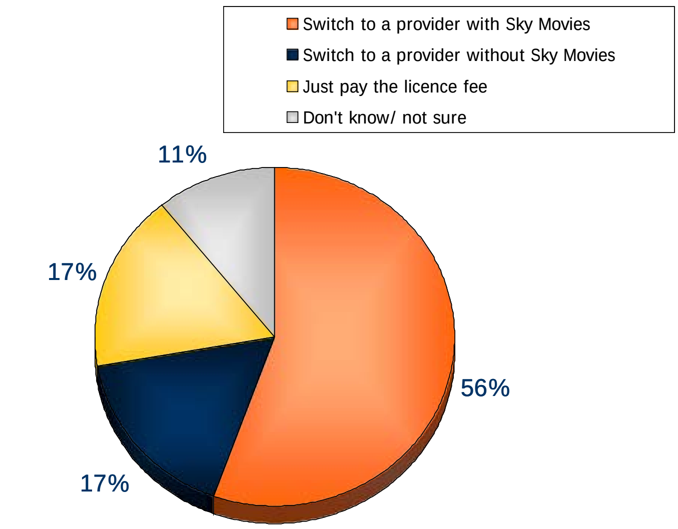
Figure 28: Q8e/8fi – Behaviour if current provider stopped offering Sky Movies

If (.....) stopped offering Sky Movie channels, would you continue to get their TV service, or not?

IF STOP: Would you change to another provider of TV services that you pay for, or would you stop paying for a TV service and just pay the licence fee instead? IF USE ANOTHER PROVIDER PROMPT: Would you switch to another provider with Sky Movie channels, or to another provider without Sky Movie channels?



Base: All Sky Movies subscribers (375)

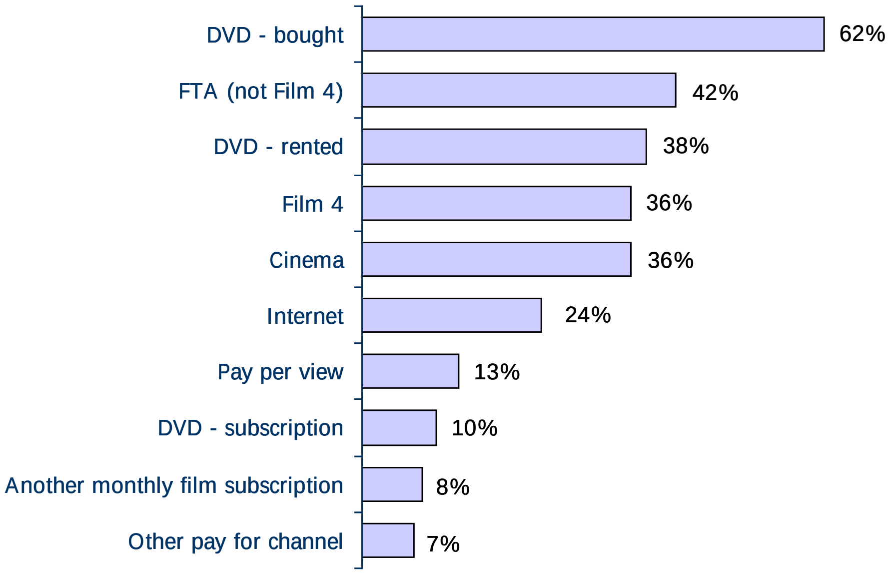


Base: Sky Movies Subscribers who would not use current service (84)

57. Among those who would stop getting TV with Sky Movies (if their current provider did not offer it), the most likely method for watching films (instead of Sky Movies) would be by DVD, mentioned by 83% of this group. FTA programmes was the next most likely source, either Film 4 (36%) or other FTA channels (42%). Other monthly film subscription packages were not identified as an alternative to any marked extent.

Figure 29: Q8fii – Methods of watching films if did not subscribe to Sky Movies

In which if any of the following ways would you and other members of your household watch films instead if you did not have Sky Movie channels?

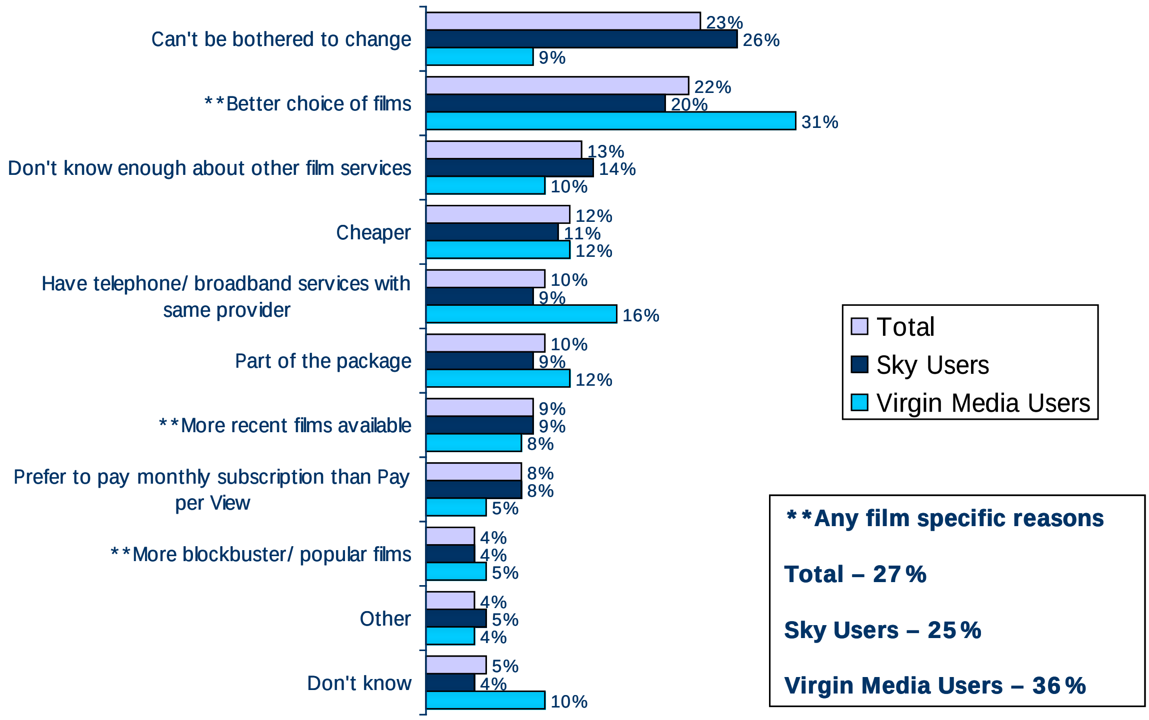


Base: Sky Movie subscribers who would not switch to another Pay TV Provider with Sky Movies (326)

58. There was a range of responses when people were asked why they subscribed to Sky Movies rather than another monthly subscription package or watch PPV films. One in four (27%) mentioned the choice of films, or how recent the films were on Sky Movies, or there being more popular films available on Sky Movies – and these reasons were more apparent among those who subscribed via Virgin Media. However, there was also some evidence of inertia with nearly one in four (23%) saying they couldn't be bothered to change, although somewhat less so amongst Virgin Media customers who were more likely to cite the bundling of telephony and broadband services with Pay TV as a reason for staying with Sky Movies. Those who subscribed for a long time were more likely to say "can't be bothered to switch" as a reason for having Sky Movies (29% among those with Sky Movies for more than 10 years c.f. 17% with it for less than three years, and 23% for 3-10 years).

Figure 30: Q8g – Reasons for buying Sky Movies instead of another TV film subscription or PPV service

Other TV providers offer film services via a monthly subscription package or on a pay per view basis. Why do you get Sky Movie channels rather than another film service?

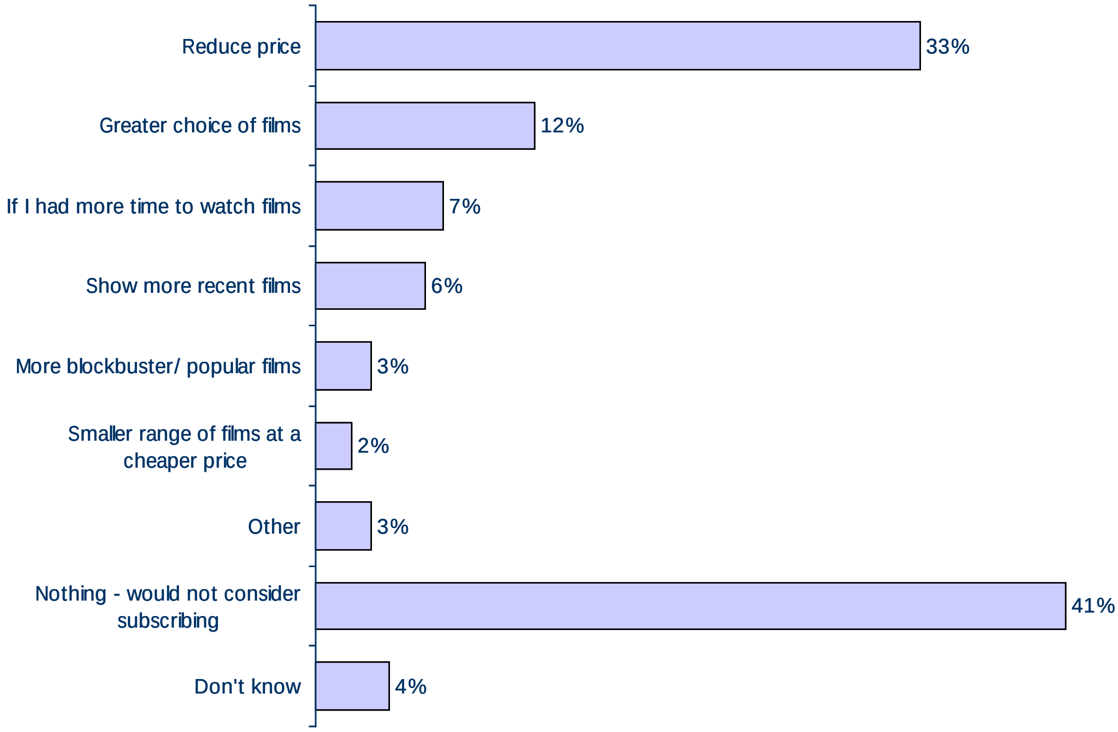


Base: All Sky Movies subscribers – Total (372), Sky (264), Virgin Media (108)

59. One in four (26%) of those without Sky Movies had bought it previously, and 14% had considered taking a subscription in the last year. All those without Sky Movies were asked what would encourage them to take up a subscription. 41% said “nothing” and 33% said “reduce price”, and no other factor was mentioned spontaneously to any extent.

Figure 31: Q11 – Factors which would lead to consideration of Sky Movies (non-subscribers) – spontaneous mentions

What if anything would make you consider subscribing to Sky Movie channels?



Base: Non Sky Movies Subscribers (665)

4.5 Consumer Interest in Different Film Packages

4.5.1 Appeal of Different Features

60. A conjoint exercise was conducted to assess the interest in different film packages, in particular with regard to a subscription video on demand service in the FPTW. The technique works by asking respondents to state which film "package" they would prefer to buy when presented with a variety of different options. From the analysis of preferences the model identifies which package features (or "levels") are most attractive to consumers.

61. The film packages shown to respondents were defined in terms of the following attributes:

Cinema release date – this shows how recent the films are that you can watch using this service, that is when the films were released in UK cinemas. Only films made during this cinema release date are available to watch using this service.

Number of films added each week – There are usually 12 films that become available each week. So, if the service shows six films, it shows HALF of the films available and has a library of films that is half the total number available.

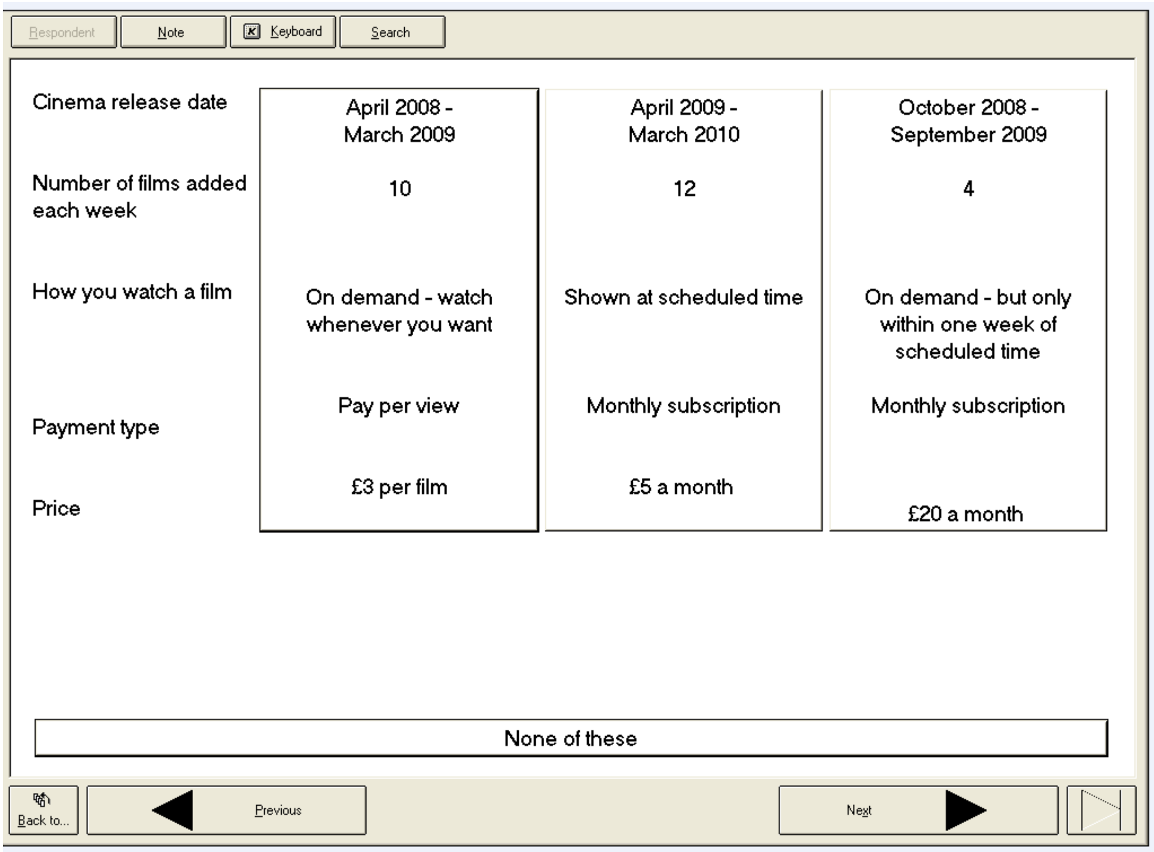
How you watch a film – this describes whether you choose any movie from a library of films at a time that suits you (*on demand)*, or whether the film is only shown at specific times according to the provider's schedule. This also describes whether you pay a monthly subscription fee, or whether you pay for each film that you watch on a pay per view basis

Price – the price you pay for the service.

62. These attributes were presented to the respondent on a showcard, and the interviewer asked the respondent to read through the definitions carefully, and to keep the showcard as an aide-memoire during the subsequent task of choosing film packages.

63. For the choice task, respondents were shown three different film packages side-by-side, and asked which package they would prefer to buy. Each film package had a feature or “level” for every attribute, so the respondent was trading off the benefits of different attribute levels when coming to a decision about which package they would prefer. The screenshot below provides an illustration of the task as presented to the respondent

Figure 32: Screenshot of conjoint exercise



64. This task was repeated twelve times for every respondent, with differing levels for each attribute that are randomised across the packages shown, to test the appeal of a range of package options.

65. The grid below shows the different “levels” that were tested for each attribute.

Attribute	**Levels**					
Cinema release date	April 2009 – March 2010	October 2008 – September 2009	April 2008 – March 2009			
Number of films added each week	2	4	6	8	10	12
How you watch a film	Pay Per View on demand – watch whenever you want	Monthly subscription on demand – watch whenever you want	Monthly subscription on demand – but only within one week of scheduled time	Monthly subscription – shown at scheduled time		
Price – monthly subscription**	£5	£10	£15	£20		
Price - £ per film (pay per view)**	£1	£2	£3	£4		

** PPV price levels were only shown in combination with the PPV on demand feature, monthly subscription prices with the three monthly subscription features.

66. The key output from the conjoint exercise is a utility score for each attribute feature (level), which shows the value or benefit of that feature to the respondent. The more positive the score the higher the level of benefit (negative scores indicate less benefit than positive scores).

67. In assessing the importance of each attribute in driving consumer preference, we look at the range of utility scores across each attribute. The greater the spread, the more important the attribute (given the levels tested). We also look at the differences in utility between one level and the next to judge which features need to be included in a package to attract customers - relatively big differences between levels indicate that inclusion of the (higher level) feature is important to attract customers.

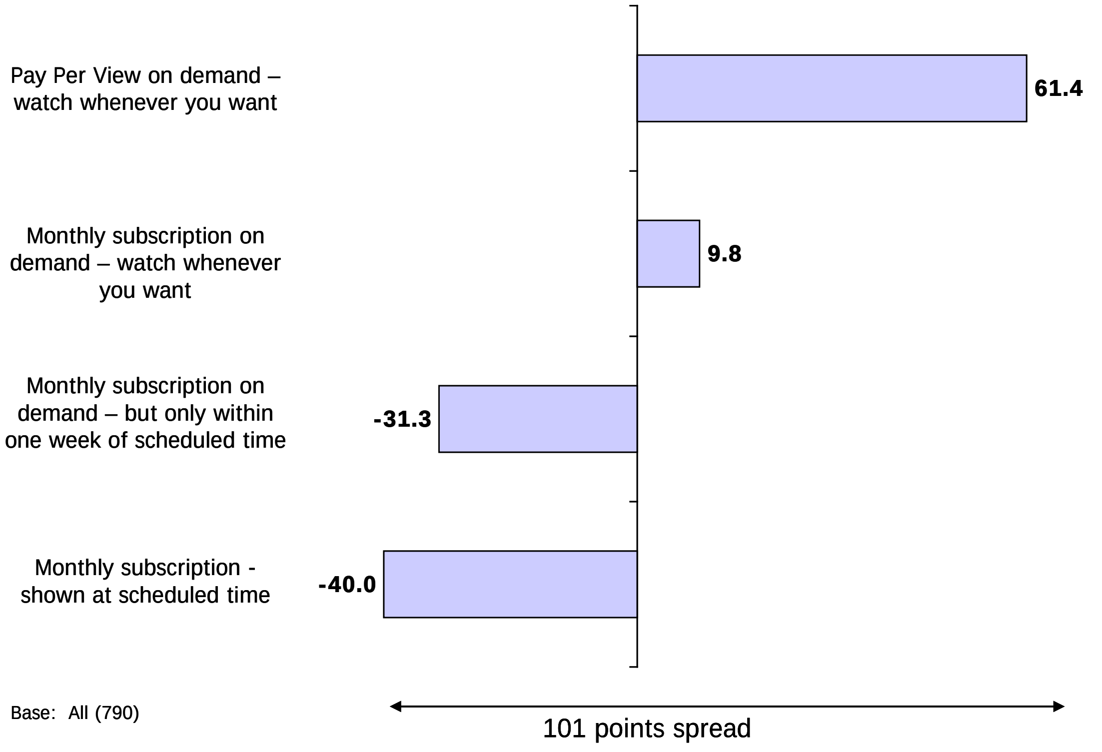
68. The following charts show the utility for each of the attribute features described in the grid above.

How you watch a film

69. The utility of the PPV on demand (watch whenever you like) feature was markedly higher than for any of the monthly subscription methods of watching a film. The spread of the utility scores, from the most attractive level (PPV on demand = +61.4 points) and the least attractive level (Monthly subscription, shown at the scheduled time = -40.0 points) was 101 points. This relatively large spread of utility scores (compared with the spread on other attributes) indicates that this attribute was an important driver of consumer choice.

70. Looking specifically at the three monthly subscription options, on demand was much more appealing, and the benefit of showing films on demand but only within one week of the scheduled time was only a little higher than if the film is shown at a scheduled time.

Figure 33: How you watch a film – utility for each level

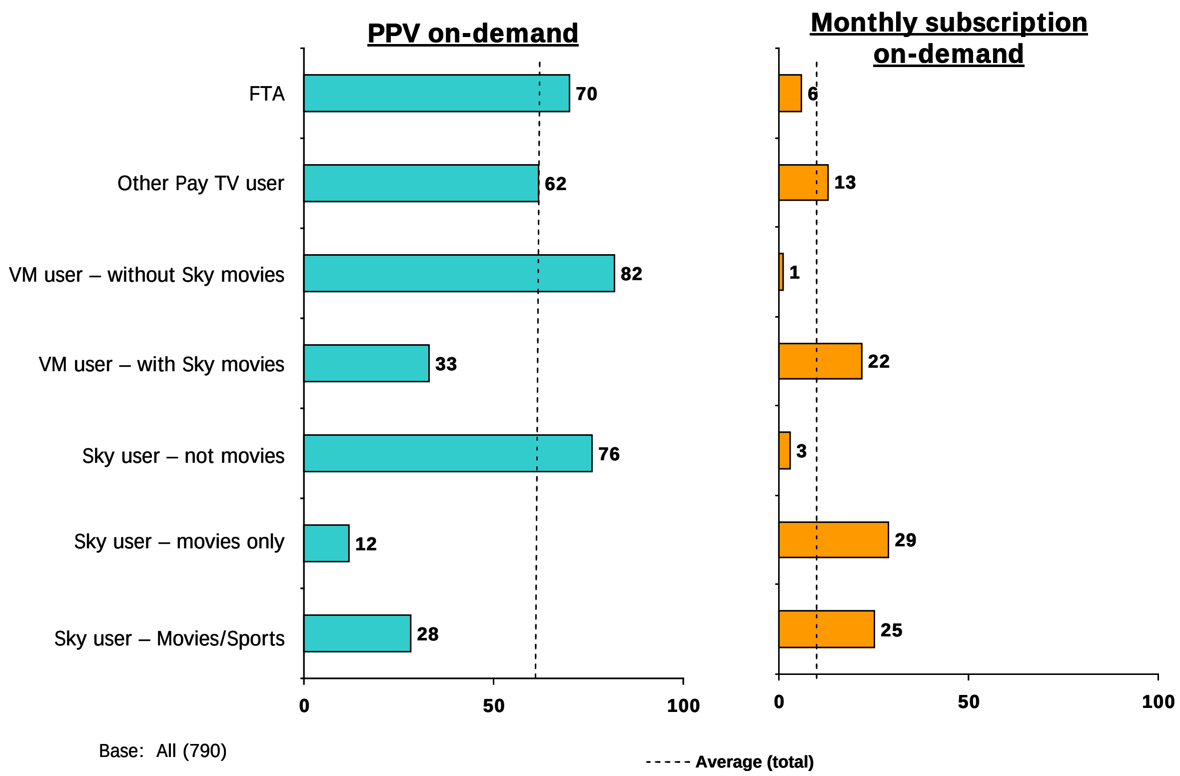


Base: All (790)

71. Those who currently subscribe to Sky Movies saw more benefit in a monthly subscription on-demand offering than those who did not have Sky Movies. However, even among the former, there was little difference in perceived benefit between monthly subscription on demand and PPV among those who had both the Sky Sports and Movies channels, and Virgin Media customers with Sky movies found the PPV offering more attractive. It was just those Sky customers with Movies only (a relatively low incidence group, 6% of the total sample) who found the monthly subscription on demand feature more attractive than PPV.

72. Those without Sky Movies clearly had a preference for the PPV offering over monthly subscription on demand.

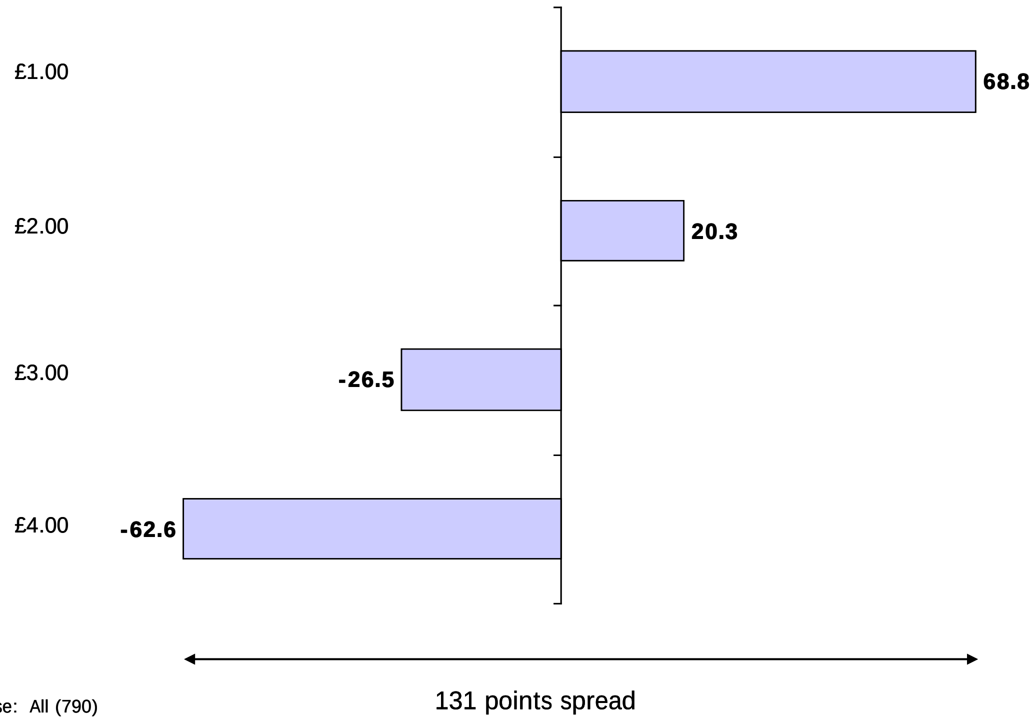
Figure 34: Utility of on demand channels by respondent type



Price

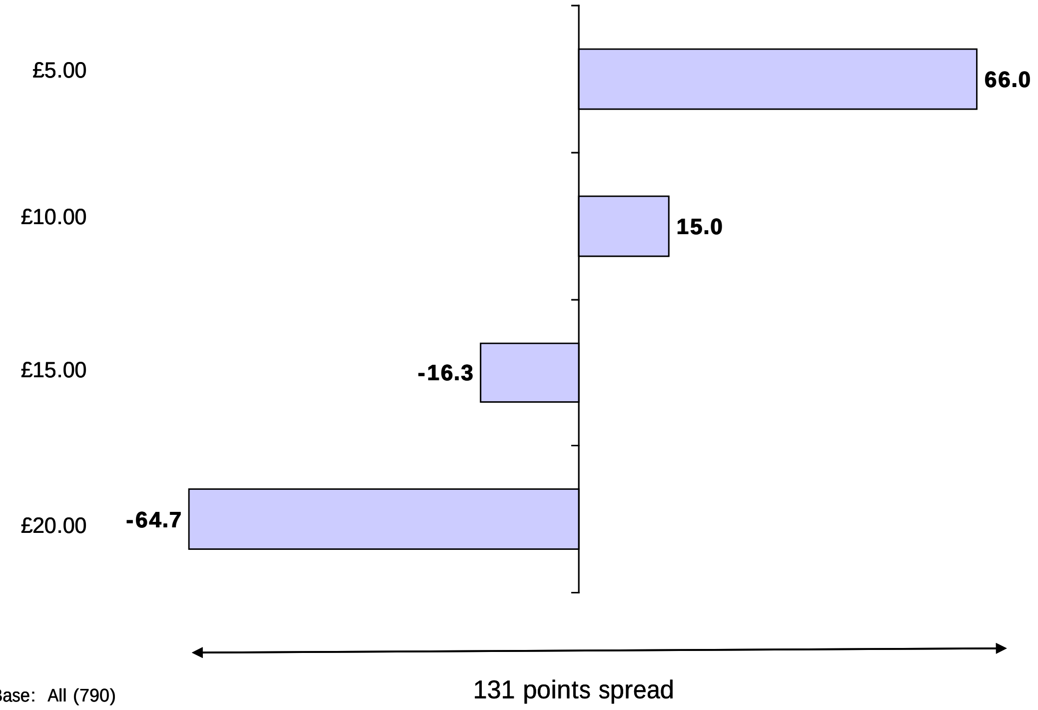
73. Each reduction in price (across the levels tested) increased utility in a near linear fashion, both for PPV and the monthly subscription packages. The large spread of utility scores, from highest to lowest, was evident for both types of film package (and was similar in magnitude to the spread on the “How you watch a film attribute”), indicating this was another relatively important driver of consumer preference.

Figure 35: Pay per View price – Utility for each level



Base: All (790)

Figure 36: Monthly subscription price – Utility for each level



Base: All (790)

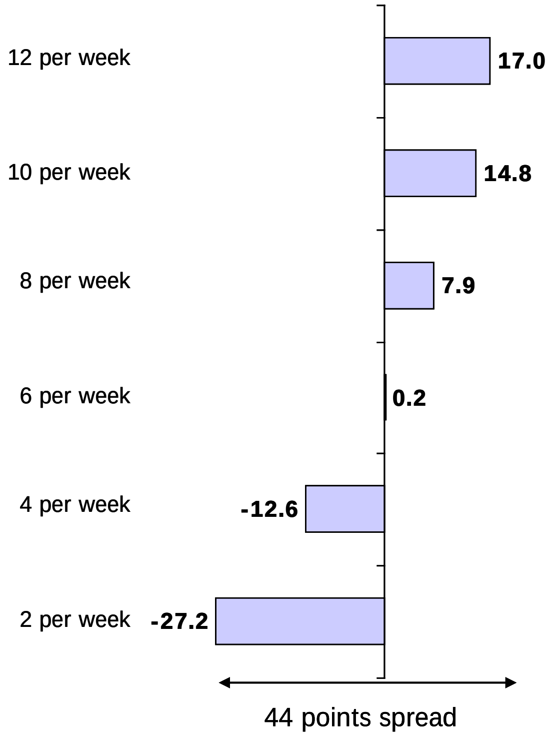
Size of the Film Library

74. The number of films added each week was used as a descriptor of the library size, with 12 films being added each week being used as a proxy for the output from six studios, ten films a week for five studios etc.

75. There was little difference in utility between a library of 10 films a week and 12 films a week. However, the utility dropped markedly if less than half of all films were provided (i.e. less than 6 films a week).

76. The spread of utility scores was less than for "How you watch a film" or "Price" indicating library size was a less important driver of choice than both of these other attributes.

Figure 37: Film library – utility for each level

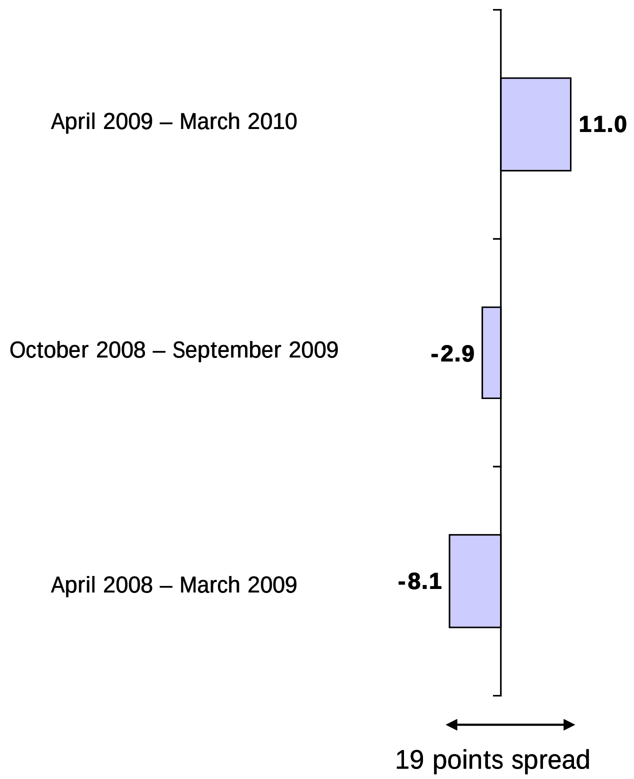


Base: All (790)

FPTW Date

77. The most recent window date tested, April 2009 – March 2010, was more attractive and the oldest window date (April 2008 – March 2009) the least attractive. However, the difference in utility scores was not very marked, indicating this was a relatively unimportant driver of consumer choice.

Figure 38: FPTW date – utility for each level



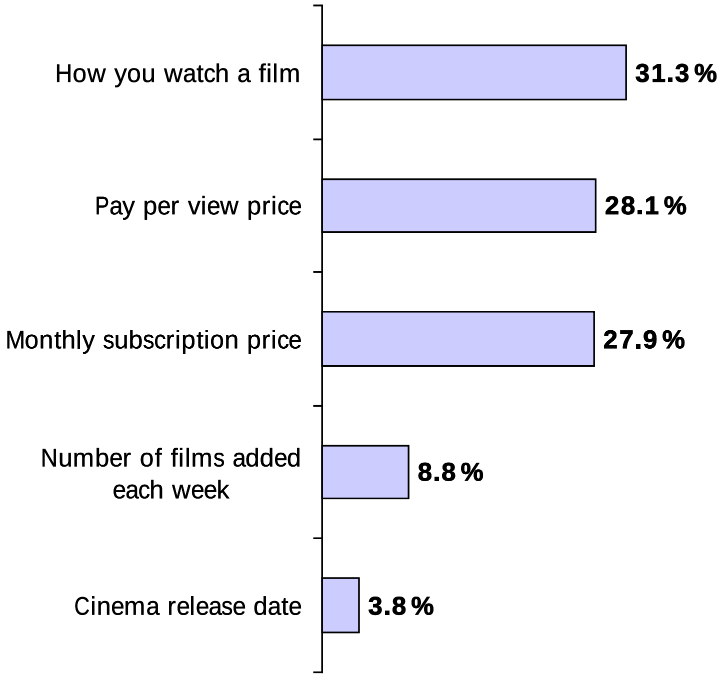
Base: All (790)

Summary of (Derived) Attribute Importance

78. The conjoint analysis provided a derived measure of attribute importance by comparing the spread in utility scores across each of the different features (for each attribute). The chart below shows this derived importance score, figures totalling to 100% with the higher the percentage the greater the level of importance. The two most important attributes in driving consumer preference were "How you watch a film" and "Price", whilst the cinema release date of films shown in the package was relatively unimportant.

79. The importance of price was the same, regardless of whether the price considered was of a PPV or a monthly subscription package, as evidenced by the fact that the importance rating of both the price attributes in the chart below is very similar.

Figure 39: Importance of film service attributes in driving preference (derived from conjoint)



Base: All (790)

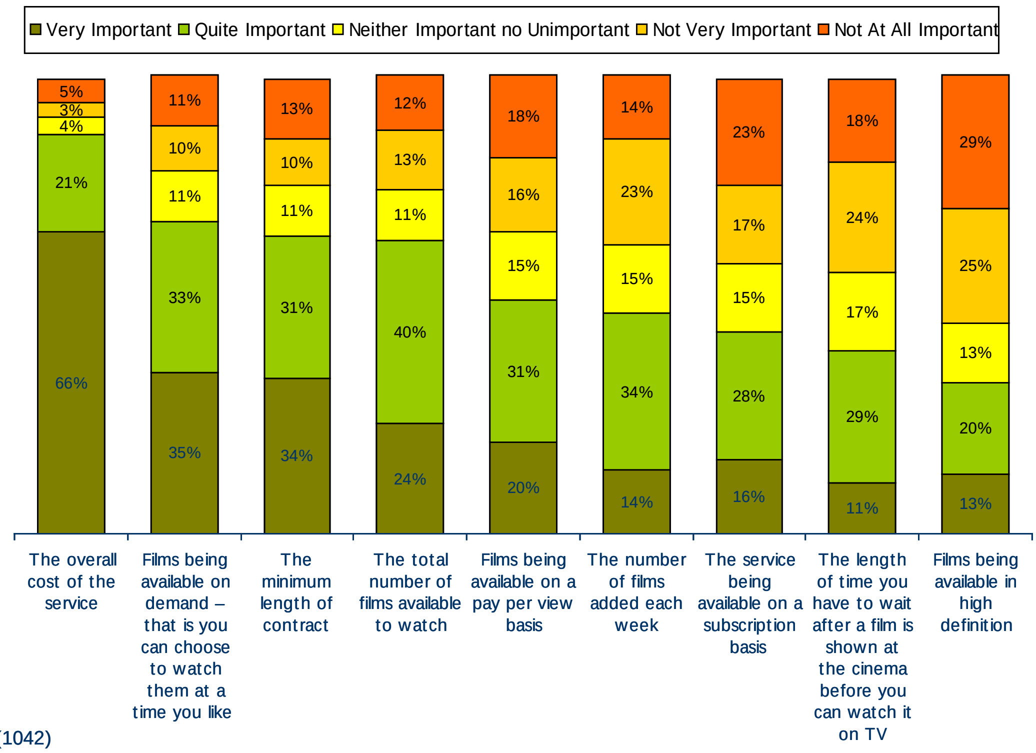
Attribute Importance – Directly Stated

80. Respondents were asked to say how important they thought different aspects were in choosing a TV film service using a 5-point "very important" to "not at all important" scale (this question was asked at the end of the survey after the conjoint section). The list included some of the attributes tested in the conjoint section to provide a sense check of these findings, and others were included to assess the importance of aspects not included in the conjoint work.

81. Two in three thought the "overall cost of the service" was very important, a much higher proportion than for any other aspect. In contrast, just 11% thought that "the length of time you have to wait after a film is shown at the cinema" was very important, the lowest percentage for any aspect. After cost, the film being available to view on demand and the minimum contract length were the next most important aspects.

Figure 40: Q18 - Importance of different features in choosing a TV film service (directly stated)

I am now going to read out a number of different features, and for each one I'd like you to tell me how important it would be if you were choosing a TV film service. Please use one of the phrases on this card.



Base: All (1042)

4.5.2 Propensity to Buy a Film Service (Derived)

82. Respondents were then shown six different packages and asked how likely they would be to buy each one if it was offered by their current Pay TV provider (or not specified if FTA respondent). The six packages were chosen to include both higher utility and lower utility features on each attribute, to test propensity to purchase the more and less attractive options.

83. Respondents were told that the price of the service was:
    - INSTEAD of the amount paid each month for their current film service, if the respondent had a Sky Movies or another monthly subscription package
    - ON TOP of the amount paid for the core TV service, if the respondent had Pay TV but did not have a monthly film subscription service
    - ON TOP of the licence fee, if the respondent was a FTA user

84. With six different packages tested, this enabled conversion of any package combination (or utility score) into a propensity to purchase percentage. The packages shown to respondents to test propensity to purchase are appended to the report.

85. From previous experience, it is known that claimed propensity to purchase will not convert into actual purchase in all cases i.e. there is always a level of respondent over-claim. When modelling the data therefore, calibration factors have been applied to response on the propensity to purchase scale, to neutralise the known level of over-claiming. These calibration factors are derived from a whole range of studies conducted by GfK NOP, mainly in the consumer goods and services sector, and are not specific to the Media sector.

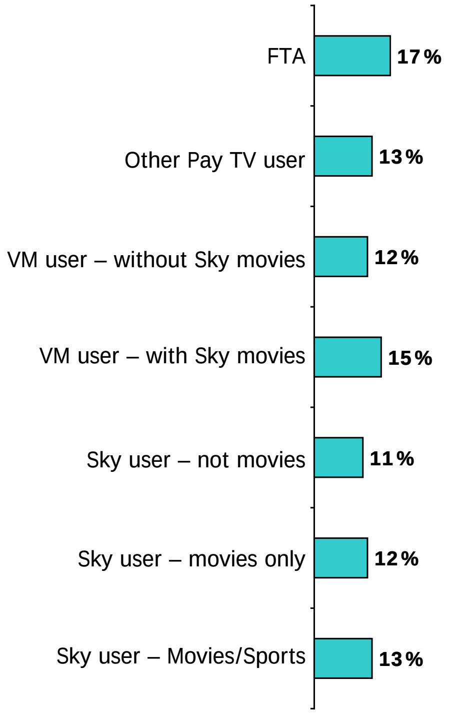
Response	Calibration Factor
Definitely would buy	x 0.78
Probably would buy	x 0.16
Might or might not buy	x 0.08
Probably would not buy	x 0.03
Definitely would not buy	x 0.01

86. This means, by way of example, that if 100 respondents said they "definitely would buy" the film package, this is reduced down to 78 respondents buying the package, and if 100 respondents said they "probably would buy" the film package this is reduced down to 16 respondents etc.

87. Overall, the (derived) proportion that would buy any combination of the film packages tested was not high. Looking at the package with the highest utility – the most recent window, the largest library, PPV on demand and £1 per film – just 13% would buy this package.

88. There was little variation in propensity to purchase this (highest utility) package by customer group, the greatest propensity being found among FTA users (17%)

Figure 41: % that would buy (derived) the most popular film service

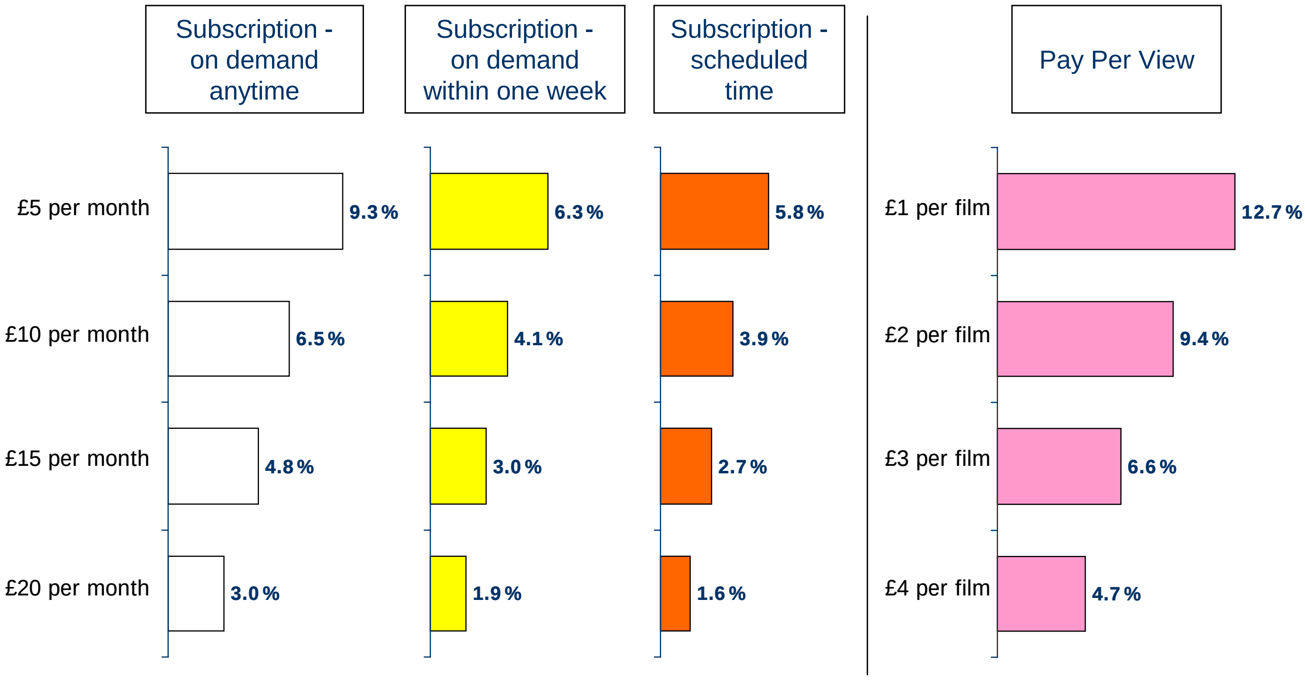


Base: All (790)

Cinema release date	April 2009 – March 2010
Number of films added each week	12
How you watch a film	Pay Per View on demand – whenever you want
Price - £ per film (pay per view)*	£1

89. The chart below shows the proportion that would buy a package comprising 12 films a week (proxy for 6 studios) released in the most recent window (April 2009 – March 2010), for each of the different ways that the films could be watched. 9% would buy the monthly subscription on demand package at £5 per month, but this fell to 3% if priced at £20 per month. Fewer would buy either of the other subscription packages tested at each price point. Only about 6% of respondents said they would pay £5 per month for a subscription package showing films at scheduled times (with or without catch-up on demand viewing), even though 25% of respondents paid for Sky Movies, the great majority paying an incremental price of at least £7 per month.

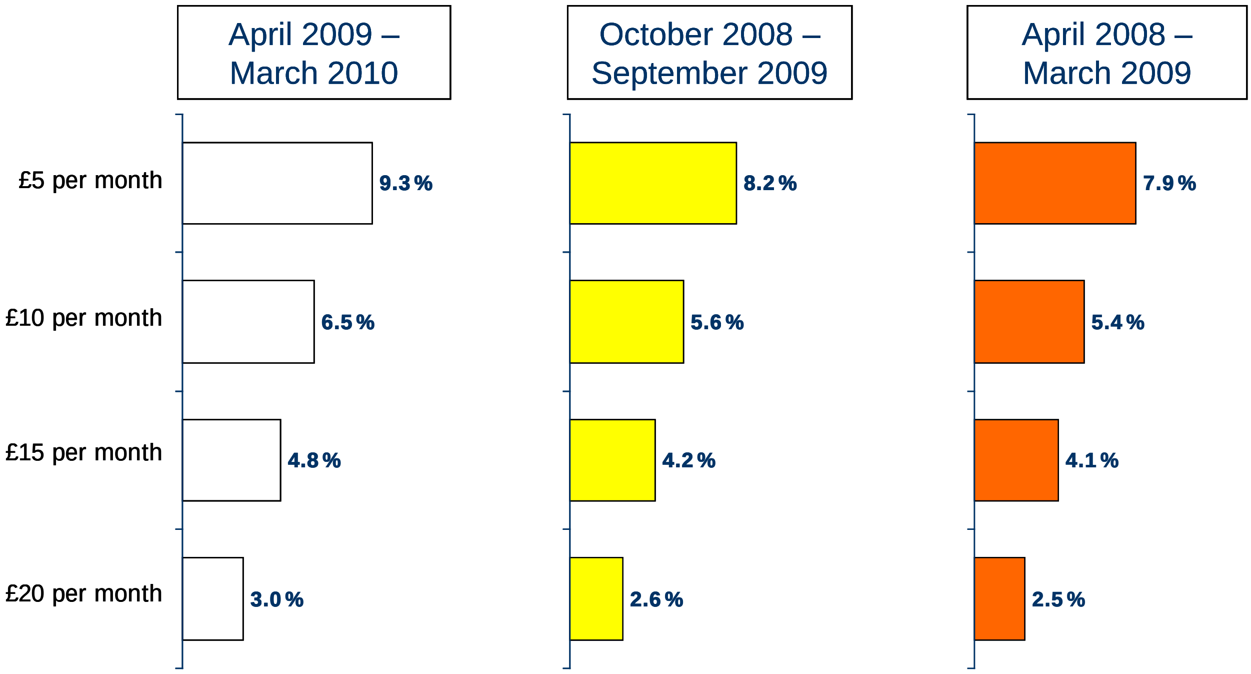
Figure 42: % who will buy full library package (12 films a week – proxy for 6 studios), April 2009 – March 2010 cinema release date



Base: All (790)

90. Looking at the monthly subscription on demand film package, price was a more important influence on likely purchase than the FPTW date. The chart below shows the % buying (derived) a film package comprising 12 films a week (proxy for 6 studios) at different price levels and window dates. 9% would buy a package with films released in the April 2009 – March 2010 period (the most recent window date tested) at £5 per month, and this falls only marginally to 8% if the window is twelve months older (April 2008 – March 2009). However, only 3% would buy the package with the most recent window if the price rises to £20 per month.

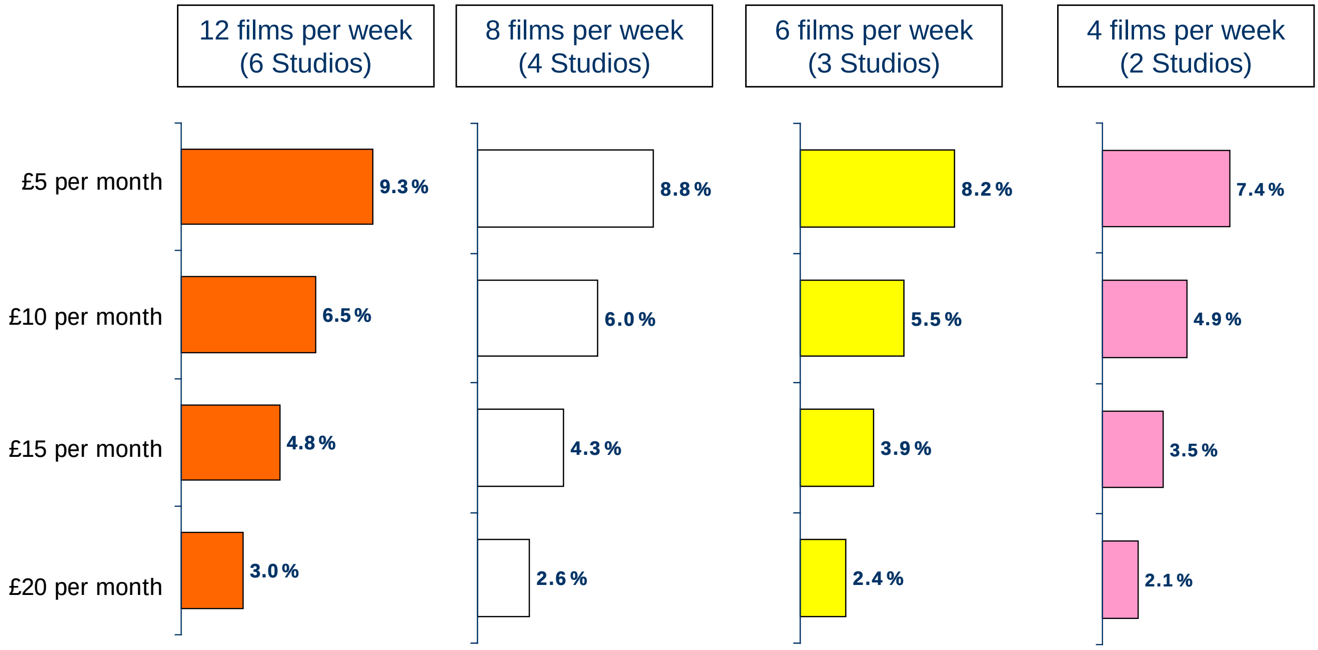
Figure 43: % who will buy full library subscription on demand service (12 films a week – proxy for 6 studios)



Base: All (790)

91. The chart below shows the propensity to buy (derived) a monthly subscription on demand package with the most recent window (April 2009 – March 2010) at different price levels and library sizes. A higher proportion would buy a package with four films a week (proxy for two studios) at £5 per month than would buy a package with 12 films a week (proxy for 6 studios) at £20 per month (7% c.f. 3%).

Figure 44: % who would buy FPTW (April 2009 – March 2010) monthly subscription on demand service



Base: All (790)

4.5.3 Provider Influence on Propensity to Buy

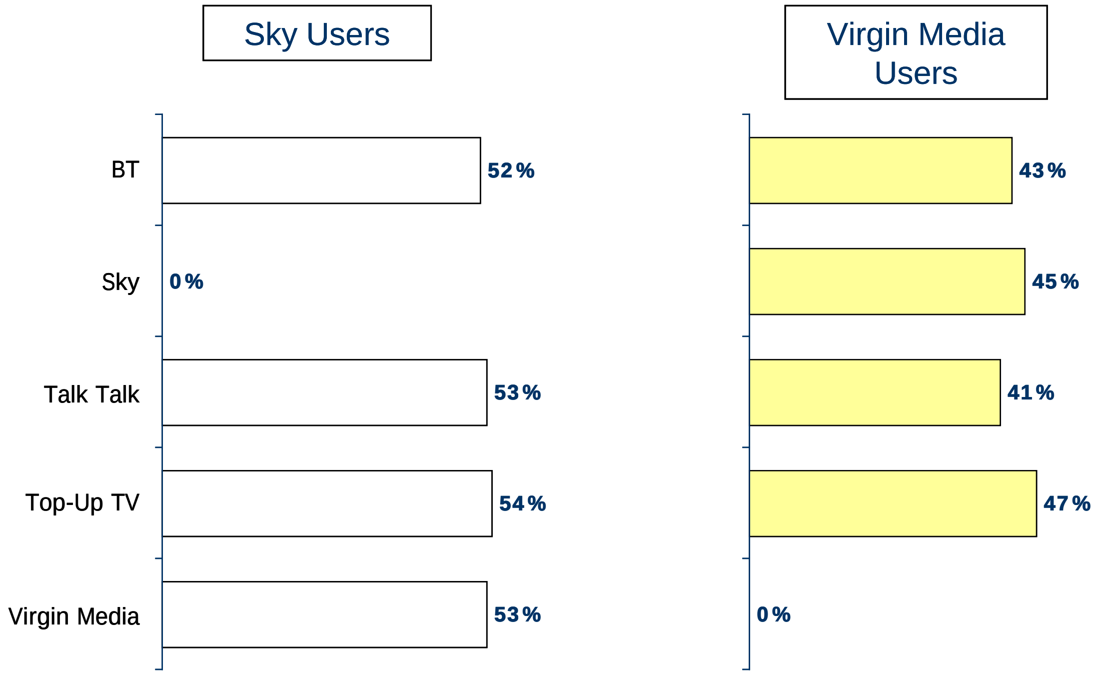
92. Those respondents who said they definitely or probably would buy at least one of the (six) packages from their current provider (or unbranded if FTA user) were asked how likely they would be to buy that package if it was offered by different Pay TV providers. If the respondent indicated they would buy more than one of the (six) packages, one package was chosen at random for this question. The same 5-point "definitely would buy" to "definitely would not buy" scale was used, and the question was repeated for each alternative provider (BT, Sky, Talk Talk, Top-Up TV, Virgin Media)

93. The results have been analysed to identify the percentage that would be more likely to buy from an alternative provider, or have the same likelihood to buy, or be less likely to buy from an alternative provider.

94. The chart below shows the proportion that would be <u>less</u> likely to buy the package if it was offered by an alternative provider, split between those who had Sky TV and Virgin Media (the base of those using Other Pay TV Providers who answered this question was not sufficient for robust analysis).

95. About half of Sky customers said they would be less likely to buy a film package if it was offered by another provider, and this proportion was the same regardless of which alternative provider was considered. Virgin Media customers were slightly less resistant to the idea of changing providers, but even among these respondents at least four in ten said it was less likely they would buy the package if it was offered by someone other than Virgin Media. It should be noted that very few respondents indicated that they would be <u>more</u> likely to buy from an alternative provider (5% or less in all cases bar one) - for most of the remainder, provider had no impact on their propensity to purchase.

Figure 45: % less likely to buy film package if offered by .....



Note – Very few respondents would be more likely to buy from another provider (5% or less in all cases bar one)

Base: Those definitely/probably buy at least one of the packages: Sky Users (264), Virgin Media Users (135)

GfK NOP

APPENDIX A –
Questionnaire

GfK NOP

Movies on Pay TV - Competition Commission
Questionnaire – FINAL
J438011
1 December 2010

SCREEENING QUESTIONNAIRE

Hello my name is ______ from GfK NOP, an independent market research agency. We are carrying out a survey on behalf of a Government organisation about leisure activities, would you be able to spare 20-25 minutes to answer some questions now?

INTERVIEWER: ADD REASSURANCES AS NECESSARY

- Everything you say is confidential and any responses will not be attributed to you
- There will be no attempt to sell you anything, either during or as a result of the survey
- This is a genuine market research survey being conducted on behalf of a Government organisation called the Competition Commission

S1. Firstly, are you responsible, either solely or jointly with someone else, for making decisions about what TV services you have in your household?

Yes – solely
Yes – jointly
No – not responsible – ASK TO SPEAK TO PERSON RESPONSIBLE IN THE H/H

S2. Do you work in, or have any strong connections with, any of these industries?
SHOW CARD A

Advertising
Banking
Journalism - CLOSE
Marketing
TV/film industry – CLOSE
None of these
Refused – CLOSE

S3. Can I just check your age?
WRITE IN

S4. RECORD GENDER
Male
Female

S5. And which of these describes you?
SHOW CARD B
Working full time (30+ hours a week)
Working part time (8-29 hours a week)
Retired
Student
House person
Not working

S6a Do you have any TV services in your household that you pay for, on top of your TV licence fee?

Yes
No

IF YES
S6b From which of these companies do you have a TV service that you pay for?
SHOW CARD C
BT
Sky
Talk Talk
Top-Up TV
Virgin Media
Other (write in)

IF GET A SKY/VIRGIN MEDIA/TALK TALK/OTHER TV SERVICE
S7a Do you get any Sky Movies channels on a monthly subscription basis?

Yes
No
Don't know

IF GET TOP UP TV/BT/TALK TALK PAY TV
S7b Do you get Picture Box film services on a monthly subscription basis?

Yes
No
Don't Know

IF GET TALK TALK
S7c Do you get Disney cinemagic film services on a monthly subscription basis?

Yes
No
Don't know

IF GET BT
S7d Do you get BT Vision Film Club on a monthly subscription basis?

Yes
No
Don't know

IF GET PAY TV AT S6a
S7e Do you get any Sky sports channels?

Yes
No

IF DO NOT GET PAY TV AT S6a
S8 Would you consider paying for a TV service from a provider in the next 2-3 years?

Yes, would consider in next 2-3 years
No – CLOSE
Don't know/not sure – CLOSE

IF DO NOT GET PAY TV AT S6A BUT WOULD CONSIDER
S9 And how interested are you in watching films, either at the cinema, on DVD, via the internet, or on TV?
SHOWCARD D

Very interested
Quite interested
Not very interested CLOSE
Not at all interested CLOSE

GfK NOP

MAIN INTERVIEW

Q1 How often do you, or anyone else in your household ......

- go to the theatre
- go to the cinema
- go out and pay to watch a live sports event
- watch a DVD (owned or rented)

SHOWCARD E
SCALE

Once a week or more
Once every 2-3 weeks
Once a month
Once every 2-3 months
Once every 4-6 months
Once every 7-12 months
Less than once a year
Never
Don't know

Q2 Which if any of the following would you say you, or anyone else in your household, watch regularly on TV, by regularly I mean at least once a week?
SHOW CARD F

Children's programmes
Comedies
Documentaries
Dramas
Films
Lifestyle programmes
News programmes
Reality TV/Quiz Shows
Soap operas
Sports
None of these

GfK NOP

IF GET PAY TV AT S6A. REST GO TO Q6
Q3 When did you first get a TV service that you pay for?

3 months or less ago
4-6 months ago
7-12 months ago
More than 1 year – less than 3 years ago
3-5 years ago
6-10 years ago
More than 10 years ago
Don't know/can't remember

Q4 Why did you first decide to get a TV service that you pay for?
DO NOT READ OUT BUT PROMPT TO PRECODES
INT PROMPT: Why else?

Q5. Here is a list of reasons given by some other people, which if any describe why you first paid for a TV service?
SHOWCARD G
PROMPT: Which others?

	Q4 Spontaneous	Q5 Prompted
Greater choice of TV		
Watch more sports		
Watch more films		
More children's channels		
Bundled service with broadband/telephone services		
Only way of getting TV in my area		
To get equipment to record/store programmes		
To watch programmes in HD		
Other (write in)		
Don't know/can't remember		

ASK ALL
Q6 Did you know that you can get TV services from …………….
READ OUT (EXCEPT CURRENT PROVIDER AT S6b)

ROTATE ORDER – CODE YES/NO FOR EACH

BT
Sky
Talk Talk
Top-Up TV
Virgin Media, if you live in a cable area

IF AWARE OF ANY (OTHER) PROVIDERS AT Q6
Q7a Have you ever bought a TV service from any of these providers?

Yes
No

IF HAVE PAY TV (YES at S6A) AND SWITCHED (YES AT Q7a).
Q7bi When did you most recently switch to …….. (ANSWER AT S6b) for your TV service?

3 months or less ago
4-6 months ago
7-12 months ago
More than 1 year – less than 3 years ago
3-5 years ago
6-10 years ago
More than 10 years ago
Don't know/can't remember

Q7bii Why did you decide to switch to (……….. ANSWER AT S6b) for your TV service?
DO NOT READ OUT BUT PROMPT TO PRECODES
INT PROMPT: Why else?

Cheaper TV
Cheaper broadband/telephone/bundle
Better range of TV programmes
Better sports package
Better films package
Moved house
To get equipment to record/store programmes
To watch programmes in HD
Heard they were more reliable
Not happy with previous provider
Other (WRITE IN)
Don't know/can't remember

IF FREE TO AIR (NO at S6A) BUT PREVIOUSLY HAD PAY TV (YES AT Q7A)
Q7c When did you last have a TV service that you paid for?

3 months or less ago
4-6 months ago
7-12 months ago
More than 1 year – less than 3 years ago
3-5 years ago
6-10 years ago
More than 10 years ago
Don't know/can't remember

GfK NOP

Q7di Why did you decide to stop having a TV service that you pay for?
DO NOT READ OUT BUT PROMPT TO PRECODES
INT PROMPT: Why else?

Q7dii Here is a list of reasons given by some other people, which if any describe why you stopped having a TV service that you pay for?
SHOWCARD H
PROMPT: Which others?

Didn't have channels I wanted
Too busy to watch much TV
Too expensive
Unhappy with customer service
Moved house
Other (WRITE IN)
Don't know/can't remember

ASK ALL
Q7e From which, if any, of these companies do you get a landline phone service?
SHOW CARD I
Q7f From which, if any, do you get a mobile phone service?
SHOW CARD I
Q7g From which, if any, do you get a broadband internet service?
SHOW CARD I

	Landline Phone	Mobile Phone	Broadband
BT			
Sky			
Talk Talk			
Top-up TV	xxx	xxx	
Virgin Media			
Other			
None			

IF HAVE PAY TV AND ANY OTHER SERVICE FROM SAME PROVIDER AS AT S6B
Q7h You mentioned you have a (......ANSWER(S) AT Q7e/f/g) service from (........ ANSWER AS AT S6b) as well as a TV service. Did this influence you to get their TV service a lot, did it influence you a little, or did it make no difference?

Influenced a lot
Influenced a little
No difference
Can't remember/not sure

IF HAVE PAY TV (YES AT S6A)
Q7i Have you considered switching your TV service from (........... ANSWER AT S6b) to another provider of TV services that you pay for in the last 2-3 years?

Yes
No

IF CONSIDERED SWITCHING
Q7j Have you compared TV services from different providers in the last 2-3 years?

Yes
No
Don't know/can't remember

IF HAVE PAY TV
Q7k Why have you not switched (IF CONSIDERED AT Q7i)/not considered switching (IF NOT CONSIDERED AT Q7I) to another provider of TV services? PROMPT: Why else not?
DO NOT READ OUT

Too much hassle to change
Don't want to change broadband/telephone
Don't trust other providers
Cost more to switch
Others don't offer TV channels I want
Can't have/don't want cable/satellite dish
Other (WRITE IN)
Don't know

IF FREE TO AIR (NO AT S6A)
Q7l Have you considered getting a TV service that you pay extra for in the last 2-3 years?

Yes
No

IF CONSIDERED
Q7m Have you compared TV services from different providers in the last 2-3 years?

Yes
No
Don't know/can't remember

IF FREE TO AIR (NO AT S6A)
Q7n Why have you not got (IF CONSIDERED AT Q7L)/not considered getting (IF NOT CONSIDERED AT Q7L) a TV service that you pay for? PROMPT: Why else not?
DO NOT READ OUT

Too much hassle to install
Doesn't have channels I want
Too busy to watch much TV
Too expensive
Can't have/don't want cable/satellite dish
Other (WRITE IN)
Don't know/can't remember

ASK IF GET PAY TV AT S6A. REST GO TO Q9a
Q7o How much do you pay in total each month for your TV and Broadband/Landline Telephone/Mobile telephone services (as Q7e-Q7g) from (......ANSWER AT S6B)?
PROMPT IF NECESSARY: Roughly how much?
WRITE IN AMOUNT OR DON'T KNOW

Q7p If someone else offered you exactly the same TV and Broadband/Landline Telephone/Mobile telephone services (as Q7e-Q7g), how much cheaper would it have to be per month to make you switch? Assume you did not have to pay any set-up costs.
WRITE IN AMOUNT IN POUNDS, OR TICK WOULD NOT SWITCH BOX, OR DON'T KNOW BOX

Q7q Thinking about what is involved in switching TV provider, how easy or difficult do you think it would be to switch?
SHOW CARD J

Very easy
Quite easy
Neither easy nor difficult
Quite difficult
Very difficult
Don't know

IF GET SKY MOVIES CHANNELS (Yes at S7a). REST GO TO Q9a
Q8a How long have you had any Sky Movie channels on a monthly subscription basis?
3 months or less
4-6 months
7-12 months
More than 1 year – less than 3 years
3-5 years
6-10 years
More than 10 years
Don't know/can't remember

Q8b Did you get Sky Movie channels when you first got a TV Service from (.....ANSWER AT S6B)?

Yes
No
Don't know/can't remember

Q8c How important are Sky Movie channels in your decision to have a TV service from (.....ANSWER AT S6B)?
SHOW CARD K
Very important
Quite important
Neither important nor unimportant
Not very important
Not at all important
Don't know/can't remember

Q8d Would you say Sky Movie channels have become more important to you and your household since you first got a TV service that you pay for, less important, or has its importance not changed over time?

More important
No change
Less important
Don't Know

Q8e If (PROVIDER AT S6B) stopped offering Sky Movie channels, would you continue to get their TV service, or not?

Continue to get TV service
Not use their TV service
Don't know

IF WOULD NOT USE THEIR SERVICE
Q8fi Would you change to another provider of TV services that you pay for, or would you stop paying for a TV service and just pay the licence fee instead?
IF USE ANOTHER PROVIDER PROMPT: Would you switch to another provider with Sky Movie channels, or to another provider without Sky Movie channels?

Use another Pay TV provider with Sky Movies channels
Use another Pay TV provider without Sky Movies channels
Just pay the licence fee
Don't know/not sure

IF WOULD JUST PAY LICENCE FEE AT Q8fi OR WOULD SWITCH TO ANOTHER PROVIDER WITHOUT MOVIE CHANNELS AT Q8fi, OR WOULD CONTINUE TO GET THEIR SERVICE AT Q8E

Q8fii In which if any of the following ways would you and other members of your household watch films instead if you did not have Sky Movie channels?
SHOW CARD L

Cinema
DVD – rented
DVD – bought
DVD - subscription
Internet – downloaded/streamed
On TV
None of these
Don't know

IF WOULD WATCH ON TV
Q8fiii In which of these ways would you or anyone else in your household watch a film on TV if you did not have Sky Movie channels?
SHOW CARD M

Another monthly subscription film service
Pay per view (e.g. £3 per film)
Other channel that you pay for
Film 4
Other free to air channels
Don't know/can't remember

IF GET SKY MOVIES CHANNELS (Yes at S7a).
Q8g Other TV providers offer film services via a monthly subscription package or on a pay per view basis. Why do you get Sky Movie channels rather than another film service?
PROMPT: Why else?
DO NOT READ OUT BUT PROBE TO PRECODES

Better choice of films
More recent films available
More blockbuster/popular films
Cheaper
Don't know enough about other film services
Don't like other providers
Can't be bothered to change
Have telephone/broadband services from same provider
Prefer to pay monthly subscription rather than pay per view
Other (WRITE IN)
Don't know

IF DO NOT HAVE SKY MOVIES CHANNELS. REST GO TO Q12
Q9 As you may know, Sky Movie channels is a service where you can watch films for a monthly subscription fee. Have you ever subscribed to any Sky Movies channels?

Yes
No
Don't know/can't remember

Q10 Have you considered subscribing to Sky Movie channels within the last year?
Yes
No

Q11 What if anything would make you consider subscribing to Sky Movie channels?
DO NOT READ OUT BUT PROBE TO PRECODES
PROMPT: What else?

Greater choice of films
Show more recent films
More blockbuster/popular films
Reduce price
Smaller range of films at cheaper price
If I had more time to watch films
Other (Write in)
Don't know
Nothing – would not consider subscribing

Q12ai In the <u>last month</u>, have you or anyone else in your household watched a film in any of the ways described on this showcard?
CODE ALL WAYS WATCHED
SHOW CARD N

Cinema
DVD – rented
DVD – bought
DVD - subscription
Internet – downloaded/streamed
On TV
None of these

IF WATCHED ON TV
Q12aii In which of these ways have you or anyone else in your household watched a film on TV in the last month?
SHOW CARD O

Sky Movie channel
Another monthly subscription film service
Pay per view (e.g. £3 per film)
Other channel that you pay for
Film 4
Other free to air channels
Don't know/can't remember

IF DOWNLOADED/STREAMED FROM INTERNET
Q12b In which of these ways do you or anyone else in your household stream or download films from the internet?

SHOWCARD P
On an internet enabled TV
On a desktop PC
On a laptop
Apple TV
Ipad
Games Console
Other (Write in)
Don't know/can't remember

Q12ci Roughly how many films in total have you personally watched in the last month?
ADD IF NECESSARY: Either at the cinema, on DVD, via the internet, or on TV?

WRITE IN NUMBER OR ZERO
Don't know/Can't remember

Q12cii Roughly how many films in total have other people in your household watched without you in the last month?
ADD IF NECESSARY: Either at the cinema, on DVD, via the internet, or on TV?
ADD IF NECESSARY: Please give me your best estimate

WRITE IN NUMBER OR ZERO
Don't know/Can't remember

Q13 Do you have a facility to record or pause programmes on your TV, so that you can watch them later?

Yes – can record/pause programmes
Yes – but don't know how to use it/never use it
No
Don't know/not sure

ASK Q14 IF WATCHED MOVIES ON TV VIA SUBSCRIPTION CHANNEL OR FREE TO AIR IN LAST MONTH (AT Q12), AND HAVE FACILITY TO RECORD (AT Q13). REST GO TO Q15
Q14 (Apart from any pay per view/subscription video on demand films (IF WATCHED)), How did you and others in your household watch the films that you saw on TV in the last month? Did you tend to watch them live at the time they were transmitted, or record them and watch later, or did you do both equally?

Mostly watched at time shown
Mostly recorded
Roughly equal
Don't know/can't remember

ASK ALL - CONJOINT

Q15 I would now like to show you some different types of film packages that could be offered by TV providers and I would like you to tell me which if any you would prefer to buy.

Each package is described in terms of five "attributes", as shown on this card.
INTERVIEWER HAND OVER ATTRIBUTE SHOWCARD AND ALLOW RESPONDENT A MINUTE OR TWO TO READ THROUGH CAREFULLY.

ONCE RESPONDENT HAS FINISHED READING SAY:
Can I check that you understand what we mean by the Cinema release date? IF RESPONDENT IS UNSURE READ THROUGH THE ATTRIBUTE DESCRIPTION AND CHECK AGAIN THAT RESPONDENT UNDERSTANDS

Can I check that you understand what we mean by the number of films added each week? IF RESPONDENT IS UNSURE READ THROUGH THE ATTRIBUTE DESCRIPTION AND CHECK AGAIN THAT RESPONDENT UNDERSTANDS

Can I check that you understand what we mean by How you watch a film? IF RESPONDENT IS UNSURE READ THROUGH THE ATTRIBUTE DESCRIPTION AND CHECK AGAIN THAT RESPONDENT UNDERSTANDS

Can I check that you understand what we mean by the Payment type? IF RESPONDENT IS UNSURE READ THROUGH THE ATTRIBUTE DESCRIPTION AND CHECK AGAIN THAT RESPONDENT UNDERSTANDS

Can I check that you understand what we mean by the price of the service?.

IF HAVE SKY MOVIES OR OTHER MONTHLY FILM SUBSCRIPTION SERVICE SAY.
Please note that the price of the service is instead of the amount that you pay each month for your current film service

IF HAVE PAY TV BUT DO NOT HAVE A MONTHLY FILM SUBSCRIPTION SERVICE SAY.
Please note that the price of the film service is on top of the amount that you would pay for the core TV service from a provider

IF FREE TO AIR SAY.
Please note that the price of the film service is on top of the licence fee that you currently pay

IF RESPONDENT IS UNSURE READ THROUGH THE ATTRIBUTE DESCRIPTION AND CHECK AGAIN THAT RESPONDENT UNDERSTANDS

PRODUCT ATTRIBUTE SHOWCARD

Cinema release date – this shows how recent the films are that you can watch using this service, that is when the films were released in UK cinemas. Only films made during this cinema release date are available to watch using this service.

Number of films added each week – There are usually 12 films that become available each week. So, if the service shows six films, it shows HALF of the films available and has a library of films that is half the total number available.

How you watch a film – this describes whether you choose any movie from a library of films at a time that suits you (*on demand)*, or whether the film is only shown at specific times according to the provider's schedule

Payment type – this describes whether you pay a monthly subscription fee, or whether you pay for each film that you watch on a pay per view basis

Price – the price you pay for the service

You will now see a series of screens that show three TV film packages side by side. On each screen please select the ONE package that you would most prefer to buy. If you would not buy any of them, you can tick the "would not buy any" box at the bottom of the screen.

HAND OVER COMPUTER TO RESPONDENT. AFTER THE RESPONDENT HAS GONE THROUGH THE FIRST SCREEN, CHECK THE PREFERENCE THAT THE RESPONDENT HAS MADE AND THAT HE/SHE HAS UNDERSTOOD THE TASK. ONLY ASK THE RESPONDENT TO GO TO THE NEXT SCREEN ONCE YOU HAVE CHECKED. TASK REPEATS FOR A NUMBER OF SCREENS – WHEN FINISHED ASK RESPONDENT TO HAND BACK COMPUTER

GfK NOP

CONJOINT LEVELS

Attribute						
Cinema release date	April 2009 – March 2010	October 2008 – September 2009	April 2008 - March 2009			
Number of films added each week	2	4	6	8	10	12
How you watch a film	On demand – watch whenever you want	Shown at scheduled time	On demand – but only within one week of scheduled time			
Payment type	Monthly subscription	Pay per view				
Price – monthly subscription*	£5	£10	£15	£20		
Price - £ per film (pay per view)*	£1	£2	£3	£4		

*Note – "Price- monthly subscription" attribute only appears on packages with monthly subscription payment type; and "Price - £ per film" only with Pay per view payment type

Q16. I am now going to show you some more film packages, one at a time, and for each one I would like you to tell me how likely it is that you would buy this service, (IF USE PAY TV - if it was offered by (......ANSWER AT S6B)), using one of the phrases on this showcard.

SHOW CARD Q

SCALE
Definitely would buy
Probably would buy
Might or might not buy
Probably would not buy
Definitely would not buy

IF HAVE SKY MOVIES OR OTHER MONTHLY FILM SUBSCRIPTION SERVICE SAY.
Please note that the price of the service is instead of the amount that you pay each month for your current film service

IF HAVE PAY TV BUT DO NOT HAVE A MONTHLY FILM SUBSCRIPTION SERVICE SAY.
Please note that the price of the film service is on top of the amount that you would pay for the core TV service from a provider

IF FREE TO AIR SAY.
Please note that the price of the film service is on top of the licence fee that you currently pay

HAND OVER COMPUTER AGAIN TO RESPONDENT.
Q16 REPEATS FOR SIX DIFFERENT PACKAGES – RANDOMISED ORDER

Q17 FOR THE FIRST PACKAGE THAT RESPONDENT WOULD DEFINITELY/PROBABLY BUY ……….. (IF NONE SKIP TO Q18):

SHOW PACKAGE AGAIN

You mentioned that you would definitely/probably buy (… ANSWER AS Q16) this package (IF USE PAY TV - … if it was offered by (ANSWER AT S6B).
How likely would you be to buy it if it was offered by:
READ OUT ALL EXCEPT CURRENT TV PROVIDER (IF APPLICABLE), RANDOMISE ORDER:

- BT
- Sky
- Talk Talk
- Top-Up TV
- Virgin Media

SHOW CARD Q

SCALE
Definitely would buy
Probably would buy
Might or might not buy
Probably would not buy
Definitely would not buy

Q18 I am now going to read out a number of different features, and for each one I'd like you to tell me how important it would be if you were choosing a TV film service. Please use one of the phrases on this card. **SHOWCARD R**

SCALE
Very important
Quite important
Neither important nor unimportant
Not very important
Not at all important

Don't know

ROTATE ORDER OF READING OUT FEATURES

The length of time you have to wait after a film is shown at the cinema before you can watch it on TV

The number of films added each week

The total number of films available to watch

Films being available on demand – that is you can choose to watch them at a time you like

Films being available on a pay per view basis – so you pay a fixed amount for each film you watch, and do not pay for films you don't want to watch

The service being available on a subscription basis – so you only pay a fixed monthly fee with no extras no matter how many films you watch

The minimum length of contract

Films being available in high definition

The overall cost of the service

Q19 Finally, I'd like to ask you a few questions that will be used for classification purposes only. Which if any of these has happened to you during the last 2-3 years?

SHOW CARD S

Moved house
Started living with someone else
Had a baby
Child/Children left home
Lost my job
Retired/stopped working
None of these

OTHER DEMOGRAPHICS

Social Grade
Household composition (no. of adults (aged 16+ years)/children in household aged: 0-4 years; 5-10 years; 11-15 years)

Thank you very much for your time that is the end of the interview. If you have anything else that you wish to say about how you watch films, please contact the Competition Commission at: moviesonpaytv@cc.gsi.gov.uk

APPENDIX B –

Film packages shown to derive propensity to purchase

GfK NOP

Derived propensity to take-up film services – the 6 packages tested

Q16 Packages: Likely to buy						
Attributes	**Task 1**	**Task 2**	**Task 3**	**Task 4**	**Task 5**	**Task 6**
Cinema release date	April 2009 -March 2010	October 2008 - September 2009	April 2008 - March 2009	April 2009 -March 2010	October 2008 - September 2009	April 2008 - March 2009
Number of films added each week	6	8	2	10	12	4
How you watch a film	On demand - watch whenever you want	On demand - but only within one week of scheduled time	Shown at scheduled time	Shown at scheduled time	On demand - watch whenever you want	On demand - watch whenever you want
Payment type	Monthly subscription	Monthly subscription	Monthly subscription	Monthly subscription	Pay per view	Pay per view
Price	£5 a month	£10 a month	£15 a month	£20 a month	£2 per film	£4 per film

APPENDIX C –

Summary findings from the qualitative survey

GfK NOP

Competition Commission Pay TV Qualitative Exploration

Summary of Findings 10th November 2010

Outlined below are the findings for this research, conducted as an exploration of decisions for choice of TV provider, and the role of film channels within this.

1. Sample summary

5 group discussions were conducted between 3rd and 8th November as follows:

- 2 x 'expert' Pay TV subscriber groups
- 2 x 'moderate' Pay TV subscriber groups
- 1 x free to air group

Locations included London (Blackfriars), Birmingham (Sutton Coldfield) and Hertfordshire (Kings Langley).

2. Quantitative question testing / development

<u>TV programme genres (Quant Questionnaire Q3)</u>
All those tested are applicable:

- Documentaries (some mention of nature programmes, but most felt could fit within here)
- Films
- News programmes
- Quiz Shows (does not appear to be a major category, although it still stands – and some overlap with reality TV game shows ('I'm a celebrity…', 'Deal or No Deal' etc.)
    - Some uncertainty as to whether shows like Bargain Hunt fit within here
- Soap operas (a clear and very popular category, e.g. Eastenders, Corrie etc.)
- Sports

And additionally:

- Comedy (e.g. Only Fools and Horses etc.)
- Reality TV (a host of programmes inc. Big Brother, X-factor, Strictly, etc.)
- Trash TV? - some felt that there is a new sub-category within Reality TV, generally described as 'trash TV', with celebrity gossip (e.g. 'Gossip Girl' and 'Celebrity Juice') - but most feel this content can also still fit within Reality TV bracket
- Dramas (e.g. Spooks, Downton Abbey etc.)
- Current affairs (e.g. Watchdog, Crimewatch etc.)

- Science-fiction (some see as a separate category)
- Music (as per channels, e.g. MTV etc.)
- Radio (i.e. listening to radio channels through TV)
- Lifestyle?
    - Many other programmes that do not appear to fit into any category, and including cooking (Jamie, and also Come Dine with Me), and many property / home improvement shows (e.g. Grand Designs)
    - Could fit within new 'lifestyle / living shows' category?

3. Motivations and barriers for Pay TV subscriptions

a) Motivations for subscribing to Pay TV were as follows:

- The ability to bundle services (Internet and landline) together with one provider
    - easier and more convenient to set up initially
    - easier/simpler to pay the bill/liaise with one company
    - perceived as offering better value for money to get all services for a fixed price
    - financial incentives to take more services with the same provider
- Access to Sky sports channels (Sky Sports 1, 2, 3 and 4)
    - Ability to follow specific sport
    - Access to key football matches
    - Following a football team
    - Particularly strong motivator for men - but also for some women, and children have some influence
- Accessing additional kids channels, esp. for those with young children, e.g. Disney channel mentioned in particular
- Enhanced functionality within sports channels (with Sky) – e.g. ability to choose between 8 different matches on one channel
- Ease of use - mentioned as key motivation for some, and Sky was described particularly favourably in these terms, with one or two respondents having opted for Sky on this basis, if familiar with it from another source
- Enhanced functionality, including the ability to record programmes (even from outside of the house, by sending a text message), and ability to pause and rewind a live programme (if interrupted, if needing a beak).
- General access to broader range of channels (including free to air channels) – as many did not seem to differentiate between free to air and Pay channels
- HD TV, whilst not a trigger for all, general consensus that the picture is appreciably better, and gives a sharper picture for watching live sports in particular. Also HD channel range means that those with HD can generally view selected programmes in HD most of the time.
- **Access to films / movie package** rarely the key motivation for taking out a subscription – tends to be seen as an add on
    - Some added films later
    - Some took out films initially, then cancelled the film package when they found that they were not watching it

  - Many somewhat ambivalent re having movie package, but inertia in cancelling, some see as relatively low value item (a few pounds), therefore low priority to amend package one way or other

b) Barriers for subscribing to Pay TV were as follows

- The cost of a subscription – perceived as expensive
- The hassle of installation, e.g. having to wait at home for an engineer, concerns exacerbated by negative WOM stories from others re. the two main providers
- Being tied into a contract for a minimum period of time (e.g. 12 months), exacerbated by concerns re job security etc. (and mentions that a shorter time period or initial trial period outside of a contract would prompt trial)
- Lack of flexibility of channel packages, i.e perception that you need to purchase a 'package' and not just the channels that appeal
- Not wanting to have a satellite dish on the house – perception that it lowers the tone

N.B. approx half of free to air viewers had access to the Internet – therefore the bundling of services (a key motivation for subscribers) did not seem to apply to them equally.

Motivations for subscribing to Pay TV clearly outweigh barriers – and once have signed up, many other benefits and service enhancements mean that **most retain their subscription for a long period of time** – usually until a change in circumstances / offer.

4. Switching from one provider to another

N.B. subscribers were customers of Sky or Virgin Media, plus one Top Up TV subscriber within the sample.

Switching propensity

- Subscribers seemed largely satisfied with the services received from their provider
  - One or two somewhat dissatisfied as perceive that new customers get better financial deals - but insufficient to instigate switching
- Generally subscribers did not seem to check competitor activity frequently (unless targeted by an offer), and did not seem particularly keen to switch providers (similar to utilities)
- This seemed to be partly due to perception of two providers available (awareness of BT Vision/Top Up TV was minimal),and additionally that their offer is broadly similar – therefore little perceived advantage to switching

a) Motivations for switching provider

- Financial incentives - to receive the same package for a lower price
- Approached by a competitive offer - a couple of subscribers had recently switched from Sky TV to Virgin Media in order to save money, in response to promotional material from Virgin Media.

  - However they seemed disappointed and planned to switch back to Sky as felt that the price was the same or more than Sky, and they also lost functionality
- Convenience / ease of installation –if one supplier already had equipment installed
  - e.g. when moving from one property to another, subscribers tended to select the provider that was already installed in the property
- Moving home – a prompt to re-evaluate TV subscription and available options for TV, broadband and landline in entirety – which may indicate another supplier
- To get faster broadband – in particular Virgin Media broadband described as much faster, due to fibre optic cable
  - And 1 or 2 others would like to switch for this reason, but cable not available in specific street
- Picture quality enhancements – to get a better quality picture
  - 1 or 2 mentioning that would switch if an alternative provider offered a better picture quality, or had access to new technology for a better picture etc.
  - 3D is a potential example of this, whilst few sufficiently motivating by 3D to switch currently, claim that potentially would in the future
- Sky+/V+ (hard drive recording, pause and rewind)
  - Switched when alternative provider offered + technologies for free – whereas would have to pay with existing provider
- New functional enhancements – e.g. if a new technology
- Reviewing household expenditure – monthly subscription perceived as too high
  - Prompted change to Top Up TV

b) Barriers to switching provider

- Hassle factor
  - Perception that it will take time and hassle to switch from one provider to the other
  - Concerns re. gap in service?
- Inertia – perception that any differences (price, quality etc.) likely to be very marginal
- General perception of a 'parity' product / package being available from Sky/Virgin Media (same channels, same packages etc.)
- Satisfaction with existing provider, esp. if good customer service and perception of having 'a good deal'
- Preference for cable – not wanting to have to have a satellite dish on side of house, and heard that bad weather can lead to poor reception
- Preference for satellite – claim that Sky has better quality picture, and cable uses 'amplifiers' down the line

c) Amends to TV package (e.g. Sky+/V+, HD, films and sports)

Prompted by:

- Change in household composition – e.g. children going to university, one partner leaving the home etc.
- Sports seasons starting / finishing – some will add / subtract sports channels depending upon the seasons, e.g. Ashes, football season etc.
- A provider offer – e.g. price of HD or Sky+/V+ coming down, a financial incentive to take up, e.g. a free V+/Sky+ box
- New technology / functionality available – e.g. HD, Sky+/V+ etc. (esp. series button, record all series on pressing button once)
- Buying an HD ready television – prompts some to take up HD offer.
- Reviewing household expenditure – may lead to cutting back on packages
- Low usage – may lead to downgrading channel package
- Children getting older – adding on a kids package

Whilst many motivations for switching provider, in reality these **tend not to be realised** due to inertia, until prompted by a **change in circumstances**, or in response to a potential **new offer**.

5. Motivations for take up of film packages

a) Motivations for adding a film package

- To have access to 'everything' – certain subscribers, (esp. male experts) like to have the top, all inclusive package, and film channels within that – perception of having the best/top package etc.
- To watch films together as a family – nights in at home
- As a more convenient alternative to rental shops, Lovefilm etc.
- Cheaper alternative to going to the cinema – option to see the latest releases (albeit after a period of time) but then will come onto Sky Movies Premiere
- Greater availability of films generally – greater overall likelihood of finding films that will want to watch
- Interest in films – self perception as 'film buff' and therefore access to content of interest, to keep up to date with films, latest releases etc., to ensure see good new films coming out
- Availability of more recent films that have not yet watched elsewhere – e.g. new releases as per Sky Movies Premiere

b) Motivations for removing a film package

- Low usage – may lead to downgrading channel package
- Dissatisfaction with service – e.g. too many repeats, films not appealing etc may lead to cutting back on film package
- Change in household composition – e.g. kids to university etc.
- Switch to alternative 'film' provider e.g. rental shops, Lovefilm etc.

b) Barriers to removing a film package

- Mainly inertia, and the feeling that whilst not getting great use/value from service, the additional cost is marginal, and therefore tendency to continue the service rather than take it off

- Additionally, children 'objecting' to removal of service

Once added, most **tend to retain their movie package**, although indications that usage may be limited, and some underwhelmed by content - until prompted by a change in circumstances.

6. Role and importance of films overall

Films playing varying / different roles within the household/family:

- A hobby/interest – for film buffs, or those with an interest in a specific film category e.g. sci-fi films
- A family day/evening out/treat - for both kids and adults
- The cinema experience – atmosphere, big screen, picture quality (e.g. 3D), and additionally a night out / social occasion
- Planned film viewing experience – a night in for the family, for a couple, for friends etc.
    - A specific film often chosen in advance, may be rented, borrowed, bought from supermarket – scheduled on TV, or recorded on hard drive to view later
    - Special at home 'cinema' room
- Unplanned home viewing experience – usually found scrolling through TV menus / magazines and decide to watch

Whilst most access films both inside and outside of home, some have a **clear preference for in home viewing** – a key motivator for film channel package. The role of **cinema** clearly more important for others, in which case **film channel packages a lower priority**.

Film genres (Quant Questionnaire Q4b)

Including many of those tested:

- Action/Adventure – fairly clear category
- Classic films
    - Perceived as films such as 'Gone with the Wind' for some, and for others 'Home Alone' and 'Ace Ventura' , 'Mrs Doubtfire'
    - Films that have stood the test of time – and therefore can mean all things to all people somewhat open to judgement – a somewhat 'catch all' /vague category
- Comedy – essential category
- Drama/Romance – for some (men) work together, for others (female) categories make more sense when separated
- Ethnic films
    - Often perceived to mean Bollywood films, and also more generally films in other languages.

  - Overall, seem to feel more comfortable with 'World Cinema' that is taken to mean films in any language other than English (non UK/USA)
- Family entertainment
  - For some, this category is somewhat vague and some unclear as to what's included, others perceive as generally including all PG films
  - Felt to be a distinction between films that are suitable for 'all the family' and those that are for kids only
  - Some suggestions for 'Kids films' to incorporate films such as 'SpongeBob SquarePants' and other kids only films

- Some tested seen as discrete categories (e.g. can be different variations on themes, e.g. crime comedy, crime thriller etc.)
  - Sci-fi
  - Horror
  - Crime
  - Thriller

And additional categories identified:

- Westerns – although 1 or 2 suggestions, does not appear to be essential or very current category
- Documentary films – a small but discrete category, e.g. 'Bowling for Columbine' and 'Super Size Me'
- True stories – e.g. 127 hours (mountaineer who cut own arm off), Alive
  - Could be combined with documentary films above?
- Musicals – can fit within family entertainment?
- Romcoms / 'chick flicks' – whilst mentioned, can fit within Romance as above
- Animations – a few suggestions, a growing category, and often targeted at adults rather than kids

7. <u>Ways of accessing films currently</u>

- Films currently being accessed via broad range of different ways across sample:
- Films available via TV
  - Films aired on TV channels (free to air and pay movie channels)
  - Films aired on TV and recorded on hard drive recorder
- Films on DVD
  - DVD shop rentals
  - DVD rental subscription (e.g. Lovefilm)
  - DVD own collections
  - DVDs borrowed from friends, family and colleagues
  - Specific DVD purchase (online, e.g. from Amazon or others, or from supermarket or other shops)
- Internet, via downloads (a few younger, esp. Birmingham)
- Watching films on demand (Sky Box office, Virgin Media Film Flex)
- Cinema – to see a specific film, or to see a film that 'needs to be seen' on the big screen

Overall:

- Most using TV and DVDs from a range of sources, and cinema to greater or lesser extent depending upon circumstance and preference.
- A few using on demand services, and the Internet

Many different and overlapping ways of accessing films available. Therefore access to films in general **does not appear to pose a particular problem or challenge**. Despite this, clearly a **demand for new films not seen before**, and **specific film preferences** means that some may have to make an effort to seek out new interesting content that meets their needs.

8. Testing/development of conjoint statements

8a. Certain statements were **clear and simple** across the sample, and require no or few amends:

Provider – the company that provides the service

- General agreement that this is clear self-explanatory
- Whilst not important for all (as would go with package offer rather than provider name), clearly a decision factor for others
    - Predisposed towards Sky/Virgin Media
    - Good/bad WOM reports circulating re different providers
    - Additionally provider preference is tied up or made more complicated by different arrangements around cable/satellite etc.
    - In reality, little evidence of actual loyalty to a specific provider – the package appears more motivating for most

Price – the price you pay for the service

- As above, general agreement that this is clear self-explanatory
- Clearly an important decision factor for most, although differences in price sensitivity
    - For example, some would switch for a competitive price offer to save money, whereas others would not see a small difference as sufficiently motivating to switch

Technical quality – whether the film is available in standard definition, high definition or 3D

- As above, this was fairly clear once respondents had read the entire statement
- But do not immediately connect technical quality with the picture
- 'Picture quality' suggested as more immediately clear, and on balance a preference for this
- Generally familiar with the terminology
    - One or two unsure re 'standard definition' – and queried whether this is the same as analogue or terrestrial TV – not usual consumer terminology

- o High definition – some more used to seeing it as HD – therefore HD with 'high definition' in brackets may be more quickly grasped
- o But, perception that quality experienced will depend upon the individual's TV equipment (so cannot be guaranteed by the service), and none able to receive 3D currently

- Picture quality and option for HD versus standard definition clearly a key decision factor currently, due to current buzz around HD
    - o Evidence of subscribers upgrading package to HD
    - o Those with HD very satisfied
- Whilst general familiarity with term, may be some uncertainty re how to receive the different quality levels.

Film TV premieres: Number of new films added each week (most recent films within age band above)

- Title and statement generally understood with few problems – as used to the term 'premieres'
- And many familiar with the concept of new films added each week from their film subscription services
- 'age band above' may potentially cause problem as per 'age of films' and should be amended similarly to relate to the cinema release date – which is more familiar and relevant to respondents

8b. Some statements were a little **harder for respondents to grasp**, and may require further re-working:

Choosing a film – this describes whether you choose any movie from a library of films at a time that suits you (*video on demand*), or whether the film is only shown at specific times according to the provider's schedule

- The statement overall was clear, however the heading suggested something different (i.e. ways of choosing the film, magazines, EPG etc.)
- The statement was felt to be more about the dimension of time, and when and where to watch, i.e. whether the film is available to view on demand (when you want to watch it), or whether you have to fit in with the provider's schedule
- Respondents struggled to suggest a clear alternative, however while *most* recognised the term 'video on demand'
    - o A feeling that some others would not – and those from the Free to Air group generally not familiar with VOD - but they did understand the statement overall
- A clearer title might be along the lines – video on demand or scheduled (not tested across groups)
- This factor did appear to be important to respondents, as it impacts upon the viewing occasion, and whether planned or spontaneous, and convenience

- o However indications that some recorded scheduled films to the hard drive to watch at their own convenience (essentially, similar to VOD)

How to pay – this describes whether you pay a monthly subscription fee, or whether you pay for each film that you watch on a pay per view basis

- As above, the statement itself was fairly clear, and all were familiar with the options provided
- However the title suggested something different to some (i.e. pay by credit card, cash etc.), some preferred something along the lines of 'payment options' or 'ways to pay'
- A couple of suggestions of 'contract/pay monthly or pay as you go' - terms which respondents were familiar with from mobile phones etc. and which summed the options up more clearly for them (but not tested across groups)
- This factor is clearly important –it defines how you pay for the service, and the point at which you opt into the service (i.e. upfront contract, or pay if you see a film that interests you)
- Additionally the two different service options would potentially suit different film usage patterns
  - o i.e. those who have specific films they like to watch occasionally, and those who perhaps consume films on a more regular basis (stay at home families etc.)

Range of films – this shows the proportion of all films that are released that you can choose from when using this service.

- Range initially misunderstood as 'variety' 'choice', breadth of films available, and choice of genre (i.e. a few or all genres available)
- Also struggled with proportion and percentages – some struggle with these words, and misinterpret %s
- Overall concept of 'range' hard to understand as did not understood the reason behind this, so assumed to be some sort of limitation to the offer (i.e. you can only view 1 out of 6 films showing, for a set price)
- Easier to grasp quantities as 'half' or 'three quarters', but some still struggling with concept overall

Age of films: this shows the number of months after the film has been released at the cinema, before you can watch it using this service

- Title: Age initially taken to mean the film certificate, e.g. PG, 12, 18 etc. - or alternatively the date when the film was made
- The statement itself was much clearer, as respondents understood the idea of months after cinema release (as some tend to think in these terms currently, in terms of how long have to wait before watching / appearing on Sky Movies etc.)
  - o However 1 or 2 comments re months elapsed since it was released within the cinema, versus no. of months until it can be viewed via service

    - Whilst current format is fine for most, 1 or 2 suggestions to use cinema release dates instead (i.e. released June 2010, released Dec 2009 to indicate time elapse)
- Options within this generally fine – although 1 or 2 preferred 1-2 years, 2 years+ (to no. of months)

9. Reactions to film channel scenarios

- Overall , find the concept hard to grasp
- However, preference for simplicity and convenience generally leads respondents towards preferring just one channel for all films:
    - Easier to find films all in one place
    - Expected to be a cheaper, all inclusive price
    - But, perhaps less likely to find a film to suit mood at any given time
- Two or more different channels tends to be perceived as less convenient and complicated
    - Raises concerns amongst those wanting all content that it will not be readily available to them
- Overall, number of channels is less important than the availability of the films within one package / with one provider, and of course price
- Mixed views in terms of general vs. genre split
    - Some perceive that they could choose the genres that they prefer, whereas others prefer the idea of having 'a little of everything'
- Splits by provider (Virgin/Sky) *generally* causes concern amongst those with film subscriptions currently – as concerned that current content will be cut
    - Some (who are currently somewhat ambivalent about film subscriptions) claimed that they would cancel their subscription
    - A couple claimed that this could work for them – as limited time available to view films – assuming that the price would reflect the reduced content

"I'd be very unhappy...to be honest I'd probably find a way around it somehow – I'd probably go back to Lovefilm. That worked for me and that was fine...it's just constantly posting films back and forth...." [Moderate subscribers, Kings Langley]

"I'd be really annoyed as I'd be missing out one way or the other, and I certainly won't be buying 2 packages." [Experts, Kings Langley]

However, due to **wide availability of films** via a variety of other methods (as listed above) changes to film channels /providers potentially **inconvenient** – but perception that they could still get hold of films they want to see.

Weighted average price for Sky Movies

1. We constructed a weighted average price for Sky Movies retailed by Sky.[1] We used as weights the average number of Sky subscribers for each Sky Movies product. First, we estimated the incremental price for each product and then we constructed the weighted average price across all Sky Movies products. At the time of our final report, there were six different incremental prices for Sky Movies products (one for single movies, one for dual movies and four for combined movies and sports products—see Appendix 4.1, paragraph 3*(a)*).[2]

2. For the Sky-Movies-only products (ie single and dual movies) we simply computed the incremental price as the difference between the package price including the Sky Movies product and the same package without the Sky Movies product.

3. For the combined Sky Movies and Sky Sports products we took, as a maximum, the incremental price of the Sky Movies only product (ie single or dual movies) and, as a minimum, the difference between the combined product price and the Sky Sports only incremental price (see Appendix 4.1, paragraph 3*(a)* and Table 1).

4. We then weighted these figures using the stated preferences from the Willingness to Pay survey commissioned by Ofcom in 2008. There were two research waves conducted and Table 1 presents the results from each wave.

TABLE 1 **Relative preferences for movie and sports content for subscribers taking bundled packages**

per cent

	Wave 1	*Wave 2*	*Total*	*Adjusted**
We subscribe to Sky Movies because we wanted Sky Sports and Sky Movies did not cost much extra	49	35	44	46
We subscribe to Sky Sports because we wanted Sky Movies and Sky Sports did not cost much extra	22	36	26	27
Having Sky Movies is as important as having Sky Sports	25	26	26	27
Don't know	2	1	1	
None of those	3	2	3	
Total	100	100	100	100
Total weighted base	260	131	391	

Source: CC calculations based on Ofcom's Willingness to Pay Survey (2008). The question asked was: 'which of the following best describes your household's reasons for subscribing to Sky Movies and Sky Sports'?

*Adjusted to exclude don't knows and those answering 'none of these'.

5. Across the two waves together, the results indicated that, among respondents subscribing to the combined product (ie movies and sports together) and expressing a view:

   (a) 46 per cent subscribed to Sky Movies because they wanted Sky Sports and Sky Movies did not cost much extra;

[1] Our weighted average did not cover incremental prices of Sky Movies retailed by Virgin Media (for which we did not have full historic data). Since Virgin Media's incremental prices were higher than those of Sky, this led to some understatement of the overall weighted average incremental price of Sky Movies. However, we considered that this effect was likely to be small as there were relatively few Virgin Media subscribers to Sky Movies.
[2] In earlier years, there were more than six prices as incremental prices depended on the basic pay-TV pack taken (see paragraph 8), and in some years there were also different prices for different single movies products.

(b) 27 per cent subscribed to Sky Sports because they wanted Sky Movies and Sky Sports did not cost much extra; and

(c) for 27 per cent of subscribers having Sky Movies was as important as having Sky Sports.[3]

6. Based on these results, we computed a weighted average incremental price for each of the combined products, assigning a weight of 46 per cent (group *(a)* above) to the minimum price, a weight of 27 per cent (group *(b)* above) to the maximum price, and for the remaining 27 per cent (group *(c)* who said Sky Movies was as important as Sky Sports) we took a simple average of the minimum and maximum price.

7. Using these results, we then estimated a weighted average Sky Movies price across all Sky Movies products. This was the incremental price of Sky Movies for each of the Sky Movies products multiplied by the number of subscribers to that product.

8. Since September 2009, incremental prices for Sky Movies products were the same irrespective of the number of Sky's basic entertainment packs taken. This was not the case prior to 2009, when subscribers taking fewer entertainment packs paid slightly higher incremental prices. Therefore, prior to September 2009, we used incremental prices for subscribers taking all six entertainment packs (this was by far the most common entertainment option). Prior to the introduction of entertainment packs in September 2005, we used the incremental price for Sky's Family Pack which included the maximum number of basic channels. As we did not take account of the incremental price paid by subscribers not taking all basic channels and this incremental price was higher, our weighted average slightly understated prices before September 2009.

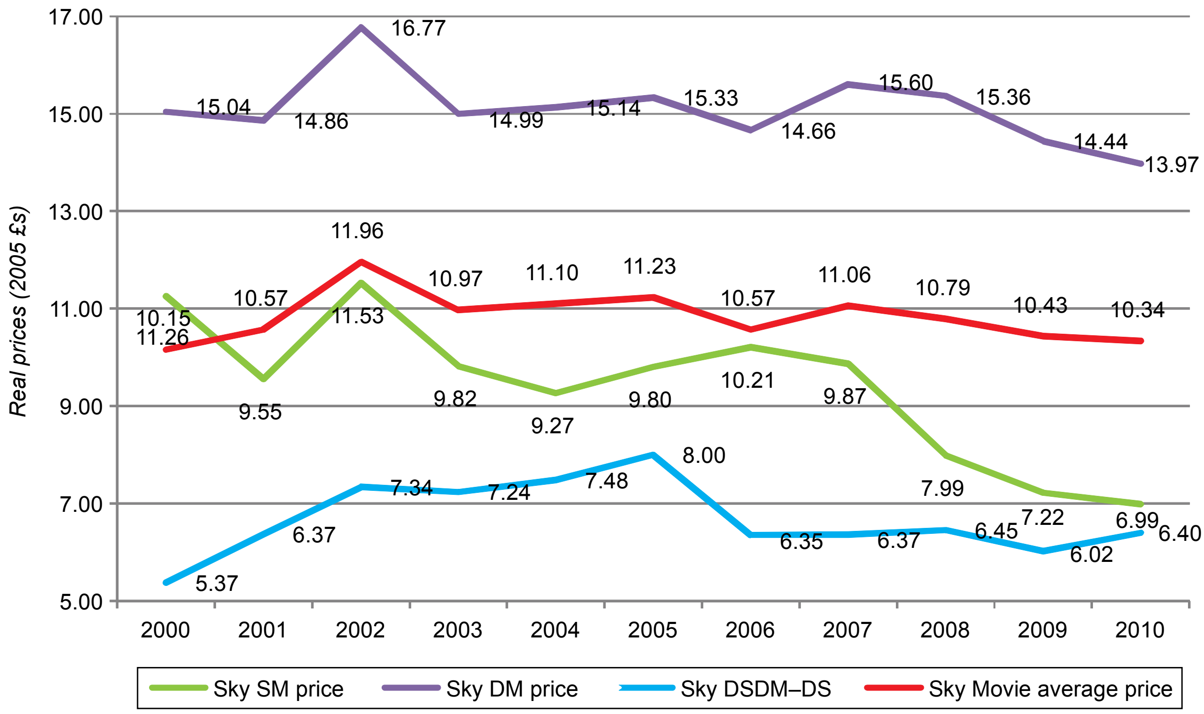
9. Our weighted average Sky Movies price also reflected the price changes that took place in a year, usually in September, as each price was weighted by the number of months it was in effect.

10. Figure 1 illustrates the weighted average incremental price and its three most important components: the single movies incremental price, the dual movies incremental price and the difference between the dual movies/dual sports and dual sports average incremental prices (there were very few subscribers to the other products).

[3] The percentages were based on a weighted average of responses from the two waves. The two waves appeared to show different responses, which might be because of differences in the preceding questions (see paragraph 15*(b)*). In the light of this, it could be argued that responses from the two waves should be equally weighted; if so, the percentages would be 44, 30 and 27 per cent respectively. This would slightly increase our calculation of the weighted average incremental price of Sky Movies but would not affect our overall assessment of close substitutability.

FIGURE 1

Incremental prices charged for Sky Movies



Source: CC calculations using data provided by Sky.
Note: Sky incremental price represented the difference between monthly subscription charge for packages including and excluding Sky Movies (SM = single movies, DM = dual movies, DSDM–DS = difference between dual movies/dual sports and dual sports price). The Sky Movie average price was computed as described above.

11. In its comments on our working papers, Sky said that our calculated figures were not meaningful prices for the Sky Movies components of pay-TV packages as products sold in packages did not have identifiable prices. However, in its comments on our working papers Sky also stated that our analysis of close substitutes was too cursory to enable sound conclusions to be reached.

12. In order to carry out an analysis of whether there were close substitutes, it was necessary for us to calculate a price for Sky Movies and we made our best effort to do so. (Indeed, had it been the case that there was no meaningful incremental price for Sky Movies,[4] this would have suggested that Sky Movies had no close substitute (because, if there had been a close substitute, retailers of Sky Movies would have had the incentive to set an incremental price in line with the price of that close substitute).)

13. Sky also commented on the detail of our calculation. Sky told us:

(a) We should not label our estimates as a ‘price’ of Sky Movies as they were just estimates of minimum willingness to pay; nor should we label incremental prices as ‘payments for’ or retail ‘revenue’ attributable to Sky Movies.

[4] As noted in Appendix 4.1 (paragraph 3*(a)*), we accepted that, for subscribers taking both Sky Movies and Sky Sports, there was no simple incremental price for Sky Movies. As regards subscribers taking Sky Movies only, our view was that a meaningful incremental price could be calculated from the difference between the package price including Sky Movies and the package price excluding Sky Movies.

(b) The results of Ofcom's Willingness to Pay Consumer Survey were not reliable as the question asked by Ofcom did not conform to good practice in survey design (because there was no suitable response for respondents who valued Sky Movies and Sky Sports differently but did not fall into either of the first two categories shown in Table 1), and the results from the first and second wave were significantly different.[5]

(c) There were errors in our approach to calculating the weighted average price, and we had shown a lack of appreciation of consumer choice and bundling theory. Sky also said that, if we did continue to use the results of Ofcom's Willingness to Pay Consumer Survey, we should do so in a slightly different way.

14. Our views in response to Sky's principal points were as follows:

(a) We considered that it was reasonable for us to describe our estimates as incremental prices (shortened to 'prices' in Appendix 4.1), as long as we had taken account of the uncertainties. We noted [✄], which suggested that our approach was not unreasonable.

(b) As there were [✄] subscribers to products other than single movies, dual movies and dual movies/dual sports, the only three prices that mattered were for single movies, dual movies and the difference between dual movies/dual sports and dual sports prices. We only used the results from Ofcom's Willingness to Pay Consumer Survey as a way of weighting these three prices to calculate a weighted average incremental price. Our assessment would not have been different if, instead of using the weighted price, we had used the three incremental prices separately. Thus, our assessment did not depend on results from Ofcom's Willingness to Pay Consumer Survey.

15. On Sky's more detailed points, we noted:

(a) Ofcom pointed out that respondents could have responded 'none of these' or 'don't know' if none of the three quoted statements applied, and that respondents were simply asked which statement 'best describes' their household's reasons for subscribing. Nevertheless, we agreed that there was a lack of clarity in the question wording used, and that the limited range of responses was not ideal. However, survey questions often involve a trade-off between offering a complete range of responses and brevity and in this case we did not believe that the form of questioning used was likely to have introduced material bias into our estimates of weighted average incremental price.

(b) We agreed that, in the absence of an explanation, the statistically significant difference in the results across the two waves was of concern. However, we noted that a possible explanation was that, in the first wave, the relevant question was preceded by questions about sport, which may have focused respondents' minds on sport, while, in the second wave, it was preceded by questions about movies, which may have focused respondents' minds on movies (the questions

[5] Sky also said that Ofcom's question implicitly assumed that the only reasons that consumers subscribed to a pay-TV package that included Sky's sports and movie channels was to obtain access to those channels. We did not think the question assumed this. In our view, the question asked about respondents' relative preferences between Sky Movies and Sky Sports and was meaningful for a variety of assumptions about respondents' willingness to pay for a basic package and other services from Sky.

on movies were asked in the second wave, but not the first wave).[6] Overall, our view was that while there were some uncertainties about the interpretation of this survey question, they were not such that we should entirely ignore the responses.

16. While we acknowledged the uncertainties, we did not accept that there were errors in our approach to calculating weighted average incremental prices, nor that we showed a lack of appreciation of consumer choice and bundling theory. We did not believe that Sky's approach to calculating weighted average incremental prices was preferable to our approach. Moreover, we had no reason to believe that adopting Sky's approach would have made any material difference to the resulting estimates of weighted average incremental price.

[6] We put this point to Ofcom. Ofcom accepted that it was a possible explanation of the difference in responses but said that it was not sure that having either sports or movies at front of mind would have made much difference given that both sports and movies were mentioned in the relevant question. Ofcom added that, in its view, the most likely explanation for the difference in responses was the relatively small sample size rather than the question ordering (Ofcom considered that these types of fluctuations were not unusual with samples of this size).

Movie content available on pay-TV services

1. We compared both the number and the box office success of the movies available on the services of Sky (Sky Movies), LOVEFiLM Instant (ie its OTT SVOD service, not its DVD rental by post service) and Netflix. Our comparison also took into account the recency of the movies available. At the time of our final report there were two other subscription movie services offering movies with a broad range of content: BT's Vision Film and PictureBox (which is available OTT and via traditional pay-TV retailers other than Sky).[1] Accordingly, we also compared the movies available on BT's Vision Film, which includes the PictureBox service, with the LOVEFiLM and Netflix services.

Number of movies

2. Table 1 in Appendix 4.2 indicates that in July 2012 LOVEFiLM offered considerably more movies on its streaming service than Netflix and both offered more on a VOD basis than Sky, though the number of FSPTW movies they offered was less. Table 1 below provides a more detailed comparison of the number of movies on the streaming services of LOVEFiLM, Netflix and Sky Movies. The numbers shown for 2013 and 2014 are projections provided by each of the parties and should only be taken as indicative.

TABLE 1 **Comparison of movies services**

UK box office take	*As at end Jan 2012*			*As at end July 2012*			*As at end Jan 2013*			*As at end Jan 2014*		
	LF	*NF*	*Sky*	*LF*	*NF*	*Sky*	*LF*	*NF*	*Sky*	*LF*	*NF*	*Sky*
Total number of movies released in previous 25 months (proxy for FSPTW)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total number of movies that were theatrically released in preceding 2 years to period referred to above (proxy for SSPTW)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total number of movies that were theatrically released before period referred to previously (proxy for TSPTW and library)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Number of movies not theatrically released	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total number of movies on service	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: LOVEFiLM, Netflix and Sky.

Note: [✂].

3. Table 1 indicates that, at the time of our report, [✂].

[1] Picturebox is also available via certain Freesat STBs.

Box office revenue

4. We asked Netflix and LOVEFiLM to consider the films offered on their services and to split the films into categories according to their UK box office success. The results are in Table 2.

TABLE 2 **Comparison of average box office success of movies shown at the end of January 2012**

Box office revenue £m	*Netflix proportion of movies %*	*LOVEFiLM proportion of movies %*
>15	<5	1.5
15–5	15	3
5–1	30	3
<1	50	92.5

Source: Netflix and LOVEFiLM.

5. Although we recognized that box office success was an imperfect indicator of the value of a movie on pay TV (see Appendix 9.1) and the figures in Table 2 did not take account of the age of the movies available, the table shows that a high proportion of the movies offered by LOVEFiLM achieved low box office revenues. On average, the movies available on Netflix achieved higher box office revenues than the movies on LOVEFiLM (though we noted that LOVEFiLM might have a similar number of movies in the top bracket of box office revenues as Netflix but, due to its much higher number of movies overall, it had a lower percentage of such movies).[2]

6. As another aspect of the appeal of the movies offered by each of Sky (Sky Movies), LOVEFiLM and Netflix, we asked these parties to tell us what proportion of the total UK box office in each of 2011 and 2012 they expected to offer on their services in the FSPTW. We estimated the share of box office content that each party was likely to have on the basis of Rentrak data for the UK and Republic of Ireland. However, due to complexities in the contracts between different parties involved in producing, distributing and exhibiting movies, we recognized that these percentages did not necessarily give an accurate guide to any party's entitlement in a given year and we asked the parties also to provide an estimate. The forecasts for 2012 obviously involved a degree of speculation about the success of movies not yet released theatrically.

7. Sky told us that it would offer on its Sky Movies service the movies responsible for [✂] per cent of the UK box office revenues generated by the top 100 movies in 2011 and we noted that Sky had stated publicly that Sky Movies offered customers access to around three-quarters of the year's top 100 UK box office movies.[3] Sky also told us that it had signed agreements to exhibit in the FSPTW [✂] per cent of the 625 movies shown in cinemas in the UK in 2011 (ie [✂] movies). Given that [✂] of these movies were in the top 100, Sky had agreements to exhibit [✂] of the remaining 525 movies shown in the cinema in the UK in 2011. Therefore, Sky's share of box office revenues for those movies not in the top 100 was likely to be lower than its share of box office revenues for top 100 movies, and its overall share somewhat lower than its

[2] An article on VOD in the August 2012 issue of Which compared the LOVEFiLM and Netflix SVOD services and four TVOD services for various aspects of quality and rated each retailer's library of films against a checklist of a range of popular titles. The article noted that the SVOD services lacked the latest film releases, stating that to watch these movies TVOD was needed. The article noted that LOVEFiLM had none of the 45 new releases and only one of the 34 older popular titles on its checklist, while Netflix had two of the new releases and four of the older popular titles on its checklist. By comparison, Blinkbox (which appeared to be the TVOD service with the largest number of titles on the checklist) had 30 of the new releases and 17 of the older popular titles. The article did not include Now TV (which was launched after it went to press) or the SVOD or TVOD services offered by the traditional pay-TV retailers.

[3] Sky's press release relating to the launch of Now TV.

[✂] per cent share of box office for the top 100 movies in 2011 (typically, the top 100 movies account for around 90 per cent of total box office revenue).

8. By virtue of its agreements with eOne and Studiocanal, LOVEFiLM told us that it had FSPTW rights to movies accounting for about [✂] per cent of UK box office revenue in 2011 and that it expected to have FSPTW rights to movies accounting for about [✂] per cent of box office revenue in 2012.[4]

9. Netflix told us that the 2011 releases to which it had FSPTW rights through its agreements with Lionsgate (which we understood would also distribute Icon films in the future), Momentum and MGM represented [✂] per cent of total UK box office revenues for that year, but that the 2012 releases to which it had FSPTW rights represented [✂] per cent of box office revenue (up to the start of May 2012).[5] Netflix said this was driven largely by the success of two movies (*The Hunger Games* (Lionsgate) and *Woman in Black* (Momentum)), which collectively represented [✂] per cent and each of which was released theatrically in the UK in February or March 2012. In Netflix's announcement of its second quarter results for 2012,[6] it estimated that the movies it would offer on its service in the FSPTW were responsible for 16 per cent of the UK box office in the year to date (ie in the first six and a half months of 2012). However, we recognized that this period was only part of the year and the full year percentage of box office available on Netflix's service in the FSPTW would depend on the success of movies yet to be released. We also noted, for example, that Netflix had stated that it would be the first pay home of *The Hobbit*,[7] Part 1 of which was expected to be released in December 2012.

10. We noted that, as LOVEFiLM and Netflix had each reached agreements under which movies would become available on their services as movies entered the FSPTW, the extent of the FSPTW content on their services would gradually increase. Netflix told us that it would have [✂] per cent more movies on its service at 31 July 2012 than it had on its service at 31 January 2012.

11. In our review of Sky's internal documents, we noted that Sky focused principally on monitoring the share of the top 100 movies (according to box office success) which it was able to offer on Sky Movies in the FSPTW rather than its share of overall UK box office. [✂], as shown in Figure 1.

FIGURE 1

Share of top 100 box office titles licensed to Sky, by year of cinematic release

[✂]

Source: Sky.

12. Figure 1 shows that Sky Movies had FSPTW rights to 98 of the top 100 movies released in the cinema in 2008, [✂].

[4] Rentrak data for the UK and the Republic of Ireland would suggest that these studios together accounted for 8 per cent of box office revenues in 2010 and 9 per cent in 2011.
[5] On the basis of Rentrak data for the UK and Republic of Ireland, these studios together accounted for 7 per cent of box office revenue in 2010 and 7 per cent in 2011, though their share in early 2012 was higher (about 19 per cent).
[6] Letter to Netflix shareholders from its CEO and CFO, 24 July 2012.
[7] Letter to Netflix shareholders from its CEO and CFO, 23 April 2012.

13. Sky provided us with an analysis of the top 100 movies released in the cinema in the UK in 2011 (by box office success) which showed that it expected LOVEFiLM and Netflix to offer [✄].[8]

BT's Vision Film

14. In response to our working paper on market developments[9], BT said that the new OTT services of LOVEFiLM and Netflix were not materially different from BT's Vision Film subscription service at the time of our August 2011 provisional findings. BT said that:

(a) LOVEFiLM and Netflix did not have materially more FSPTW or SSPTW content than Vision Film; and

(b) the total number of library movies offered by Vision Film over the course of a year was much higher than the number of movies available at any one time (which we had quoted both in our August 2011 provisional findings and working paper 29), and this total number was of a similar order of magnitude to the total number of movies offered by each of LOVEFiLM and Netflix.

15. Accordingly, we compared the movies offered on BT's Vision Film[10] with the movies offered on the OTT services of LOVEFiLM and Netflix. We asked BT to provide us with an analysis of the movies offered on Vision Film in August 2011 (at the time of our provisional findings) and in April 2012. BT told us that, in August 2011, it offered 152 movie titles across the month, with about 100 titles available at any point in time. BT said that it offered around 600 different movies over a 12-month period. We noted this was less than the number offered by LOVEFiLM and Netflix at the end of January 2012 (about 3,500 and 1,000 respectively, see Table 1 in Appendix 4.2). BT also said that, in April 2012, it offered 232 movie titles with about 150 available at any point in time, 45 of which were introduced to the service during the month. We noted that this was much less than the number offered by LOVEFiLM and Netflix at the end of January 2012.[11] Moreover, it appeared to us that the number of movies available at any one time may be more relevant to competition (we noted that this number was usually quoted in marketing material).

16. BT provided us with an analysis of the box office success of the movies offered on its service in August 2011 and April 2012, as shown in Table 3. Comparing with Table 2 above, we noted that the average movie box office success on Vision Film in April 2012 appeared slightly lower than that of Netflix, though higher than that of LOVEFiLM. We also noted that the overall strength of the offering depended both on the number of movies on the service and the average box office success. For example, LOVEFiLM told us that, under existing agreements, it would have [✄] movies on its service in July 2012, of which [✄] movies (about [✄] per cent) had box office revenue of over £15 million, [✄] movies (about [✄] per cent) had box office revenue of between £5 million and £15 million and [✄] movies had box office revenue of between £1 million and £5 million.[12] The comparable figures for Vision

[8] Although Netflix did not have FSPTW rights to many successful 2011 releases, it expected to have the rights to three of the most successful releases in early 2012 (*Hunger Games* (Lionsgate), *The Woman in Black* (Momentum) and *21 Jump Street* (MGM)).
[9] Working paper 29.
[10] BT's Vision Film service incorporates PictureBox.
[11] The number of movies available over the course of a year on the LOVEFiLM and Netflix services would be greater than the number available in any one month, although not to the same proportionate extent as for BT's Vision Film service (because each movie is available for longer on the LOVEFiLM and Netflix services than on BT's Vision Film service).
[12] LOVEFiLM's proportion of movies with box office revenue between £[✄] million and £[✄] million for July 2012 was [✄] than for January 2012.

Film showed it had 232 movies on its service during April 2012 of which [✂] movies had box office revenue of over £15 million, [✂] movies had box office revenue of between £5 million and £15 million and [✂] movies had box office revenue of between £1 million and £5 million. On the basis of this comparison, LOVEFiLM had [✂] movies in each category than Vision Film. However, we also noted that these figures on average box office success needed to be treated with some caution since they did not reflect differences in recency.

TABLE 3 **Average box office success of movies on Vision Film (August 2011 and April 2012)**

Box office revenue £m	*Proportion of movies in August 2011 %*	*Proportion of movies in April 2012 %*
>15	[✂]	[✂]
15–5	[✂]	[✂]
5–1	[✂]	[✂]
<1	[✂]	[✂]

Source: BT.

17. BT told us that, at the time of our August 2011 provisional findings, PictureBox, which is incorporated into the Vision Film offering, had the rights to the FSPTW content of Studiocanal (though, in August 2011, no Studiocanal movies were scheduled for exhibition and hence no FSPTW movies were shown on Vision Film). Studiocanal's share of UK box office revenue in 2010 and 2011 was 2 and 4 per cent respectively. This was considerably less than the percentage of 2011 box office to which LOVEFiLM had FSPTW rights (about [✂] per cent), and to which Netflix expected to have FSPTW rights (see paragraphs 8 and 9). Additionally, each movie was available for longer on the services of LOVEFiLM and Netflix than on PictureBox, which meant that the number of FSPTW movies available to view at any one time was greater. PictureBox's licence agreement with Studiocanal expired in [✂]. BT also told us that, in April 2012, it had the rights to exhibit [✂] movies in the FSPTW from Sony Pictures (though [✂] of these movies did not have a theatrical release).[13]

18. We noted that Vision Film previously had SSPTW rights to movies which achieved [✂] percentage of box office to the movies which each of LOVEFiLM and Netflix had acquired rights, although in many cases these movies would have been exhibited on Vision Film for a considerably shorter period than the movies exhibited on the LOVEFiLM and Netflix services. However, due to the increased competition for SSPTW rights and for the FSPTW rights of the non-major studios (in particular, from LOVEFiLM and Netflix), by the time of our report the recency of the content on Vision Film was in decline. In August 2011, Vision Film offered SSPTW content from Warner (WarnerFilms), Universal (PictureBox), Revolver, Studiocanal and Icon; in April 2012, it offered SSPTW content from Universal (PictureBox) and Sony Pictures; [✂].[14] BT said that, in October 2012, it still expected to offer around [✂] movie titles across the month [✂].

19. We also noted that, both at the time of our August 2011 provisional findings and in April 2012, none of the FSPTW or SSPTW content on Vision Film was acquired on an exclusive basis. All of the content on Vision Film was available to other services

[13] Up to the time of our August 2011 provisional findings, BT had not told us that these services included FSPTW content nor made the point that over a period of 12 months its Vision Film service distributed around 600 movies. These points were not therefore reflected in the analysis in our August 2011 provisional findings.
[14] [✂]

(eg PictureBox was also offered by Virgin Media), although, in August 2011, BT was in fact the only party with rights to Sony Pictures' SSPTW movies content.[15]

[15] BT told us that, while it had acquired and paid for Sony Pictures' SSPTW rights on a non-exclusive basis, it had the rights exclusively as Sony Pictures did not have deals in place with any other party. BT said that, in December 2011, LOVEFiLM and Sony Pictures announced that LOVEFiLM would be offering Sony Pictures' SSPTW movie content.

Data from pay-TV retailers on new subscribers and churn

1. Sky provided us with its data on customer losses and acquisitions and its survey-based estimates of the destination of its losses and source of its acquisitions. In Table 1 we summarize Sky's annual rate of customer loss and gain for the three years 2008, 2009 and 2010.

TABLE 1 **Sky's customer losses (churn) and gains**

	Year to end September		
	2008	*2009*	*2010*
[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]
[✂]			
[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]
[✂]			
[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]

Source: CC calculations based on Sky data.

[✂]

2. We used this data to estimate the rate of switching to other retailers from Sky (switching out) and the rate of switching to Sky from other retailers (switching in).[1] We estimated that, [✂], the rate of switching was about [✂]. Given that Sky's market share of pay TV was about [✂] per cent during this period, this implied a market switching rate of [✂].[2] These results were [✂] with the results of our December 2010 survey, which suggested that about 6 per cent of pay-TV subscribers had switched provider in the previous year (see Appendix 4.10).

3. The Sky data also suggested that, in the most recent 12-month period, [✂] per cent of Sky's customers were new to pay TV. This was [✂] to the 10 per cent suggested by our December 2010 survey (see Appendix 4.10).

4. We also obtained data from Sky on the number of its customers who contacted Sky to cancel their subscriptions but did not do so. Sky's data showed that, over 12-month periods, the number of its customers contacting its call centre to cancel their subscription but not ultimately doing so was [✂] per cent of the total number of its customers at the end of the 12-month period (this represents a 'save rate' of about [✂] per cent of all Sky customers contacting its call centre to cancel).[3] Additionally,

[1] Where Sky's data shows customers switching from or to an 'other' supplier, we have assumed the 'other' supplier is a pay-TV retailer.
[2] [✂]
[3] It was possible that customers may have contacted Sky more than once during a 12-month period to cancel their subscription.

Sky's data showed that the number of its customers entering its debt system who did not eventually cancel through non-payment was [✂] per cent of its total base of customers at the end of the 12-month period.[4] However, it was not clear from the data how many of these customers were actually seeking to cancel as they may never have intended to enter Sky's debt system.[5]

5. Sky also provided us with information about its discounts. This information suggested that Sky's [✂]: the difference between Sky's estimated effective average price and its nominal headline price averaged [✂] per cent in the 12 months to September 2010,[6] and this figure included [✂].

6. Evidence provided by Virgin Media for this period [✂].[7]

7. Virgin Media told us that customers who were considering dropping/downgrading their pay-TV service would be referred to its customer retention teams. Virgin Media said that some of these customers would then decide to continue their subscription. It said that, typically, it retained [✂] per cent of customers who were considering dropping/downgrading a Virgin Media pay-TV service.

[4] The number not eventually cancelling [✂] per cent of all those entering Sky's debt system.
[5] It was possible that during any 12-month period customers may have entered into Sky's debt system more than once and there may also have been some duplication with customers seeking to cancel by contacting Sky's call centre.
[6] The figures were [✂] per cent for dual movies customers, [✂] per cent for dual sports customers and [✂] per cent for customers taking both dual sports and dual movies.
[7] These numbers came from a Virgin Media presentation. We did not have detailed information on the survey methodology, so some caution was needed in interpreting the results.

The retailing of pay channels directly to consumers (using the platforms of other traditional pay-TV providers)

1. Sky's platform can be used by third parties to retail content to consumers with Sky STBs. This means that, subject to making the appropriate payments to Sky, third-party providers of channels and other broadcast content (PPV and interactive) can obtain conditional access services from Sky and a listing on Sky's EPG.[1]

2. We observed that, in practice, very little content was retailed on Sky's platform other than by Sky. As shown in Table 2 below, there were some other retailers on Sky's platform, but none of these retailers reached more than [✂] per cent of consumers with a Sky STB. In our view, it was also significant that even companies with very strong brands (for example, Disney and Manchester United Football Club) had chosen to wholesale their channels to Sky rather than retail them directly to Sky's subscribers. In the past, Setanta's UK sports channel did achieve a significant number of subscribers with a business model based on retailing directly (both via satellite and DTT). However, although Setanta had about 1.2 million customers (of which about 1.0 million were satellite customers on Sky's platform), press reports at the time (mid-2009) suggested that this was below the number it required to break even and Setanta's UK business went into administration.[2] Setanta (which continued to retail its Irish sports channels over Sky's platform) told us that retailing a significant movie or sports service as a third party on another company's platform required very significant investment, principally in marketing, customer management and possibly also in production. Setanta added that this was additional to the investment in the rights themselves (which would occur however the channel was sold) and pointed out additionally that, until a customer base was built up, expenditure growth exceeded income. We noted also that [✂].[3]

3. Third party access to other pay-TV platforms is not regulated in the same way as access to Sky's platform and we observed that no other retailers operated on the Virgin Media, BT Vision and TUTV platforms.[4] [✂][5] On the existing TalkTalk TV platform, which has [✂] subscribers compared with Sky's platform, Sky has retailed a reduced version of its Sky Movies and Sky Sports packages (known as Sky by Wire).[6] About [✂] per cent of TalkTalk TV customers subscribed to Sky by Wire. TalkTalk told us that it would relaunch its pay-TV service with a YouView-compatible STB in 2012 (see paragraph 2.102), [✂]. Sky told us that it had reached agreement with TalkTalk for the wholesale carriage of all the Sky Movies channels in SD for delivery over TalkTalk's broadband network to YouView-compatible STBs, replacing the current retailing arrangement.[7]

---

[1] Via an automated process, such retailers request Sky to provide access to their customers on the Sky platform (ie with Sky STBs). For customers who are existing Sky subscribers, Sky amends the subscriber's entitlement to view in the same way as if there had been a change in the subscriber's Sky package. For customers of such retailers on the Sky platform who are not existing Sky subscribers, Sky adds the entitlement to view and issues a viewing card to the customer.
[2] Press reports at the time (June 2009) indicated that Setanta would have required around 1.9 million customers to break even.
[3] Following Setanta UK going into administration, ESPN acquired the rights for 2010/11 to 2012/13 as the next highest bidder (after Setanta) for one of the six packs (23 games) of televised FAPL football games (under European Commission rules, no bidder can purchase more than five of the six packs and consequently Setanta and ESPN were not bidding against Sky for the sixth pack). ESPN also acquired the rights for the 2009/10 games previously held by Setanta UK.
[4] Setanta retailed its premium channels on TUTV's platform from 2007 until Setanta UK went into administration.
[5] We noted that [✂].
[6] We understand that it was a reduced version due to [✂].
[7] See paragraph 2.95.

Third party access to the Sky platform

4. In order to access households with a Sky STB, a third party would need:

   (a) access to an uplink earth station or uplink services (to send content to a satellite);

   (b) space on a satellite which could broadcast to the UK;[8]

   (c) a position on Sky's EPG: Sky's EPG is an on-screen guide to the TV channels that are available on the Sky DTH platform. This service includes listing information that allows viewers to navigate to channels, and view scheduling and programme synopsis information; and

   (d) conditional access services from Sky (so that only those who pay for its service can view it).

5. Conditional access services consist of secure encryption and decryption of TV channels, as well as, in the case of Sky's DTH satellite platform, the provision of access cards necessary to enable viewing of the secure content. The main purpose of these features is to ensure that a channel is received only by the people who have paid to receive it. However, FTA broadcasters also use Sky's conditional access services in order to prevent overspill (ie to ensure that TV channels are received only by consumers in geographic areas covered by their licence or copyright) and for distributing regional variants of the TV channel (ie regionalization).

6. It appeared to us that there was no technical difficulty in obtaining access to the four elements required to access Sky's platform:

   (a) Usage of uplink earth stations, and the necessary skills, could be readily purchased.

   (b) Relevant satellite capacity was available. Ofcom told us that it was not aware that there had ever been a question about the provision of satellite capacity to those who wanted it, subject to the possible exception of capacity on Astra 2D (the only satellite that had a broadcast footprint focused on the UK, allowing FTA broadcasters to control 'overspill' without the need to use Sky's conditional access services).[9]

   (c) Access to Sky's EPG is regulated under a continuation notice issued in 2003,[10] which remains in force. Sky told us that the principal conditions included requirements to provide services on a fair, reasonable and non-discriminatory basis, not to discriminate or show undue preference to any person, and to publish a charges notice. We understood that Sky's EPG on its SD STBs had reached capacity in that additional channels on the EPG would require more memory than was available. However, Ofcom noted that EPG slots may be traded and said that it was not aware that EPG slot trading had been problematic. Ofcom also noted that Sky's HD STBs had more memory, and Sky continued to allocate EPG positions to new HD channels.

   (d) Conditional access services are covered by an EU Directive which was implemented in the UK by the CA 2003. Sky told us that the principal conditions in

[8] Transponder capacity on a satellite at orbital position 28ºE.
[9] For example, the majority of BBC channels are broadcast from Astra 2D without encryption.
[10] 'Continuation notice to a class of persons defined as the licensee for the purposes of the provision of electronic programme guide services under paragraph 9 of Schedule 18 to the Communications Act 2003', 23 July 2003. Available at: www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/cont_notices/epg_class.pdf.

relation to conditional access were that: (i) it must meet all reasonable requests for conditional access services; (ii) its terms and conditions must be fair, reasonable and not unduly discriminatory; and (iii) it must publish a charges notice.[11]

7. Sky also told us that revised Ofcom guidelines which took effect on 1 January 2007 had the central requirement that Sky should set out charges for 'technical platform services' in a rate card and supply such services only in accordance with that rate card.

8. Under Sky's July 2012 rate card,[12] third parties using the Sky platform may pay the following charges:

(a) EPG listing charge;

(b) platform contribution charges (related both to the provision of the EPG and conditional access);

(c) conditional access charges; and

(d) access card charges.

9. The conditional access charge and access card charge are only payable by parties purchasing conditional access. Sky's rate card specifies the annual charges for a number of channels (mainly FTA channels and channels retailed by Sky).[13] For other channels, the charges appeared to be: for EPG, £62,000 per year per channel plus £21,000 per year for each EPG listing; and, for conditional access, £5,000 per year per channel plus per-subscriber charges. For most third party retailers, these per-subscriber charges are likely to be greater than the fixed charges as they are linked to the retailer's subscription revenue.[14]

10. As of September 2010, there were 570 channels on Sky's EPG (this counts regional and time-shifted variations and PPV as separate channels). Of those, 264 channels were retailed directly by Sky; the other 306 channels included FTA channels, third-party pay-TV channels, and third-party PPV channels. There were a total of 47 HD channels (five FTA and 42 retailed by Sky), one 3D channel and 522 SD channels. Of the 262 FTA channels listed on Sky's EPG, Sky provided conditional access services for only 64 channels. Table 1 provides a summary of all TV channels listed in Sky's EPG in the UK (or part thereof) as of 15 September 2010.

---

[11] 'The regulation of conditional access: Setting regulatory conditions, explanatory statement and formal notification pursuant Section 48(1) of the Communications Act 2003', Oftel, 24 July 2003. Available at: www.ofcom.org.uk/static/archive/oftel/publications/eu_directives/2003/condac0703.pdf.

[12] http://corporate.sky.com/documents/pdf/20c24d2e1c62406594e1a79de5f917db/bskyb_and_sssl_published_price_list_effective_1_july_2012.pdf.

[13] Sky told us that Ofcom's Guidelines and Explanatory Statement on Technical Platform Services required Sky to base the charges for its platform services on the benefits derived by broadcasters from delivery of their services via Sky's platform. Sky said that it therefore specified the annual charges for channels earning a significant amount of revenue by virtue of being available via Sky's platform. Sky added that, for example, a TV channel with substantial advertising revenues (such as Sky 1, or ITV1) available via Sky's platform would have specified annual charges, whereas a small, niche channel that generated little revenue (such as EuroNews) would pay only the minimum charges.

[14] The charges per subscriber per month are set out in a sliding scale in Annex 3 of the rate card. For products with retail subscription charges over £5.00 per subscriber (excluding VAT) Sky's total charge is typically around 7.75 per cent of the retail subscription charge, though the precise percentage varies according to the position on the sliding scale. Sky's July 2012 rate card also sets out provisional charges anticipated to be payable from 1 January 2014 (for products with retail subscription charges over £5.00 per subscriber (excluding VAT), Sky's provisional total per-subscriber charge from 1 January 2014 is typically around 5.25 per cent of the retail subscription charge though the precise figure again varies according to the position on a sliding scale). Content in the adult genre of the EPG is subject to minimum conditional access charges of £1.55 per subscriber per month and £0.65 per PPV purchase respectively. There is also a discount for subscription packages with monthly revenue of over £10 million. This is 1 per cent if monthly revenue is between £10 million and £35 million, rising to 5 per cent if monthly revenue is over £110 million. Sky told us the discount is not limited to subscription packages (eg the BBC also receives the discount).

TABLE 1 **TV channels listed in Sky's EPG in the UK, September 2010**

Type of channel	*Number of channels*
FTA (BBC, ITV, Channel 4, Five, etc)	262
Sky retailed (Sky 1, Sky 2, Comedy Central, FX, etc)	201
Sky retailed—PPV (SBO, Adult PPV channels)	63
Third-party pay service (Nollywood,Cinémoi, Setanta Ireland, etc)	31
Third party—PPV (Primetime, Adult PPV Channels)	11
Other	2

Source: Sky.

11. The 42 third-party channels shown in Table 1 were sold by the 13 retailers shown in Table 2. In September 2010, none of these retailers sold their content to more than [✂] per cent of Sky's total UK pay-TV subscriber base and the average for the 13 retailers was about [✂] per cent of Sky's total UK pay-TV subscriber base.

TABLE 2 **Subscribers to third-party retailers on Sky platform, September 2010**

Pay-TV retailer	*Average residential subscribers Sept 2010*	*Percentage of Sky's UK residential subscribers Sept 2010*	*Channels*
Setanta Sports Hibernia sarl	[✂]	[✂]	Setanta Sports 1, Setanta Ireland
Racing UK Limited	[✂]	[✂]	Racing UK
Portland Enterprises (CI) Limited	[✂]	[✂]	Television X, TVX Amateur, TVX Brits, redhot amateur, redhot Mums, redhot 40+, redhot fetish, redhot TV, Gay TV
Asia TV Limited	[✂]	[✂]	Zee TV, Zee Cinema, Zee Punjabi, Zee Café
MSM Asia Limited	[✂]	[✂]	MAX, SAB TV, Sahara One, Aaj Tak, ARY Digital, ARY QTV, Sony TV Asia, B4U Movies, COLORS
Playboy TV UK/Benelux Limited	[✂]	[✂]	Adult Channel, Playboy, Top Shelf, Extreme, Climax, GirlGirl
RHF Productions Limited	[✂]	[✂]	Primetime, redhot amateur, redhot Mums, redhot 40+, redhot fetish, redhot TV, Gay TV
Geo TV Limited	[✂]	[✂]	GEO UK, AAG, GEO News
Nollywood Movies Limited	[✂]	[✂]	Nollywood Movies
MSK Media Limited	[✂]	[✂]	Premier Sports, Prem Spts Xtra
Mint3D Enterprises Limited	[✂]	[✂]	Cinemoi movies
Horizon TV Network Limited	[✂]	[✂]	South For You
Daar Communications UK Ltd	[✂]	[✂]	AIT Int'l

Source: Sky.

Innovations in the UK pay-TV market (up to 2010)[1]

Innovations introduced by pay-TV providers

Year	*Sky*	*Other providers*
1997	**Sky Box Office**	
1998	**Sky Digital** rolled out	**ONdigital** (later ITV Digital) launches
1999		**Homechoice (since TiscaliTV, now TalkTalk TV)** launches
2000		**PVR—TiVo** launches PVR
2001	**PVR—Sky+** launches to Sky Digital customers	
2004	**Sky by Wire**—TV services retailed directly by Sky over Tiscali's fixed-line networks	**TUTV**—pay-TV service via DTT. It offered Freeview viewers a number of extra channels on a subscription basis.
2005	**Sky Mobile TV**—over 25 channels contained in four packages are streamed to the subscriber's mobile phone. 3G phone required.	**Telewest and NTL (now Virgin Media)** launch TV VOD services (pull VOD) and PPV (including premium movies) and SVOD (shows and series).
		Telewest (now Virgin Media)—HD and DVR service, now called V+, available from £49 to £99.
		FilmFlex—transactional VOD film service launches on cable networks.
2006	**Sky HD**—requires a Sky+ HD box.	**BT Vision**—a pay-TV and VOD service.
	Sky by broadband (also known as Sky Anytime on PC, Sky Player)—enables premium customers to download sports and movies to their PCs at no extra cost.	**TUTV Anytime**—the company changed its business model into a VOD (push VOD).
2007	**Sky Anytime**—VOD service available to some Sky+ and Sky+ HD customers (push VOD)	**Setanta Sports (with FAPL)**—was available on all pay-TV platforms in the UK, closed in June 2009
2008	**Sky Player**—online subscription TV service offering live TV and VOD on SVOD and PPV basis	
2009	**Sky Player on Xbox 360**—using OTT Internet delivery	**ESPN** launched a subscription sports channels.
		Fetch TV—offers on-demand content to its bespoke DVR STBs using OTT Internet delivery.
		Freeview HD—launched regionally from end-2009.
2010	**Sky Player on Fetch TV**—to owners of Fetch TV STBs using OTT Internet delivery.	**Freesat iPlayer**—pull VOD services using OTT Internet delivery to a TV set.
	Sky+HD offered 'pull' VoD.	**Project Canvas**—a VOD service for Freeview that will use OTT Internet delivery.[2]
	Sky 3DTV—Sky launched a 3DTV channels via its existing Sky+HD boxes.	

Source: Ofcom Pay TV Statement, 2010.

[1] We have updated this table slightly from the version published in Ofcom's 2010 Pay TV statement simply to reflect the fact that the expected developments for 2010 took place.
[2] This project led to YouView, which had its 'soft launch' in July 2012 (see Section 2).

Profitability of Sky

Introduction

1. An important indicator of the extent of competition in a market is the level of profit of the businesses involved. We would expect competition to put pressure on profit levels so that they move towards the cost of capital in the medium to long term. Where profits have been persistently in excess of the cost of capital for businesses which represent a substantial part of the market, this is likely to indicate limitations in the competitive process and would be consistent with the presence of features that prevent, restrict or distort competition. The amount by which profits exceed the cost of capital is also important as, where businesses have earned profits that have persistently and substantially exceeded the cost of capital, this will tend to indicate a more significant competition problem than a situation in which the gap is persistent but smaller.

2. This appendix sets out our assessment of the profitability of Sky.

3. Any assessment of a business's profitability involves a large amount of detailed analysis, which inevitably leads to many detailed points being raised by parties. Notwithstanding the role that profitability analysis plays in our assessment of competition in market investigations, the length of this appendix has been driven by the large amount of evidence we received (mostly from Sky) and the need to consider this evidence carefully and to reflect our thinking fully to allow Sky and other parties to understand our approach. The length of this appendix relative to other appendices should not be taken as indicative of the relative weight placed on this analysis.

4. This appendix is structured as follows:

   (a) background, including our approach to profitability analysis in this investigation (paragraphs 6 to 17);

   (b) analysis of Sky's aggregate profitability:

      (i) methodology for assessing aggregate profitability:

         1. use of TIRR with ROCE as a cross-check (paragraphs 24 to 48);

         2. use of other methodologies (paragraphs 49 to 74); and

         3. benchmarking (paragraphs 75 to 82);

      (ii) aggregate profitability modelling, including:

         1. valuation of the asset base (paragraphs 85 to 92);

         2. approach to intangible assets (paragraphs 93 to 164);

         3. other significant modelling assumptions (paragraphs 165 to 201); and

         4. the profitability results including our base case and the effect of changing certain assumptions (paragraphs 202 to 218);

(iii) interpretation of the aggregate profitability analysis:

1. reasons for the profitability gap (paragraphs 220 to 259);

2. the future profitability of Sky (paragraphs 260 to 267);

3. persistence of the profitability gap (paragraphs 268 to 271); and

(c) analysis of Sky's disaggregated profitability:

(i) Ofcom's disaggregated profitability findings (paragraphs 273 to 305), including Ofcom's pricing models (paragraphs 302 to 305);

(ii) Sky's views (paragraphs 306 to 311); and

(iii) our analysis of Sky's disaggregated profitability, including:

1. our assessment of the disaggregated costs of Sky's movies business (paragraphs 312 to 322); and

2. other evidence on the profitability of Sky's movies business (paragraphs 323 to 328).

5. We have included as Annex A an analysis of Sky's WACC.

Background

Process prior to the reference to the CC

6. Ofcom produced three consultation documents prior to its Pay TV Statement. The first of these was in 2007.

7. Sky responded to each of Ofcom's consultation documents, and submitted two reports prepared by Professor Grout on profitability.

8. The main piece of analysis from which Ofcom drew its conclusions on Sky's profitability was analysis performed by Oxera.[1] Oxera produced two reports for Ofcom on Sky's profitability (the first was produced in June 2009 and annexed to the Third Pay TV Consultation, the second was produced in February 2010 and annexed to the Pay TV Statement). These reports covered both aggregate and disaggregated profitability analysis and addressed many of the issues raised by Sky and Professor Grout. These reports were based on Oxera's model of Sky's profitability ('Oxera's model') which was a TIRR analysis. A TIRR measures the internal rate of return (IRR) over a specific period during the lifetime of an economic activity.[2] Oxera also performed various corroborating analyses and sensitivities to check the results of its TIRR analysis.[3] In particular, Oxera's model produced ROCE estimates using Sky's earn-

[1] Oxera first report, Annex 9 to Ofcom's third pay TV consultation. Ofcom looked at other measures of Sky's profitability earlier in its investigation before commissioning Oxera's analysis but, by the time of its Pay TV Statement in March 2010, Ofcom had adopted Oxera's approach.
[2] We explain the TIRR analysis in more detail in paragraphs 24–48.
[3] Oxera first report, paragraph 4.2.2.

ings before interest and tax (EBIT) and total assets as shown in its accounts.[4] These ROCE figures were used as a cross-check of Oxera's TIRR results.

9. Ofcom also commissioned analysis from the Brattle Group (on cost of capital) and Analysys Mason (on cost allocation).[5]

Process following the reference to the CC

10. Sky made a submission to us with regard to its profitability as part of its response to our issues statement.

11. In February 2011, we published a working paper on Sky's profitability (working paper 12) to which Sky also replied. During the course of our investigation, we received large amounts of information from Sky in response to our various requests and also held two meetings with Sky on this issue.

12. Other parties also provided responses to our working paper but, given the nature of the analysis, most evidence came from Sky.

13. Sky also commissioned PwC to review our analysis of Sky's aggregate profitability as set out in working paper 12 and to comment on some further analysis[6] we put back to Sky prior to the publication of our August 2011 provisional findings (we refer to the first report PwC produced in March 2011 as 'PwC's review of Oxera's modelling').

14. During the period of our investigation, Sky provided evidence on its profitability to the CAT as part of its appeal of Ofcom's decision in its Pay TV Statement, including a further report by Professor Grout (as an expert witness), an expert report by David Hulbert and a witness statement by Mike Darcey (Sky's Chief Operating Officer). Sky also provided these witness statements to us.

Process after the publication of our August 2011 provisional findings

15. Following the publication of our August 2011 provisional findings, we received further submissions from Sky on our profitability analysis (in September and November 2011). These submissions included two further papers from PwC, one on the identification and valuation of intangible assets and another on the WACC. Sky also provided a model prepared by Sky (with input from PwC) (the 'Sky/PwC model'). Like Oxera's model, this produced TIRR and ROCE figures but it also included certain important differences (see paragraph 203).[7]

Our approach to assessing profitability

16. Our profitability analysis focused on Sky because it was the sole provider of movie content in the FSPTW from the major studios in the UK and no competition concerns in the provision of FSPTW movies by any other parties were identified by Ofcom in its

---

[4] Oxera also considered ROCE on a replacement cost basis, using the same asset base as in its TIRR calculation. It adjusted the EBIT figure to reflect the capitalization of intangible assets on the balance sheet (and also for the associated depreciation of these assets).
[5] Analysys Mason did not produce a report for Ofcom. Analysys Mason's cost allocation analysis, performed without input from Sky, was used by Oxera as a high-level cross-check and as the basis for Ofcom's work on wholesale prices.
[6] This further analysis principally covered the valuation of Sky's asset base, the cash flows used in Oxera's model and the disaggregated costs of Sky's movies business.
[7] However, Sky and PwC disagreed with our use of a TIRR methodology noting that our 'approach has considerable conceptual issues associated with it, which make it of questionable value'.

reference decision. We started by considering the most appropriate method of assessing Sky's profitability.

17. Our profitability analysis was divided into aggregate profitability analysis, which considered the profitability of Sky's UK pay-TV operations,[8] and disaggregated profitability analysis, which considered the profitability of parts of Sky's business. For both analyses we set out our approach, the work performed by Ofcom and Oxera prior to the reference to us, the comments of Sky and its advisers, and our assessment of the issues.

Aggregate profitability analysis

18. Having considered Oxera's overall approach to modelling Sky's aggregate profitability and tested the robustness of Oxera's model,[9] we decided to use Oxera's model as a starting point for our aggregate profitability assessment rather than to start afresh. We decided that it was not necessary to duplicate modelling work and instead focused on examining each aspect of Oxera's analysis, when doing so considering whether we would have adopted a different approach or used different assumptions. In particular, we considered in detail central issues such as the valuation of Sky's intangible assets. We formed our own base case reflecting those aspects of the analysis which we considered we would have done differently. Our base case used the TIRR and ROCE outputs from Oxera's model with the ROCE results as a cross-check for the TIRR results. We also considered the effects of changing certain of the assumptions used.

19. Following our August 2011 provisional findings, we reviewed the Sky/PwC model submitted by Sky. We found that this model was a slight improvement on Oxera's model because Sky/PwC had been able to make refinements (ie including greater detail) in its estimation of the subscriber base (see paragraph 203). We noted that, given the same input assumptions, the Sky/PwC model and Oxera's model produced a similar TIRR for 2005 to 2009.[10] Rather than continually refer to two different models with only minor differences, we have used the Sky/PwC model to input our own assumptions so as to derive our base case TIRR and ROCE estimates of Sky's profitability. Since both the results of the Sky/PwC model and Oxera's model were primarily dependent on the assumptions used, we decided that using these models and inputting our assumptions (rather than creating another model of our own) was a reasonable approach. We have explained where we have adopted a different approach or used different assumptions from Oxera or Sky/PwC. We have also considered the effects of changing certain assumptions used.

20. We set out our analysis of Sky's aggregate profitability below. We first discuss the methodology for assessing aggregate profitability, looking at the following areas:

(a) use of TIRR with ROCE as a cross-check (paragraphs 24 to 48);

(b) use of other methodologies (paragraphs 49 to 74); and

(c) benchmarking (paragraphs 75 to 82).

---

[8] In general, the analysis excludes operations unrelated to Sky's UK pay-TV operations. However, it was not possible to exclude certain of these elements (such as Easynet) which are consolidated into Sky's accounts.
[9] We reviewed Oxera's model by checking it for internal consistency and agreeing the raw input data for the period 2000 to 2009 with Sky's financial statements for those years. We were satisfied that there did not appear to be either input errors or mechanical errors in the model which affected the cash-flow analysis results.
[10] [✄] per cent in the Oxera model and [✄] per cent in the Sky/PwC model. In our August 2011 provisional findings we said that the recent past (2005 to 2009) was of most relevance to our consideration of Sky's profitability.

21. We then discuss detailed aspects of the profitability modelling, in particular:

(a) valuation of the asset base (paragraphs 85 to 92);

(b) approach to intangible assets (paragraphs 93 to 164);

(c) other significant assumptions (paragraphs 165 to 201); and

(d) profitability results, including our base case and the effect of changing certain assumptions in the Sky/PwC model (paragraphs 202 to 218).

22. Finally, we present our interpretation of the aggregate profitability analysis:

(a) reasons for the profitability gap (paragraphs 220 to 259);

(b) future profitability of Sky (paragraphs 260 to 267); and

(c) persistence of profitability (paragraphs 268 to 271).

Methodology

23. First we considered the methodology for assessing aggregate profitability analysis, looking at the following areas:

(a) use of TIRR with ROCE as a cross-check (paragraphs 24 to 48);

(b) use of other methodologies (paragraphs 49 to 74); and

(c) benchmarking (paragraphs 75 to 82).

Use of TIRR with ROCE as a cross-check

Oxera's use of TIRR

24. In its Second Pay TV Consultation,[11] in response to several parties'[12] suggestions that an IRR calculation would be suitable, Ofcom noted a number of difficulties in performing an IRR calculation.

25. At that stage of its investigation, Ofcom concluded: 'a profitability assessment based on a truncated IRR approach is unlikely to yield a robust conclusion about Sky's profitability'.[13] In its Pay TV Statement, Ofcom said that the reason it did not believe that a TIRR was appropriate at the time of its second consultation was because of the difficulties it faced in assessing an appropriate asset base and in identifying an appropriate scope and time period for the analysis.[14]

26. Prior to its third consultation document, Ofcom commissioned Oxera to perform a detailed analysis of Sky's profitability. For this task, Oxera adopted a TIRR calculation as its main approach. Ofcom stated that Oxera 'had managed to overcome the various difficulties [Ofcom] had identified by virtue of its expertise in having carried out this type of analysis for the OFT and CC and the availability of more detailed

[11] Ofcom Second Pay TV Consultation, Annex 9, paragraphs 1.31–1.57.
[12] BT, Setanta, TUTV.
[13] Ofcom Second Pay TV Consultation, Annex 9, paragraph 1.55.
[14] Ofcom Pay TV Statement, paragraph 1.21.

financial data such as management accounts'.[15] Oxera explained the TIRR as follows:

> In theory, with each additional entrant, the returns of each company in the market should fall until the IRR equals the cost of capital, or, equivalently, the NPV is zero. By contrast, the IRR, being persistently and substantially above the competitive benchmark (eg, the cost of capital), could indicate the existence of entry barriers and hence market power.
>
> For the purposes of competition analysis, there is usually a need to measure the IRR over a specific period during the lifespan of an economic activity. In practice, therefore, a truncated IRR can be calculated using accounting information on net cash flow during the period under consideration. Since only a segment of the lifespan of an investment is considered, the initial asset value is treated as a cash outflow and the residual value at the end of the period is treated as an inflow.[16]

27. Oxera stated that this approach was the theoretically correct approach for measuring Sky's profitability. Oxera stated that the IRR and net present value (NPV) were 'conceptually appropriate measures of profitability in the context of competition investigations'.[17]

28. Oxera[18] noted that the IRR was equivalent to an NPV assessment, that the use of an IRR was theoretically robust and that it was commonly used in the business world. Oxera also noted that the IRR reflected both the inflows and outflows of cash, and the time value of money.

29. Oxera acknowledged[19] the sensitivity of an IRR analysis to both the asset valuation and cash-flow information. It recognized that the TIRR was particularly sensitive to asset values because these asset values represented the opening cash flow and part of the closing cash flow.[20]

Sky's views

30. Sky criticized the use of a TIRR as the principal means of assessing its profitability. Sky referred us to evidence provided by Professor Grout to the CAT. This evidence noted that the 'truncated IRR methodology provides an imperfect indicator of profitability' on the grounds that:

    (a) the TIRR was affected by the manner in which companies structured themselves; and

    (b) in Sky's case, the TIRR depended significantly on the value ascribed to Sky's intangible assets, in particular the value of its subscriber base, and the calculation of these values was not straightforward.

[15] Ofcom Pay TV Statement, paragraph 1.22.
[16] Oxera first report, paragraph 2.1.
[17] Oxera first report, June 2009, p1, referencing the Oxera (2003) report for the OFT 'Assessing profitability in competition policy analysis'.
[18] Oxera first report, paragraph 2.1.
[19] ibid, paragraph 2.1.
[20] We discuss the extent to which the TIRR is affected by the way that a company structures itself in paragraph 47, and we discuss issues surrounding the valuation of Sky's intangible assets in paragraphs 93–164.

31. Regarding the impact of the structure of Sky on its TIRR, Sky referred us to Professor Grout's evidence to the CAT in which he stated that this went beyond merely modifying the TIRR because a different structure could result in a different TIRR. For example:

(a) Sky leased satellites when it could instead own them and include them on its balance sheet; and

(b) Sky had historically expensed STBs, ie it paid for them and gave them to customers rather than including them as assets on its balance sheet.

32. Sky noted that the TIRR was not designed to measure the profitability of companies as part of a competition assessment but for project appraisal. Therefore, a TIRR might tell you that profits were above WACC but it would not be a reliable indicator of how much higher they were.

33. In addition, Sky stated that TIRRs were not independent of a company's financing decisions, unlike a ROCE approach, and independence of profitability measures from financing decisions was normally considered to be an important feature of such measures. Sky stated that, for this reason, little weight should be placed on TIRRs in measuring Sky's, or any other company's, profitability.

34. Sky said that its analysis and Oxera's analysis indicated that there were significant differences in the levels of Sky's profitability and how it had changed over time depending on whether it was measured using a TIRR or ROCE approach. Sky stated that it was 'impossible reasonably to describe Sky's business as being in a steady state, either currently or, more importantly, over the "longer time periods"' examined by us, so the TIRR and ROCE would not produce the same result.

35. Sky also noted that the TIRR was rejected by Ofcom in its Second Pay TV Consultation.[21]

PwC's criticisms of the TIRR

36. In PwC's review of Oxera's modelling, it also criticized the use of TIRR. PwC said that:

(a) The TIRR was sensitive to the period chosen for truncation and, for a business like Sky, the results were highly sensitive to the timing and duration of the TIRR calculation.

(b) The approach was not transparent and was not used in mainstream business applications.[22] It could also lead to perverse results, for example the inclusion of an additional asset or increase in the cost of investment could increase the measured profitability.[23] It was not directly analogous to NPV or IRR as claimed.

(c) Reliance on opening and closing asset values and historical cash flows was unreliable when a business underwent significant change.

[21] Second Pay TV Consultation, Annex 9, paragraph 1.55.
[22] Sky initially set out a number of concerns regarding the cash flows used in Oxera's TIRR model. However, PwC (on behalf of Sky) concluded that Oxera's calculations using TIRR were not wrong, but the fact that the cash flows used to calculate the TIRR were different from those used to calculate an IRR meant that the analogy with IRR was weaker than stated. In addition, PwC noted that the fact that Sky's management had found the TIRR confusing and counterintuitive should be of concern to us, particularly given that Sky had significant experience of dealing with regulatory issues.
[23] PwC's concern was that Sky was a business which invested in and created intangible assets continually and that it might or might not be in Sky's interests for these assets to be included in the model.

(d) A TIRR was unreliable for businesses that employed substantial intangible assets.

(e) The circumstances under which a TIRR would be unreliable, as set out by Oxera in its paper for the OFT,[24] applied to Sky.

Assessment of TIRR

37. Our market investigation guidelines state that[25] 'in the context of a market reference, the Commission will normally consider profit levels, usually in terms of rates of return on capital in the market or markets concerned, as a further indicator of competitive conditions'. The guidelines also state:[26]

> The Commission will normally consider returns on the depreciated replacement cost of assets, unless there are specific reasons why this is inappropriate. Such profits could be significantly different from profits reported in statutory accounts which are usually on a historic cost (or modified historic cost) basis.

38. The CC has in the past tended to make extensive use of ROCE analysis in its profitability assessments, and to a lesser extent (though more recently) IRR-based analyses.[27] In principle, we do not favour one method over another since, providing suitable adjustments are made, both IRR-based and ROCE-based approaches can provide estimates of profitability which are suitable for use in a competition assessment. There are merits to considering a range of measures where practicable and, as a result, we placed weight on both the TIRR and ROCE results from our analysis.

39. We considered carefully Sky's criticisms of the TIRR approach and its preference for a ROCE approach. Nevertheless for the reasons set out in the following paragraphs, we focused on the TIRR analysis and used the ROCE analysis as a cross-check.

40. All measures of profitability have limitations. We did not believe that the fact that Ofcom rejected the IRR at an early stage of its analysis before finally adopting it had any relevance to our analysis. In our investigation, we considered the possible measures of profitability and weighed up the relative advantages and disadvantages of each and attached appropriate weight to the different analyses.

41. Both ROCE and TIRR measures are dependent on the quality of the inputs used and it was important that the appropriate asset valuations and cash flows were identified for use in the calculations. The valuation of opening and closing assets was particularly important where we needed to measure the IRR over a specific period during the lifespan of an economic activity. The importance of the opening and closing asset values was reflected in the amount of scrutiny that these values received in Oxera's and our analysis.[28] The importance of the time period chosen led us to consider the TIRR over various different time periods (see paragraphs 213 and 268 to 271). We noted that asset values were just as important an input in ROCE-based analysis, where an asset value needs to be estimated in each year of the profitability analysis.

---

[24] Oxera (2003) report for the OFT 'Assessing profitability in competition policy analysis'.
[25] *CC3,* paragraph 3.82.
[26] *CC3,* footnote 22.
[27] See, for example, the CC's market investigations into rolling stock leasing and classified directory advertising services.
[28] We discuss the valuation of the asset base in paragraphs 85–164.

42. We considered PwC's comment that the TIRR was not as widely used in business as an IRR but, in our view, truncation of the IRR was essential in order to measure the profitability of a specific period during the life of an ongoing business, rather than the profitability of the whole of a project or of the entire life of a business.

43. We accepted that there were some limitations to the TIRR and we agreed that it was important to assess correctly the necessary inputs to the calculations (specifically the assets and cash flows). Nevertheless, in our view, a TIRR, suitably cross-checked to ROCE calculations, was a reasonable method with which to assess Sky's profitability for the purposes of a competition investigation because it reflected the inflows and outflows of cash, changes in asset values and the time value of money. It therefore reflected the way in which businesses make investment and entry/exit decisions. It could also be benchmarked against the WACC.

44. For a business in a relatively steady state, and with appropriate adjustments, we would expect the results from the ROCE and IRR (or TIRR) analyses to be broadly comparable and we would not expect to draw different conclusions using one measure rather than the other. In our view, a ROCE analysis with appropriate modifications for intangible assets would produce a similar answer.

45. We disagreed with Sky's view that it was not in steady state. It was obviously the case that an industry such as the pay-TV industry showed regular technological advances but Sky had had a well-established business with a steadily growing subscriber base over the last ten years (see paragraph 228 and Figure 4). Furthermore, the consistency of the results between our TIRR analysis and the ROCE cross-checks clearly demonstrated that our results held whether assessed on a ROCE or a TIRR basis.

46. We considered Sky's concerns that decisions regarding the financing of a business could affect its TIRR. As the TIRR uses the business's cash flows as the basis of its analysis, movements in cash balances could theoretically have an impact on the measured TIRR. We did not believe that in the case of our analysis of Sky's profitability there had been any such distortion because of the consistency of the results of our TIRR and ROCE analysis.

47. We considered whether the structure of Sky's business inflated its TIRR. Although different accounting treatments will affect the TIRR, we needed to consider whether the structure of Sky's business had purely accounting-based reasons or whether the structure had been adopted as a critical part of its business model which had influenced its profitability. However, we noted that this concern would apply equally to a ROCE-based analysis. It appeared to us that there were business reasons and not merely accounting reasons for Sky's structure. In particular:

(a) As noted by Professor Grout, Sky could have capitalized rather than expensed its STBs, but doing so would have necessitated a real and non-trivial change in Sky's business model. There appeared to be business reasons (as opposed to merely accounting reasons) for the existing contractual arrangements, whereby the customer owns the STB (eg, it could improve Sky's ability to attract and retain customers; it made the customer, rather than Sky, responsible for the cost of repairs after the end of the 12-month warranty period; and it might also make it easier to reconnect a customer whose subscription has lapsed.

(b) Sky leases rather than owns the satellites that it uses (and hence does not capitalize them on its balance sheet), so a different accounting treatment would reflect a change in Sky's risk profile and cash flows.

48. Overall, we found that the TIRR was a reasonable method by which to assess Sky's profitability but, in order to ensure that our TIRR findings were robust, we compared the results of the TIRR analysis with the ROCE results (produced given the same input assumptions).

Use of other methodologies

49. In this section, we discuss the appropriateness of assessing Sky's profitability by *(a)* using total shareholder return (TSR); and/or *(b)* benchmarking Sky's ROCE against levels of ROCE found for other businesses in past CC cases. These two approaches were put forward by Sky and its advisers as alternatives to the TIRR.

50. Sky submitted that:

> … all profitability measures have their strengths and weaknesses … it is inappropriate to treat the TIRR approach as the only valid way of assessing Sky's profitability … other approaches, such as a ROCE analysis and the evaluation of returns to shareholders, also provide valid information on Sky's historic profitability and it is wrong to dismiss them as being entirely uninformative.

Total shareholder return

51. TSR analysis considers the observed returns to Sky's shareholders, including both capital appreciation and dividend income.

- *Ofcom's and Oxera's approach to TSR*

52. In its First Pay TV Consultation, Ofcom considered some basic measures of Sky's profitability (including its operating profit margin and turnover) and also considered Sky's TSR.[29]

53. Ofcom used this measure to derive an IRR by treating the TSR as the relevant project cash flows, ie using the initial share valuation as a cash outflow (as though the shares had been purchased at this point in time) and using the final share valuation as a cash inflow.

54. Ofcom considered the period from Sky's flotation in 1994 to 2007 and compared Sky's TSR over this period with the TSR of various indices. It found that Sky had underperformed these indices (with an IRR over the period of only 6 to 8 per cent).[30] However, Ofcom noted that, at certain points, Sky's return would have outperformed all of the indices in its sample (mainly around 2000 to 2002).

55. Ofcom noted that Sky's low TSR might have reflected a high initial purchase price, as shareholders might have anticipated high returns.

56. Oxera explained that the mechanical reason for the difference between the returns resulting from a TSR analysis and the returns resulting from a TIRR analysis was the difference in the asset valuation (ie market value in a TSR versus the cost incurred in acquiring the asset in a TIRR). Oxera said: 'the main reason why the [T]IRR is higher

[29] Ofcom First Pay TV Consultation, Annex 12, paragraph 3.1ff.
[30] The IRR was calculated by treating the TSR as an investment project.

than TSR in this case is because the value of assets used in the TSR analysis significantly exceeds the value of assets in the [T]IRR analysis'.[31]

57. Oxera noted, as an explanation of the different asset valuations, that 'the costs to Sky of acquiring additional subscribers are significantly lower than the value of additional cash flows generated by these subscribers over their lifetime'.[32] Oxera used a simplified incremental lifetime per subscriber cash-flow model to show that the payback for a new customer was less than one year, using 1994, 1995 and 1996 as the start.

58. Oxera also said that it considered the TSR approach to be circular. Oxera said:

> The market value used in the TSR calculation is a function of expected future cash flows discounted at the cost of capital. Measurement of returns based on market value (whether by the [T]IRR or TSR) is therefore circular, to the extent that if actual cash flows equal expectations, the measured [T]IRR will equal the cost of capital (notwithstanding that cash flows may include significant rents).[33]

59. Oxera continued that the TSR only showed under- or overperformance of a company's shares against the expectations for the value of those shares at the time of the company's flotation. Oxera said[34] that the relevant question was not how Sky's actual cash flows compared with market expectations, but how actual cash flows compared with the costs incurred to acquire the assets which generated those cash flows. Therefore, the TSR was not an appropriate measure.

60. Oxera also highlighted a number of additional flaws:

(a) TSR incorporated investor sentiment;

(b) the TSR approach was rejected by the CC in previous cases (Oxera also quoted the Cruickshank report);[35]

(c) TSR was sensitive to the choice of period;[36]

(d) under- or overperformance depended on the choice of benchmark used;[37] and

(e) there was an element of survivorship bias, in that companies that did badly were removed from the benchmark.[38,39]

Although it considered the TSR approach flawed for these reasons, Oxera noted that, under this approach, if ITV and Kirch pay-TV were excluded from the calculations, Sky still outperformed the comparator indices.[40]

---

[31] Oxera second report, paragraph 3.1.
[32] Oxera second report, paragraph 3.1.
[33] Oxera second report, paragraph 3.1.
[34] Oxera second report, paragraph 3.2.
[35] In which the flaws of the TSR as a measure of profitability for competition analysis were highlighted. The Cruickshank report on *Competition in UK Banking* was published on 20 March 2000 and was initiated by the Chancellor of the Exchequer, not the CC.
[36] Oxera second report, paragraph 3.3.1.
[37] Oxera second report, paragraph 3.3.3.
[38] Oxera second report, paragraph 3.3.4.
[39] The sample changes over time: companies performing badly leave the benchmark index (eg the FTSE 350) and companies performing well enter into it.
[40] Oxera second report, paragraph 3.3.2.

- *Sky's views on Oxera's assessment of TSR*

61. In his evidence to the CAT, Professor Grout said that one attraction of TSR was that it sidestepped the difficulty of estimating asset values (especially Sky's intangible assets). Professor Grout accepted that TSR also faced difficulties (such as the risk that it would include any expected excess profits at the start of the period) but he believed that it could provide useful evidence.

62. Professor Grout's evidence to the CAT included an analysis of Sky's stock market returns. In summary, he found that:

    (a) Sky had not outperformed any of the comparator indices he looked at.

    (b) This relatively poor performance was not explained by investors at the time of Sky's flotation believing that Sky would outperform the market: Professor Grout looked at public views at the time of Sky's flotation and did not find an expectation of abnormal success.

    (c) Survivorship bias did not explain this result, nor was it relevant to the analysis.

    (d) The result held even on a number of different assumptions.

63. Overall, Professor Grout said that the data showed that Oxera's TIRR figure was not capturing Sky's true profitability but was 'optimistic'. Professor Grout said that it was difficult to suggest that Sky was earning a substantial excessive return and, as a result, Ofcom ought to be more cautious in its acceptance of IRR-based profitability analysis.

- *Assessment of TSR*

64. The CC has not, in any previous investigation, placed reliance on the TSR. Instead, the CC has placed reliance on ROCE or IRR-based measures, which it has compared with a cost of capital. This reflects the CC's usual approach to measuring profitability, as set out in the CC's guidelines.[41] We nevertheless considered the relative merits of TSR in this case.

65. TSR only measures changes in shareholder expectations and not economic profitability, ie it looks at the returns made by a company's shareholders rather than the company itself. As a result, we were concerned that:

    (a) the TSR approach contained a circularity, in that profits expected at the start of the period were embedded in the result and could not be isolated, and it was not possible to know with certainty what investor expectations were at the start of the period;

    (b) the share price movements reflected a lot of separate effects and, therefore, there was too much 'noise' to be able to isolate movements derived from profitability (rather than those driven by, for example, market trends or current events); and

    (c) the TSR measure was sensitive to the choice of time period and the benchmark selected.

[41] *CC3*, paragraphs 3.81–3.85.

66. For these reasons, it was our view that the TSR approach could not say anything particularly informative about whether Sky achieved excess profits for the purposes of a profitability analysis in a competition inquiry.

ROCE

- *Sky's analysis of previous CC decisions*

67. Professor Grout analysed the use of ROCE by the CC and its predecessor, the Monopolies and Mergers Commission (MMC), in past cases and considered in which of these cases the CC had reached an adverse finding.

68. From this analysis, Professor Grout concluded:

(a) the CC (or MMC) did not find against several companies with high ROCEs;

(b) the mean ROCE in past cases was [✂] per cent (company level) or [✂] per cent (case level), and [✂] per cent and [✂] per cent respectively in cases in which the CC or MMC had not reached an adverse finding, which were substantially higher figures than the ROCE of up to [✂] per cent which Oxera had found for Sky; and

(c) in some cases where no adverse finding was reached there was evidence of companies having higher ROCEs than Sky over a long period of time.

69. Oxera commented that:

(a) the findings of Professor Grout were not robust, as his analysis did not distinguish whether the authority placed weight on the profitability finding;

(b) accounting ROCEs were influenced by many factors and there had been no attempt in Professor Grout's analysis to control for these factors; and

(c) in order to produce a ROCE for Sky which was comparable to many of the ROCEs calculated in previous cases, it would be necessary to remove many of the various adjustments included in Oxera's calculations, eg because the cases tended to use normal definitions of capital employed. Oxera calculated that, under a different method (eg changing the treatment of current liabilities), Sky would have achieved a ROCE of up to [✂] per cent in recent years, rather than [✂] per cent.

- *Assessment of ROCE*

70. Our assessment of profitability in market investigations is done on a case by case basis. In each investigation, we consider profitability using the best information we have available.

71. Furthermore, profitability analysis is only one part of the overall analysis performed during an inquiry and is considered in the context of our overall assessment. Profitability analysis could be an indicator of competitive conditions but does not in itself determine the outcome of the case. Therefore, in our view, it was not meaningful to compare Sky's profitability with those of other companies in past CC cases based on the different outcomes of those past cases.

72. In any event, the analysis produced by Professor Grout did not make valid comparisons. Comparing historical ROCE data from previous inquiries with ROCE data for

Sky was unlikely to produce a meaningful comparison without adjusting the historical data in at least the following ways:

(a) revaluing the tangible asset base to a measure approaching replacement cost;

(b) including intangible assets on the balance sheet, measured appropriately; and

(c) calculating the capital employed in a consistent manner.

73. In addition, even if all these adjustments could be made, there were likely to be case-specific issues relevant to the assessment of profitability which would need to be taken into account.

74. For these reasons, we did not place any weight on Professor Grout's analysis of previous cases. Rather, we believed that our focus should be on producing a robust assessment of Sky's profitability relevant to our investigation and then to consider that assessment in the context of our overall analysis. This approach was consistent with our guidelines.[42]

Benchmarking of aggregate returns

75. Oxera produced a detailed benchmarking analysis of Sky's aggregate returns[43] looking at both:

(a) Sky's ROCE and return on sales (ROS); and

(b) valuation ratios (enterprise value[44] over total assets and enterprise value over operating expenditure plus capital expenditure).

76. Oxera chose comparator companies using a clustering analysis, which sought to determine companies similar to Sky using a variety of metrics.[45]

77. Oxera set out[46] ROCE calculations for Sky compared with other benchmarks (FTSE 350, FTSE 350 Media and FTSE 350 Telecoms). Oxera looked at both:

(a) book value measures for Sky and the comparators; and

(b) depreciated replacement cost (DRC) values for Sky (including values for intangible assets which Oxera identified) versus book value measures for the comparators.

78. Oxera drew the following conclusions from its benchmarking analysis:

(a) the ROCE and ROS benchmarks provided a 'consistent indication that Sky's returns (measured on the basis of accounting ratios) seemed higher than for the comparators from the media and telecoms sectors';[47] and

---

[42] *CC3,* paragraph 3.85.
[43] Oxera used benchmarking analysis for both its aggregate and disaggregated profitability analysis. We discuss the disaggregated benchmarking in paragraphs 299–301.
[44] The market value of a company adjusted mainly for debt and cash.
[45] Detail on this is set out in Chapter 6 of Oxera's first report. Clustering analysis ranks companies with reference to a dissimilarity measure: it is used to select comparator companies with similar business risk characteristics (in this case Oxera considered revenue risk, cost risk and operating leverage).
[46] Oxera second report, paragraph 3.4.
[47] Oxera first report, paragraph 6.2.1.

(b) 'for the closest comparators, the valuation ratios appeared lower than for Sky'.[48]

79. Sky criticized this analysis on the grounds that the comparators which Oxera had chosen 'are not in fact relevant as comparators'.[49] Sky said that:

> Although the process used by Oxera to determine its comparators has the outward appearance of being scientific, the output derived from that process is not fit for the purpose for which it is intended. The majority of the companies identified by Oxera are sufficiently different to Sky in at least some respects (and many are different to Sky in numerous respects) such that it is meaningless to compare the metrics identified by Oxera for these companies against those of Sky. For example, Oxera appears to believe that it is sensible to compare Sky's performance with that of companies such as:
>
> *(a)* France Telecom (principally a telecommunications network operator);
>
> *(b)* Vue Cinemas (a cinema chain operator);
>
> *(c)* Tesco Mobile (a virtual mobile telephony business);
>
> *(d)* GCap (a commercial radio business);
>
> *(e)* Reed Elsevier (a book publisher);
>
> *(f)* ITV (a mature, advertising funded public service broadcaster); and
>
> *(g)* five (a loss-making, advertising-funded public service broadcaster).

- *Assessment of benchmarks*

80. Our market investigation guidelines[50] state:

> The Commission may consider alternative measures, such as the return on sales or other relevant financial ratios. For instance, comparisons with businesses operating in different but similar markets may on occasions be helpful, but will be of limited usefulness unless the Commission can confirm the validity of the comparison.

81. Comparing the returns of a company with a group of similar companies may produce useful evidence but only if good comparators can be found. However, it appeared to us that this was the crux of the problem: it was difficult to identify a good comparator to Sky. We considered the analysis produced by PwC in its 'Evaluation of the selection of comparators used in Annex 9 of Ofcom's pay TV phase three document'.[51] This analysis reviewed the companies derived from Oxera's clustering analysis and found that none could be considered to be reliable comparators to Sky.[52] We agreed with this analysis and found that the comparators used by Oxera were not sufficiently reliable for our purposes.

[48] ibid, paragraph 6.2.2.
[49] Sky response to Third Pay TV Consultation, paragraph 4.80.
[50] *CC3*, paragraph 3.85.
[51] http://stakeholders.ofcom.org.uk/binaries/consultations/third_paytv/responses/Annex_7.pdf.
[52] PwC considered each of Oxera's comparators and provided reasons for its belief that the comparison was unreliable including the fact that the comparators had different business models, cost structures, costs of capital and differences in the sectors they operated in (including life-cycle stage, maturity and recent events).

82. Furthermore, evidence based on ROCE/TIRR analysis can be compared with a cost of capital directly and, in our view, the result of this comparison will be more informative than a comparison of returns with other companies.

Aggregate profitability modelling

83. We then considered specific issues in the modelling of aggregate profitability:

(a) valuation of the asset base (paragraphs 85 to 92);

(b) approach to intangible assets (paragraphs 93 to 164); and

(c) other significant assumptions (paragraphs 165 to 201).

84. Based on our analysis of these issues, we set out our base case profitability assessment. We also considered a sensitivity analysis by examining the effect of changing certain assumptions used in our base case (paragraphs 202 to 218).

Valuation of the asset base

85. The TIRR methodology requires valuation of the opening and closing asset base and the ROCE methodology requires a valuation of the asset base in each year for which it is being calculated. The value at which assets are recognized in company accounts does not always reflect their economic value and certain intangible assets may not be recognized at all. This section considers our approach to valuing assets. The following section considers which intangible assets should be recognized when assessing profitability for the purposes of a competition assessment.

Oxera's approach

86. Oxera considered three approaches to the total valuation of Sky's assets, as follows:

(a) Under its market value approach, Oxera used the market value of Sky's equity and the book value of its debt, which it reduced by the value of Sky's investments in joint ventures.

(b) Under its replacement cost approach, Oxera valued Sky's balance sheet assets at their book value on Sky's balance sheet and it valued the additional intangible assets not on Sky's balance sheet as described in the following section. Oxera recognized that, ideally, it would have valued the tangible assets at their replacement cost but, as most of Sky's tangible assets (all such assets excluding the property, plant and equipment category (which is around [✄] per cent of Sky's asset base)) were already presented at current cost, fair value or were annually tested for impairment, the difference in overall values would have been small.

(c) Under its book value method, Oxera valued Sky's balance sheet assets at their book value and excluded any value for the additional intangible assets not included on Sky's balance sheet.

87. Figure 1 shows Oxera's calculations of the value of the total asset base under these three approaches.

FIGURE 1

Value of Sky's total (tangible and intangible) asset base under different valuation approaches*

[✄]

*Oxera first report, Figure 4.1.

88. The market valuation approach produced asset values which were much higher than the other methods, and were highest in 2000. Over time, the ratio by which this value exceeded the replacement cost value decreased. Oxera attributed this decline to increasing SACs, which had increased the asset base under the replacement cost approaches.

89. The value of Sky's assets calculated according to the book value approach was lower than the value calculated under the replacement cost approach throughout the period. Oxera said that this reflected the value to Sky of its intangible assets which were not capitalized on its balance sheet.

90. Oxera said that the replacement cost method was the appropriate approach for its analysis, as this approach used the modern equivalent asset (MEA) value for each asset, including intangible assets. Oxera said that using the MEA value was consistent with the value to the owner principle, which required taking the lower of the MEA value and the economic value (ie in this case the market value).

Sky/PwC approach

91. PwC also used an MEA approach to valuing assets, although it adopted different valuation approaches for certain intangible assets.

Our approach

92. The methodology we used for valuing Sky's asset base was the MEA valuation. The MEA valuation approximates the lowest costs which a potential new entrant would face in acquiring the assets needed to offer an equivalent service to Sky. If the estimated TIRR (or ROCE) was in excess of the WACC when assets were valued at the MEA, then we would have expected entry to have occurred. The best estimate for the MEA valuation is the replacement cost method.

Valuing intangible assets

How to value intangible assets

- *Oxera's approach*

93. Oxera considered the following potential methods of valuing Sky's intangible assets:

(a) Value-based approaches, which can be split between:

(i) a market-based approach—intangible assets are primarily valued on the basis of empirical transactional data (eg pricing multiples); and

(ii) an income-based approach—intangible assets are valued according to the present value of the income earned from the ownership of the assets (this approach requires careful delineation of the economic income associated with the intangible assets from the income earned by the overall business of the company whose assets are valued); and

(b) a cost-based approach, ie based on the costs of creating the intangible assets rather than on the market value generated by them.

94. Oxera used a cost-based approach, rejecting the value-based approaches on the grounds that these approaches did not allow for the separation of the value derived from intangible assets in competitive markets from the value which could be derived from potential market power. A value-based approach might introduce circularity in the analysis of profitability—for example, if a customer base was valued as discounted future cash flows from customers, returns on this asset base would be expected to be equal to the cost of capital at which the cash flows were valued, irrespective of whether prices were high or low. Oxera applied its cost-based approach to the three categories of intangible asset which it had identified (see paragraph 98).

- *Sky's views*

95. Sky said that it did not object in principle to valuing intangible assets based on cost rather than value on the basis that it was the least worst option available for many intangible assets such as Sky's retail subscriber base. However, it said that such an approach might not be appropriate in all cases and, as PwC found, was likely to underestimate the value of Sky's intangible assets (and hence overestimate the profitability gap). PwC recognized the problem of circularity associated with using projected cash flows but, overall, PwC believed that the asset base valuation calculated by Oxera should be seen as a minimum figure.

- *Assessment of how to value intangible assets*

96. We agreed with Oxera that the valuation of intangible assets should be based on cost. As with other areas of profitability analysis, we were concerned with any approach which introduced circularity (ie that embedded the expectation of future profits in the asset base) and, in our view, there was a risk that including intangible assets (for example, brand) on the basis of their market value (which would reflect the value of the future profits which they were expected to generate) introduced such a circularity. Valuation on the basis of cost was also consistent with the MEA approach (as described in paragraph 92).

Which intangible assets to value

- *Oxera's approach*

97. Oxera highlighted[53] the presence of significant intangible assets which related to Sky's business but which were not reflected on Sky's balance sheet. If these assets were not included in the calculation, or were estimated at too low a value, then Sky's profitability would appear too high. This would affect the outputs for both TIRR and ROCE analyses.

98. Oxera identified three types of intangible asset relating to Sky's business which were not included on Sky's balance sheet:

[53] Oxera first report, paragraph 3.2.

(a) the subscriber base—Sky's investments in acquiring customers and raising customer awareness of its products;

(b) contractual obligations—Sky's contractual obligations to incur payments for programming content in future years (eg FAPL rights); and

(c) past losses (which might be linked to current high profitability)—the proportion of past losses that reflected the timing of cash flows from past investments, if relevant.

- *Our approach in our August 2011 provisional findings*

99. In our August 2011 provisional findings we set out the criteria we used for considering whether an intangible asset should be recognized on the balance sheet, as follows:

(a) the asset must be derived from a cost incurred, primarily to obtain earnings in the future;

(b) this cost must be additional to those necessarily incurred at the time in running the business; and

(c) it must be identifiable as an asset separate from any that arises from the general running of the business.

100. These criteria were originally set down in the CC's report on the supply of banking services to small and medium-sized enterprises (SME banking).[54] The SME banking report also noted that 'whether the expenditure on any given intangible should be capitalized will depend on the nature of the specific intangible identified and the context'.[55]

101. This work was subsequently reviewed by Sir Bryan Carsberg in a report for HM Treasury (the Carsberg report).[56] The Carsberg report broadly concurred with the conclusions of the CC, saying that 'the framework adopted by the Commission is sound and would be accepted by most independent experts'.[57]

- *Sky's views on our August 2011 provisional findings*

102. Sky stated that our approach to this issue in our August 2011 provisional findings was fundamentally flawed. Sky said that we had adopted an unreasonable approach to the identification of its intangible assets, adhering rigidly to criteria for recognition of intangible assets that were developed specifically for a separate investigation, and paid no heed to the principle, also outlined in that investigation, that 'whether the expenditure on any given intangible should be capitalized will depend on the nature of the specific intangible identified and the context', nor to Sky's detailed submissions on this matter.

103. Sky stated that 'the criteria the CC [has used] are inappropriate for the current investigation. This is evidenced by the fact that their use results in the exclusion from

[54] *Supply of banking services by clearing banks to small and medium-sized enterprises*, March 2002.
[55] SME banking report, paragraph 2.271.
[56] *Report on certain issues arising out the report by the Competition Commission on the supply of banking services by clearing banks to small and medium-sized enterprises.*
[57] Carsberg report, paragraph 12.

Sky's intangible assets [of] items included as standard when intangible assets are considered for business purposes and by experts on such matters'.

104. Sky believed that 'The proposition that Sky only has one intangible asset—its subscriber base—is plainly wrong, as is any proposition that the value of all of Sky's other intangible assets is included in the value of its subscriber base'.

105. PwC (on behalf of Sky) disagreed with our criteria in paragraph 99 for identifying an intangible asset. PwC said that:

(a) The first condition ignored the possibility of costless assets (eg a good idea, business longevity, reputation for a good product, or good service).

(b) The second condition was not practicable because it was unlikely that a business would be able to distinguish between what was necessarily incurred at the time in running the business and what was additional. PwC also stated that its application would require the 'de-capitalization' of many tangible assets currently recognized on corporate balance sheets.

(c) The third condition suffered from the same problems as the second condition as, in reality, it was not possible to split a business into activities which created assets that did or did not arise in the general running of a business.

106. Instead, Sky, with PwC, devised its own criteria for intangible asset recognition, as follows:

(a) the asset should be generated by a past activity leading to future benefits (the past activity may or may not consist of expenditure);

(b) the company should have effective control of the asset; and

(c) a potential acquirer would place value on the company holding the asset.

- *Assessment of the criteria for recognizing intangible assets*

107. In the light of the views we received, we considered again the appropriate approach for recognizing intangible assets by first considering the rationale for such recognition and then considering whether the criteria we adopted in our August 2011 provisional findings needed to be revised.

108. The economic rationale for defining an item as an asset is that it is able to generate future economic benefits. We distinguished between expenditure which created an asset and expenditure which maintained an asset for general use. We also considered it correct to include only those intangibles that could be properly identified and measured. The criteria put forward in the SME banking report were consistent with these principles.

109. We considered Sky's criticisms of these criteria but we were not persuaded that the criteria we adopted in our August 2011 provisional findings were unreasonable for the purposes of our assessment of profitability in this inquiry. We noted that:

(a) Although 'costless' assets might represent the value of intangible assets not capitalized on the balance sheet, they could also represent the excess of the NPV of expected future economic returns over the book value of the assets, where these returns included the 'excess profits' which we were seeking to assess. Including such costless assets, which could only be valued based on

potential future earnings, therefore risked significantly underestimating profitability. In addition, for consistency, we noted that the increase in economic value of the entity which would be represented by the inclusion of such costless assets would represent a return to the providers of capital which should be recognized by an appropriate increment to profit (notional positive cash flow in the TIRR) in the profitability calculation, though this was not proposed by Sky.

(b) Judgement was required when assessing whether costs being incurred were additional to the costs of running a business. We acknowledged that for some potential intangible assets there may have been an uncertain link between expenditure and the potential intangible asset, which needed to be considered carefully. Therefore, for this reason, we explained why we included or excluded a particular intangible asset. We also considered the effect of including some other potential intangible assets in the asset base (in our sensitivity analysis).

110. We considered Sky's proposed alternative criteria in turn:

(a) Sky's first criterion was not unreasonable in theory but, as it broke the link between the creation of an asset and the associated cost, it was hard to use in a model as assets were created with no impact on the profit and loss account. In addition, it would be necessary to measure the asset value using a methodology other than cost and this would usually be one based on expected future returns, which suffered from issues of circularity (see paragraph 96).

(b) The second criterion did not appear to be particularly useful in distinguishing between assets.

(c) The third criterion suggested that the asset should be measured by its value rather than its cost (again suffering from circularity issues). Had it been adopted, it would in any case have been logically necessary to recognize additional notional cash inflows in the TIRR calculation (or additional notional 'profit' in a ROCE calculation) reflecting the creation of additional value in the business over and above the costs incurred, as mentioned in paragraph 109*(a)* above.

111. For these reasons, we did not adopt Sky's criteria as we did not believe they were suitable for a competition assessment.

112. We discuss below in turn the applicability of our criteria to the three intangible assets in paragraph 98 (ie *(a)* the subscriber base; *(b)* contractual obligations; and *(c)* past losses) and to other potential intangible assets. We discuss Oxera's approach and Sky's views, and present our assessment. We noted that the effect on the TIRR and the ROCE of capitalizing a cost as an additional intangible asset would be both to increase the asset base and also to reduce the cost in that year.

Subscriber base

- *Oxera's approach*

113. Oxera said that the replacement cost value of Sky's subscriber base for the purposes of its profitability assessment depended on both the cost and the number of new subscribers in each year. Oxera produced a subscriber valuation model, which consisted of two elements:

(a) the changes in subscriber numbers; and

(b) the changes in SACs.

114. Oxera calculated a base case and a high case for the SAC. In the high case, the SAC was defined as all the marketing and subscriber management costs shown in Sky's accounts, divided by the number of new subscribers.[58] In its base case, Oxera excluded from the SAC those costs which related to maintaining the subscriber base (rather than creating or adding to it), those costs which were not described as customer acquisition costs in Sky's data, and those costs which were not related to pay TV (eg they were related to Easynet and Sky Bet).[59]

115. Oxera valued the subscriber base in 'cohorts', with the value of subscribers gained in each year being added to the base. The value of each cohort was then 'depreciated' using data on the churn rate. (The churn rate reflected the number of customers leaving and was used in the model as the 'depreciation' of the number of customers.)

116. Oxera considered two methods of valuing the subscriber base:

(a) *year of investment,* in which new subscribers were valued at the SAC in the year they were acquired; and

(b) *annual revaluation,* in which the subscriber base was revalued at the SAC in each year and the 'holding gains' were reflected in the profit and loss account.

117. Oxera also considered an approach which they termed the 'CC precedent approach', based on the CC's treatment of marketing costs in the banking services to SMEs inquiry.[60] Under this approach, Oxera assumed that only a third of the annual marketing costs were used in the calculation of the relevant SAC.

118. Table 1 shows the valuation of the subscriber base under these different methodologies.

TABLE 1 **Value of the capitalized subscriber base under different approaches**

£ million

	1995	*1996*	*1997*	*1998*	*1999*	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*
High case														
Replacement costs—year of investment	311	427	550	723	776	1,302	1,743	2,205	2,612	2,989	3,448	3,997	4,717	5,412
Replacement costs—annual revaluation	469	670	837	1,732	1,413	1,642	1,982	2,930	3,014	3,772	4,644	5,441	6,300	7,586
Base case														
Replacement costs—year of investment	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Replacement costs—annual revaluation	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Base case—CC precedent														
Replacement costs—year of investment	47	64	87	129	146	271	360	449	519	574	662	765	889	995
Replacement costs—annual revaluation	73	100	147	373	311	373	402	575	555	649	888	1,035	1,140	1,302

Source: Oxera first report, Table 3.5.

[58] Oxera first report, paragraph 3.4.1.
[59] The difference between the SAC figure used by Oxera and the SAC figure which Sky reports (eg in its annual accounts) was that Sky shows as the SAC the costs of acquiring a new customer whereas Oxera estimated the costs by taking the marketing cost line in Sky's accounts and dividing this by the number of subscribers acquired in that year. The figure derived by Oxera was approximately 30 per cent higher than that used by Sky. In 2009, Oxera used an SAC of £436 compared with the SAC of £308 reported in Sky's annual review.
[60] *The supply of banking services by clearing banks to small and medium-sized enterprises*, CC, 2002.

- *Sky's views*

119. PwC identified a number of elements of Oxera's model of the subscriber asset base which it believed to be incorrect. These were that:

(a) the model treated subscribers as homogenous, which they were not: they took a variety of packages and remained subscribers for varying lengths of time;

(b) regarding the life of each cohort:

(i) there was an unclear relationship to the churn rate;

(ii) subscribers in each cohort were likely to be subscribers for varying lengths of time and also have varying churn rates; and

(iii) the use of straight-line depreciation for subscriber numbers was wrong—assuming that it was acceptable to use any homogenous assumption, a geometrically declining depreciation rate would have been more appropriate;[61]

(c) regarding SACs:

(i) these excluded costs which should be included (eg the costs of certain large investments and subscriber management costs);

(ii) the SAC should not be depreciated at all; and

(iii) straight-line depreciation of the SAC was inappropriate—this assumed each cohort had a fixed lifespan and that the value of each subscriber decreased over time;

(d) the effect of Oxera's assumption of straight-line depreciation of both the cohort life and of the SAC applied to each cohort was that the depreciation charge in the model was in some cases as little as half the appropriate rate; and

(e) in calculating a ROCE figure, the asset value used was not an average figure for the period but rather an end-of-period figure.

120. The Sky/PwC model largely adopted the same approach as Oxera in valuing the subscriber base but made some further amendments to address several of its concerns with Oxera's model. Specifically these adjustments were:

(a) more detail was included in the model on both SACs and subscriber upgrade costs; and

(b) subscribers were broken down into six types depending on which type of STB they had.

121. The result of these refinements was that the subscriber base value in the Sky/PwC model was higher than in Oxera's model (the value of the subscriber base in 2009 estimated by Sky/PwC was £[✂] million compared with that estimated by Oxera of £[✂] million).

---

[61] In Oxera's model the number of subscribers in each cohort was reduced (or depreciated) to zero in a straight line over the useful economic life of the cohort. In addition, the SAC was also depreciated to zero in a straight line over the useful economic life of each cohort.

- *Assessment of subscriber base asset*

122. In our view, Sky's subscriber base satisfied the criteria in paragraph 99 and was therefore an intangible asset which should be capitalized. Both Oxera and PwC also capitalized it in their models, albeit using slightly different methods to value the subscriber base.[62]

123. Having considered all PwC's comments regarding the valuation of the subscriber asset base and its specific concerns with Oxera's modelling, we were of the view that the refinements proposed by PwC in its model regarding the precise estimation of the subscriber base were reasonable and a slight improvement on Oxera's model. We therefore used PwC's valuation of the subscriber base in our base case. The effect of PwC's adjustments compared with Oxera's valuation was to increase the valuation of the subscriber base in each year. However, the effect on profitability was small.

Contractual obligations

- *Oxera's approach*

124. The second intangible asset which Oxera identified[63] related to future contractual rights which Sky had secured (though not paid for), in so far as they were not already included in the asset base (see paragraph 98). Oxera explained that 'at the end of every year, Sky has contractual obligations stretching several years into the future … FAPL rights constituted the majority of future programming obligations'. Oxera noted that the nature of these obligations was such that Sky always had the ability to breach the contract after a season and therefore, at any point in time, was only liable for one season. However, Sky submitted that any such breach would have substantial adverse consequences for its business, and therefore was extremely improbable. Sky said that, furthermore, Oxera's propositions did not appear to be based on a sound understanding of the nature of Sky's rights contracts ([✂]) or of the consequences of breaching such contracts.

125. Oxera did not agree with Sky's submission and, under both its base and high case scenarios, Oxera valued Sky's future contracts as the NPV of the amounts Sky must pay for rights in the following year, discounted at a rate of 15 per cent.[64] Oxera tested the sensitivity of these values to using a discount rate of 10 or 20 per cent, and found that the change of rate had little effect on the overall figure.[65]

- *Sky's views*

126. Sky noted that there were contracts which Sky had entered into which obliged the sports rights or movies rights holders to allow Sky to broadcast their content (including the sports contractual obligations considered by Oxera). PwC stated that these contractual obligations met the criteria for defining an asset as set out by Sky/PwC, noting that:

> In economic terms, rights contracts have the same characteristics as tangible assets that are financed by debt. The buyer agrees to pay an amount for an asset, and payments for that asset spread over the

[62] For example, Oxera used a figure which was 30 per cent higher than the SAC reported by Sky.
[63] Oxera first report, paragraph 3.4.2.
[64] Oxera used 15 per cent for 'illustrative purposes'.
[65] See Oxera first report, footnote 37.

period in which the asset delivers economic services (ie the period over which the asset depreciates).

127. Sky stated that rights contracts held by Sky were typically core assets of a TV broadcaster. Sky said that these contracts comprised significant intangible assets for Sky's broadcasting businesses and, therefore, they should be included as assets in the analysis of its profitability. It said that programming rights were normally identified as relevant intangible assets for TV broadcasters. In support of this view, it quoted a recent review by Grant Thornton which stated that 'when one media business acquires another, a greater part of the price paid for the acquisition tends to relate to intangible assets and goodwill rather than tangible assets'. Sky noted that Grant Thornton's review specifically identified contract-based intangible assets, and included operating and broadcast rights within its description of contract-based intangible assets. Sky stated that a failure to include such core assets to Sky's business, by use of our criteria for recognition of intangible assets, would indicate that the criteria were ill-suited for identification of relevant intangible assets in the current case (and for businesses which depend on exploitation of intellectual property rights more generally).

128. PwC agreed with Oxera that Sky's contractual obligations should be included in the asset base. PwC valued these assets using a discounted cash flow of the future costs to be incurred by Sky for each contract (eg three years for the FAPL contract). In each year, PwC made two adjustments to EBIT. The first adjustment removed the costs from operating costs, and the second included depreciation of the rights over the lives of the contracts.

- *Assessment of contractual obligations*

129. Our view was that Sky's contractual obligations (ie its current obligations to acquire rights in future periods) did not satisfy our criteria in paragraph 99 and so we did not include them in our base case. In each year Sky pays for the contractual rights it uses in that year and expenses these as a cost. These are operating costs and are reflected in Sky's profit and loss account (and in the Sky/PwC model) for that year. [✂] Therefore, we judged that Sky's future contractual obligations were not costs which had been incurred, but rather reflected future costs which were likely to be incurred (Sky noted that it was extremely improbable that these costs would not be incurred).

130. We did not agree with Sky's proposed approach to recognizing these costs as an intangible asset. In our view, agreeing to buy an asset in the future does not create an asset now worth the full amount due to be paid over the contractual term.

131. Although not included in our base case, we nevertheless showed the effect of including these costs in our sensitivity analysis (see paragraph 215).

Past losses

- *Oxera's approach*

132. Oxera considered the extent to which past losses should be included in the asset base. Oxera's analysis used as its starting point the flotation of Sky in 1994, and it considered the effect of losses prior to this date.

133. Oxera's profitability analysis valued the opening asset base at replacement cost so any asset value which might have been related to past losses should have been

included already.[66] Therefore, Oxera did not include any asset value relating to past losses in its calculation of the opening asset base.

134. Nevertheless, Oxera considered past losses as part of a separate sensitivity analysis. It estimated the total losses prior to 1993 at £1,538 million and it then sought to estimate which of these losses were related to investments in the acquisition of new customers. Oxera considered two estimates of the relevant share of past losses:

(a) Oxera calculated the goodwill created at the acquisition of Sky Television (and then later written off) to be £491 million as it believed that this ‘could reflect the value of the subscriber base’ at that time.

(b) Oxera also calculated the losses associated with Sky’s operating activities, removing those losses which could not be expected to relate to investments in customers, such as the write-offs of the Marcopolo satellites. By this approach, Oxera estimated relevant past losses to be £761 million.

135. Oxera found that capitalizing either of these items would not have had a substantial impact on its TIRR results, due to the fact that the opening asset base was depreciated relatively quickly.

- *Sky’s views*

136. PwC said that at least some of the losses associated with investments by Sky in the early phases of its development should be included in its model.

- *Assessment of past losses*

137. We recognized that Sky’s current profits might be linked to its past losses and that these losses reflected actual costs incurred by Sky. However, our assessment was focused on costs which had created assets. In addition, as Oxera noted, any asset value related to past losses would already have been included in the opening asset base since, in its analysis, Oxera revalued Sky’s opening asset base at replacement cost.

138. For these reasons, we did not include Sky’s past losses either in our base case or in our sensitivity analysis (see paragraph 215). Nevertheless, we noted Oxera’s sensitivity analysis which considered the extent to which Sky’s past losses might have created assets which were not reflected in Sky’s balance sheet, the results of which indicated that they made little difference to Sky’s TIRR over the period 1995 to 2009 and no change to its TIRR over the period 2005 to 2009.[67] We recognized that a longer customer life may have increased slightly the amount of past losses which could be included but, as Oxera noted (see paragraph 135), the effect of a longer customer life was likely to be minimal.

Other possible intangible assets

- *Oxera’s approach*

139. Oxera considered other possible intangible assets to include in its profitability analysis, including:

---

[66] Oxera first report, paragraph 3.4.3.
[67] As the losses occurred over 15 years ago.

(a) brand, customer relations and corporate reputation—Oxera believed these costs would be encapsulated in the subscriber base asset; and

(b) staff training and development—Oxera believed that a significant part of these costs would be associated with developing the subscriber base.

140. Therefore, Oxera did not include any other intangible assets in its assessment of Sky's profitability.

141. Oxera considered how large the value of an asset omitted from the analysis would need to be for the omission to affect its conclusions. Oxera estimated that:

(a) the opening asset value would need to increase by around £[✄] million, or more than triple (when the DRC asset value was used), in order to remove the profitability gap for the period 1992 to 2009; and

(b) similarly, the value of potential skills and experience acquired by Sky over time would need to be significant: the opening and closing asset value would need to increase by £[✄] million (or more than 50 per cent) in order for returns over the period 2005 to 2009 to be in line with the cost of capital.

Overall, Oxera believed that there was no robust evidence that omitted assets could explain the profitability gap that it had identified (see paragraphs 206 to 209).

- *Sky's views*

142. Sky and PwC submitted that further intangible assets should be included in the model. These were:

(a) content rights (sports and movies);

(b) brand;

(c) third-party channel supply contracts;

(d) skilled workforce; and

(e) relationship with third-party engineers.

143. We considered *(a)* above under contractual obligations (see paragraphs 124 to 131). We consider *(b)* to *(e)* below in turn.

144. As an indication of the scale of intangible assets that PwC and Sky proposed should be included, Sky's total assets less current liabilities (ie capital employed) at the end of June 2011 as shown on Sky's balance sheet was £3.5 billion, and Sky's current market value as at the end of March 2012 was about £11.5 billion. However, in the Sky/PwC model, Sky's capital employed at the end of June 2011 was about £[✄] billion. Based on this sense-check, the capital employed figure we used in our analysis appeared to be more reasonable.

  - *Brand*

145. PwC stated that Sky's brand reflected a range of facets of Sky's business, including: its quality of service, its reputation with its customers, and its reputation with its suppliers and workforce. PwC attempted to estimate the amount of brand value which

was additional to the value covered by other intangible assets. PwC considered two approaches:

(a) Relief from royalty approach: PwC estimated what a reasonable royalty would be for a third party to pay for use of Sky's brand using various benchmarks. The value was then estimated using a discounted cash flow (DCF) for projected royalty payments forecast into the future (growing at the rate of nominal gross domestic product and then 2.5 per cent from 2021).

(b) A cost-based approach based on marketing costs (both 'above the line' consumer marketing costs and other marketing costs).

146. The Sky/PwC model used the first approach in its base case. In both approaches, it did not propose to adjust the EBIT figure (ie it assumed that *(a)* the element of brand value over and above that included in other intangible assets was a costless asset; and *(b)* it was not necessary to increase profits used in the profitability calculation to reflect the increase in economic value represented by the inclusion of this additional intangible asset).

- *Third-party channel supply contracts*

147. These are third-party broadcasters' contracts with Sky to supply their channels to Sky for inclusion in its retail packages. Sky stated that 'Agreeing these contracts causes an asset to be generated—the contractual right to include third party channels in its pay TV packages in the future, ie over the duration of the third party channel contracts'.

148. The approach taken by Sky/PwC in its model to value this asset was a discounted future costs approach (as with the content rights).

149. In each year Sky/PwC made two adjustments to EBIT. The first adjustment removed third-party channel costs from operating costs, and the second included depreciation, which was calculated as the previous year's asset value depreciated by one year, assuming straight-line depreciation over the average outstanding asset life.

- *Skilled workforce*

150. PwC said that these costs would not be reflected in SACs and that Oxera's approach to valuing the subscriber base explicitly did not include costs incurred by Sky in training and recruiting its workforce. PwC believed that the value of the skilled workforce was not captured on Sky's balance sheet but, given its significance, it should be included as part of Sky's intangible assets in order to assess correctly the economic value of Sky's total assets. Sky said that the asset value consisted of the expertise of Sky's workforce resulting from its past investment in formal training, hiring skilled workers and training on the job.

151. The approach used by PwC was a benchmarking approach based on the value of the skilled workforce in purchase price allocations (PPAs),[68] which typically corresponds to approximately 25 to 50 per cent of total staff costs (including training costs, recruitment costs and on the job training costs). As a sense check, PwC looked at the valuations of skilled workforce carried out for a sample of recent PPAs in the media sector, and found the average value of a skilled workforce to be 25 per cent of the

[68] A PPA is used in the sale and purchase of businesses to identify and value the assets being acquired and to arrive at the residual amount which should be attributed to goodwill.

total annual salary costs. The base case in the Sky/PwC model used this proportion (25 per cent).

152. The Sky/PwC model did not make any adjustments to operating costs for the following reasons:

(a) it treated the skilled workforce as a non-depreciating asset as it was 'topped up' through a combination of formal and on the job training; and

(b) the approach did not involve capitalizing operating costs so it was not necessary to remove any costs from operating costs.

- *Relationship with third party engineers*

153. This represented the 'value to Sky of being able to use a network of non-Sky installation engineers to flex its supply chain capacity and so avoid idle time costs and associated operational costs'. Sky told us that it maintained and invested in relationships with engineers that were contracted externally by Sky to assist with new subscriber installations. In addition to the cost of maintaining the relationship with these 'external engineers', Sky also invested in training that was necessary for these engineers to undertake the required jobs.

154. PwC calculated the value of the relationship as the discounted future cost savings to Sky as a result of Sky's use of external engineers, where the cost savings arose as a direct result of the relationships Sky maintained with them.

155. PwC estimated these cost savings as the difference between: *(a)* the cost to Sky of maintaining its current level of installation service through a combination of external and internal engineering staff; and *(b)* the cost to Sky of maintaining its current level of installation service using only in-house engineering staff.

156. PwC used contract lengths to determine the length of the relationship and therefore determine how many years of cost savings to include in estimating the value of the asset. The base case used in the Sky/PwC model assumed [✂] of outstanding contract length.

- *Assessment of other possible intangible assets*

- *Brand*

157. We disagreed with the inclusion of brand as an additional intangible asset for the purposes of our competition assessment. Sky spends money on marketing which provides it with substantial value but these are operating costs that are necessary for the ongoing running of the business and any future benefits arising from the various costs are incidental. Therefore, it was not clear to us that brand could be separately identified as an intangible asset. In addition, we were of the view that assets should be valued on a cost basis and the costs should also be used to adjust the EBIT in the model, ie a cost cannot both be expensed to reduce profits and capitalized to create an asset and hence reduce ROCE or TIRR. Furthermore, we noted that under the 'relief from royalty' approach (described in paragraph 145*(a)*) it would be necessary to increase profits/deemed cash flows to reflect the deemed creation of additional economic value represented by the intangible asset.

158. Generally, brand value tends to derive from the recruitment and training of a skilled workforce and the marketing and sales activities carried out. Together these create

customer recognition of the product/service. Given that we had already capitalized SACs and subscriber upgrade costs in the subscriber base, we did not believe it to be appropriate to capitalize any further assets in this respect. We discuss the asset category relating to the recruitment and training of a skilled workforce below.

- *Third-party channel supply contracts and relationship with third-party engineers*

159. We disagreed with the inclusion in the asset base of third-party channel supply contracts and the costs of relationships with third-party engineers. In our view, these are normal operating costs related to the running of the business. We did not believe that a contract to hire an engineer next year should be treated as an asset.

- *Skilled workforce*

160. We considered the possibility of including an intangible asset relating to the training and development of Sky's workforce. We noted this may be something that contributes to brand value.

161. We have in past cases recognized as intangible assets some staff costs that are incurred entirely for future rather than current benefit.[69] However, it appeared to us in this case that much of the expertise of Sky's staff was gained by 'learning by doing' and was necessary for the ongoing running of the business, rather than for a future investment. Training and similar activities serve to maintain rather than create that ability. Though costs result in a future benefit as well as a current one, it appeared to us that this creation of the future benefit was incidental in that the costs had to be incurred in order to provide the service currently and, for this reason, we treated these costs in our analysis as ongoing revenue costs, not as capital costs.

162. In addition, as with the brand asset described earlier, we judged that it was incorrect to include an asset that has a value greater than the cost incurred in creating it without also recognizing an increment to profit/cash flow in the return calculation.

163. For these reasons, we did not include in our base case Sky's skilled workforce as an intangible asset. However, we recognized that there may be a case for the capitalization of some of the costs that lead to the creation of a skilled workforce. Therefore, we considered the effect of including such an intangible asset in our sensitivity analysis.

- *Other possible intangible assets*

164. We considered whether there were other intangible assets which we should include in our calculations. However, we received no evidence from Sky or other parties to suggest that there were and we did not identify any either. We noted also Oxera's finding that an intangible asset omitted from its analysis would have to be substantial for the omission to eliminate the profitability gap it had found (see paragraph 141).

Other significant modelling assumptions

165. In this section, we discuss the treatment of other significant modelling assumptions: *(a)* the treatment of joint venture cash flows; (*b*) reinvestment of cash flows; (*c*) the components of Sky's capital employed; *(d)* tax; and *(e)* the cost of capital.

---

[69] For example, in the SME banking report, these costs included staff recruitment costs for permanent staff and both initial and subsequent formal training costs.

Treatment of joint ventures

- *Oxera's approach*

166. Oxera's model adjusted cash flows to exclude all Sky's joint venture (JV) activities and 'available for sale' investments. Oxera noted in its first report that 'only investments clearly identifiable as not related to pay-TV were excluded'[70] and noted that the largest investments were the £1,520 million investment in KirchPay TV (a German media group) and the £946 million investment in ITV (a UK FTA broadcaster).

167. Oxera performed a sensitivity check to understand the effect of including all of Sky's JVs and investments. Oxera found that the effect would be to reduce the TIRR by [✂] percentage points for the period 1995 to 2008. However, Oxera believed that the two large loss-making investments (ie KirchPay TV and ITV) accounted for most of the difference.

- *Sky's views*

168. Sky submitted that Oxera was wrong to take out its JV cash flows as 'virtually all' its JVs were pay-TV businesses. Sky believed that Oxera should assume that all its JVs were related to Sky's pay-TV activities unless it could be proved otherwise.

169. Sky believed that Oxera's assertion that its conclusions were robust regardless of the treatment of JVs was 'clearly unfounded' as including all Sky's JVs and investments would decrease the TIRR for 1995 to 2008 from [✂] to [✂] per cent (on the basis of Oxera's estimates) and, if Professor Grout's proposed adjustments on modifying the TIRR were also accepted, the resultant profitability gap would be negligible.

170. Sky stated that the most significant JV in which it had been involved was British Interactive Broadcasting (BiB). Sky said that BiB was related to Sky's core business and excluding the cash flows relating to BiB could make a significant difference to the cash flows used in the analysis. Until 2001, BiB was owned 32.5 per cent by Sky, at which point it became wholly owned, and therefore consolidated within Sky's accounts and included in Sky's cash flows. Sky told us that its buyout of its BiB JV partners cost Sky over £500 million, in addition to the funding which it had already put in.

171. Sky told us that the fundamental flaw in Oxera's approach to BiB was that it had failed to recognize the cost of acquiring the JV partners' shares, while including the goodwill arising on the acquisition as an intangible asset on its balance sheet. Sky told us that the provisional goodwill included in Sky's accounts for 2001 associated with the acquisition of BiB was £564.9 million. A fair value adjustment of £22.9 million was made to this value in the 2002 accounts, reducing the goodwill associated with the acquisition of BiB to £542.0 million.

172. Oxera explained that, were these cash flows to be included, only 32.5 per cent of BiB's negative cash flows in 1999 and 2000 (which were £113 million and £274 million respectively) would be included (ie £37 million and £89 million in these

[70] http://stakeholders.ofcom.org.uk/binaries/consultations/third_paytv/annexes/annex9.pdf, paragraph 4.2.1.

years).[71] Overall, Oxera did not believe that its treatment of BiB would alter the TIRR significantly over the period 1995 to 2008.

173. The Sky/PwC model excluded shareholdings, such as Sky's stake in ITV, and other 'available for sale' investments from the analysis as they are unrelated to Sky's operating activities. However, this model included Sky's JVs, with the exception of its stake in KirchPayTV.

- *Assessment of treatment of joint ventures*

174. We recognized that, in principle, if an investment by Sky related to its UK pay-TV business (which is the business in which we were interested), the treatment of that investment's cash flows in our modelling should follow the accounting treatment, ie subsidiary cash flows should be fully consolidated and cash flows from JVs and associates should be included based on Sky's share of ownership. Our treatment of JVs and shareholdings was therefore the same as used in the Sky/PwC model.

175. We found that if there were some JVs which related to Sky's UK pay-TV business and these JVs were less profitable than the rest of Sky, an approach of excluding all JVs (as Oxera did) would overstate Sky's profitability. However, we noted that the exclusion of Sky's JVs had little effect on the profitability gap.

Reinvestment of positive cash flows

176. In any IRR calculation (or TIRR calculation),[72] the interim positive cash flows generated during the period are assumed to be either reinvested in the project or returned to the project owners. This can be done at either:

(a) the project rate of return (ie the cash is reinvested in the project); or

(b) the cost of capital (ie it is returned to the owners).

- *Oxera's approach*

177. Oxera's initial TIRR calculation assumed that positive cash flows were reinvested at the project rate of return. However, the analysis of Professor Grout submitted by Sky to Ofcom proposed a modification that positive cash flows should be reinvested at a value closer to the WACC.

178. Oxera performed a sensitivity analysis assuming that the cash flows were reinvested at [✂] per cent (ie about halfway between the cost of capital and the project rate of return). The result of this analysis was that the profitability gap reduced from nine percentage points to about [✂] percentage points and Oxera therefore concluded that, as the effect was minimal, its overall conclusions remained unchanged. The analysis of Professor Grout submitted by Sky to Ofcom assumed that the cash flows were reinvested at the cost of capital and calculated a profitability gap of over [✂] percentage points.

[71] Sky questioned the accuracy of these figures but was not able to provide alternative figures. We therefore used Oxera's estimates.
[72] This issue does not affect the ROCE calculations.

- *Sky's views*

179. The Sky/PwC model used a different approach from Oxera and assumed that cash flows were reinvested at the average WACC for each truncated period.

- *Assessment of reinvestment of positive cash flows*

180. In our view, Oxera's treatment of reinvesting interim positive cash flows at the project rate of return was reasonable. Sky's business was steadily growing and regularly involved large payments to suppliers. It therefore used the cash it generated for its operations. As Oxera found, the effect of reinvesting at the WACC was in any case small.

181. Nevertheless, in the base case we used the same approach as Sky/PwC of assuming that cash flows are reinvested at the average WACC so that our results were based on a conservative assessment of Sky's profitability (ie they would slightly understate Sky's profitability).

Capital employed

- *Oxera's approach*

182. We examined the following two aspects of Oxera's calculation of Sky's capital employed:

(a) Typically, capital employed is calculated as total assets less current liabilities. However, noting that the balance of Sky's current liabilities (at book value) was high, Oxera decided to treat these liabilities as a source of finance. Therefore, it did not include this high negative balance in the calculation of capital employed.[73] The effect of Oxera's assumption was to increase Sky's capital employed.

(b) For its base case, Oxera assumed that Sky's cash was efficiently held. Therefore, Oxera included Sky's full cash balances in its calculation of Sky's capital employed. (Oxera also considered a sensitivity in which Sky's capital employed was reduced to reflect the possibility that Sky's cash balances were inefficiently large.[74,75])

183. The effect of these two base case assumptions was to increase Sky's capital employed and hence decrease its ROCE or the TIRR, so reducing the profitability gap. Table 2 shows the effects of these assumptions.

[73] Oxera first report, paragraph 4.1.1.
[74] Under this sensitivity, Oxera assumed that Sky returned excess cash to shareholders, in order to improve the efficiency of its financing.
[75] Oxera first report, paragraph 4.1.1.

TABLE 2 **Additional profitability sensitivities (TIRR, year of investment)**

		per cent
	Replacement cost (base case)	*Replacement cost (conservative)*
Oxera TIRR base case		
1995–2008	[✂]	[✂]
2004–2008	[✂]	[✂]
Cash is excluded from capital employed		
1995–2008	[✂]	[✂]
2004–2008	[✂]	[✂]
Current liabilities are deducted from capital employed		
1995–2008	[✂]	[✂]
2004–2008	[✂]	[✂]

Source: Oxera first report, Tables 4.7 and 4.5.

- *Sky's views*

184. We asked Sky about its policies regarding its cash and current liabilities. Sky told us that:

(a) With regard to its current liabilities, Sky 'does not regard or rely upon timing differences between revenues and payments to suppliers as a meaningful source of finance for its business'. Sky said that Oxera's reports demonstrated a 'weak understanding of Sky's business'.

(b) With regard to its cash balances, Sky would not be permitted by its board or shareholders to hold inefficient cash balances. Sky noted that it focused on organic growth and bolt-on acquisitions and needed cash for these purposes, although it had also been increasing its dividend to return funds to shareholders. Sky drew our attention to its discussions with its analysts in which it explained that it held cash in order to give it operational flexibility. Sky also noted the linkage to its large current liabilities and explained that Sky's business involved making large payments to suppliers during the course of the year for which large cash balances were needed.

185. In its model, Sky/PwC excluded current liabilities from capital employed and included Sky's cash balances.

- *Assessment of capital employed*

186. The standard way of treating current liabilities in both a ROCE and TIRR calculation is to deduct them from the capital that is required for the operation of the business, ie:

capital employed = non-current assets + net working capital,

where net working capital = current assets less current liabilities.[76]

[76] In which current assets are adjusted for excess cash and short-term investments not required for the operation of the business; and current liabilities are adjusted for the current portion of long-term debt obligations.

- *Current liabilities*

187. Given Sky's submission to us that it did not regard or rely on timing differences between revenues and payments as a source of finance for its business, we did not treat Sky's current liabilities as a source of financing. This was in contrast with Oxera's approach.

188. We also noted that Sky did not consistently hold negative working capital balances which were large in relation to its overall balance sheet and, to the extent that Sky managed its working capital efficiently, it was right to reflect this in the overall returns available to long-term investors. In addition, there did not appear to us to be any reason to consider Sky's current liabilities (ie its creditors) as a source of financing since these creditors do not share in Sky's returns, ie they received no interest payment and no share in the profits of Sky.

189. In our view, for these reasons, Sky's capital employed should be calculated net of its current liabilities and we adopted this approach in our base case.

- *Cash balances*

190. We saw no evidence to suggest that the cash on Sky's balance sheet was held other than for the purpose of Sky's day-to-day business operations. Therefore, we included Sky's cash balances in its capital employed.

Tax

- *Oxera's approach*

191. Oxera used Sky's pre-tax cash flows as the basis of its analysis and compared the resulting measure of Sky's profitability with a pre-tax WACC. One reason given by Oxera for this approach was to 'allow profitability, and hence competitive constraints, to be assessed at the level of operating activities, rather than taking into account interactions with financing policies and the tax system'.[77]

192. Oxera stated:

> [Although] in general, estimates of economic profitability should not depend on whether the analysis is conducted on a pre- or post-tax basis … if [a company] is paying on average less than a statutory tax rate (eg due to tax losses) then a lower effective tax rate should be assumed implying a lower pre-tax cost of capital and a higher profitability gap. Sky was making accounting losses before flotation; it may also be reasonably expected that Sky was not paying the full statutory tax rate for a number of years after 1995 due to carried forward tax losses. Thus, for a number of years during the [T]IRR period, Sky's effective tax rate will have been lower than the statutory tax rate.[78]

193. Oxera noted that its 'approach may underestimate the "true" profitability gap'. Therefore, it conducted a sensitivity check where it compared the TIRR with the cost

[77] Oxera second report, paragraph 2.3.2.
[78] ibid.

of capital on a post-tax basis. This sensitivity analysis showed that the profitability gap would be between 0.5 and two percentage points higher on the latter basis.[79]

- *Sky's views*

194. Sky/PwC, in its model, adopted the same approach to tax as Oxera.

- *Assessment of tax*

195. Our base case adopted the same approach as Oxera's treatment of tax, which we considered to be reasonable. We also noted that this approach (a pre-tax basis) generated a lower profitability gap for Sky than would be the case with the alternative approach (a post-tax basis).

Cost of capital

- *Oxera's approach*

196. We set out our analysis of the cost of capital calculated by Oxera in Annex A.

- *Sky's views*

197. Sky said that the cost of capital figures produced by Oxera were, for the early years of Sky's existence (up to around 1999/2000), not fit for purpose. It said that the real pattern was of a declining WACC from a high level in the early 1990s.

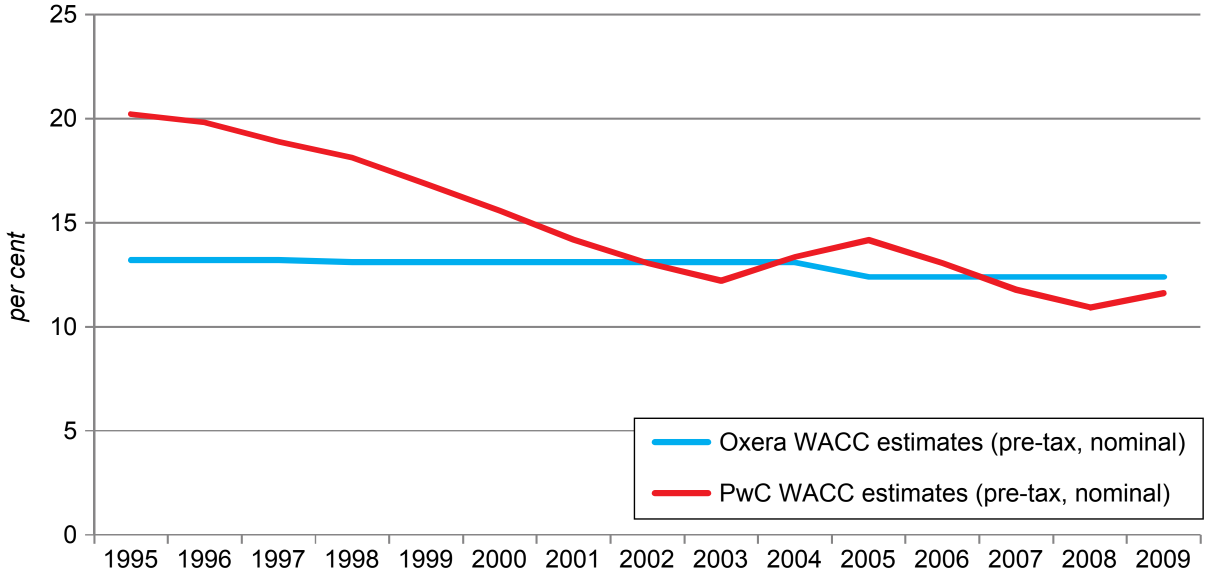
198. Sky and PwC made the further point that an ex-post analysis of Sky's profitability compared with a conventionally measured WACC would overstate Sky's profitability around the time of its 'risky' investments, and that even if the cost of capital was not adjusted to take into account ex-ante investment risk, such risk must be properly taken into account in an analysis of Sky's profitability.

199. PwC conducted an assessment of Sky's cost of capital which used the same frame-work and a similar methodology to Oxera. PwC generated a similar cost of capital as Oxera for the period since 2000, as shown in Figure 2, though there were greater differences in the period prior to 2000. Further consideration of the cost of capital calculated by PwC is set out in Annex A.

[79] ibid, paragraph 2.3.3.

FIGURE 2

Comparison of PwC and Oxera estimates of Sky's cost of capital



Source: PwC.

- *Assessment of cost of capital*

200. We reviewed Oxera's cost of capital calculations and Sky's comments on them and it appeared to us that Oxera's analysis was reasonable. We noted that PwC had re-estimated the cost of capital for Sky in its modelling of Sky's profitability, with some differences in the period before 2000. However, as we were principally concerned with the period since 2000, we did not think the differences between the two estimates were material to our analysis. We used PwC's estimate of the WACC in our base case, not because we believed it to be superior to Oxera's estimate, but because both estimates produced very similar results and, in those circumstances, we were content to use the approach and results favoured by the parties.

201. As regards the possibility of adjusting Sky's WACC to take account of ex-ante investment risk, we noted that PwC did not attempt to develop risk-adjusted estimates of Sky's WACC. We discuss Sky's investments in the 1990s and early 2000s and how these may affect our conclusions on profitability in paragraphs 240 to 243.

Profitability results including our base case and the effect of changing certain assumptions

202. We set out in this section:

(a) the key differences between Oxera's, PwC's and our base case assumptions for assessing Sky's profitability;

(b) the results of Oxera's, PwC's and our analysis of Sky's profitability; and

(c) how our base case results would differ had we treated certain aspects in different ways.

Key differences in base case assumptions

203. Based on our assessment in the preceding paragraphs, Table 3 sets out the key differences between Oxera's base case assumptions, Sky/PwC's base case assumptions and our base case assumptions.

TABLE 3 **Differences in base case assumptions**

	Oxera	*Sky/PwC*	*CC*
Tangible assets	Valued at replacement cost	Valued at replacement cost	Valued at replacement cost
Intangible assets:			
— Subscriber base	Valued using subscriber acquisition model	Valued using a more detailed subscriber model	As per Sky/PwC
— Contractual obligations	Valued at discounted future costs for next year only	Valued at all future costs discounted	Not included
— Past losses	Not included	Not included	Not included
— Brand	Not included	Valued on a reasonable royalty basis	Not included
— Relationship with third party engineers	Not included	Valued at discounted future costs	Not included
— Third party channel supply contracts	Not included	Valued at discounted future costs	Not included
— Skilled workforce	Not included	Valued based on PPAs	Not included
Reinvesting cash flows (TIRR analysis only)	Reinvested at an assumed rate of 15%	Reinvested at PwC's estimate of Sky's average WACC over each truncated period	Reinvested at PwC's estimate of Sky's average WACC over each truncated period
JVs and shareholdings	All excluded	JVs included (except KirchPay TV); shareholdings excluded	JVs included (except KirchPay TV); shareholdings excluded
Capital employed:			
— Current liabilities	Not deducted	Deducted	Deducted
— Cash balances	Included	Included	Included
Tax	Pre-tax cash flows	Pre-tax cash flows	Pre-tax cash flows
Cost of capital	See Annex A	See Annex A	As per Sky/PwC

Source: CC analysis.

204. Table 3 shows that the key differences between our base case and Oxera's base case were that we:

(a) used PwC's approach for the valuation of the subscriber base;

(b) excluded contractual obligations as an intangible asset;

(c) reinvested cash flows at the average WACC;

(d) included JVs (except KirchPay TV);

(e) defined capital employed as total assets less current liabilities; and

(f) used PwC's WACC estimate.

205. Table 3 shows that the key difference between our base case and Sky/PwC's base case was that we excluded a number of intangible assets, ie contractual obligations,

past losses, brand, relationship with third party engineers, third party channel supply contracts and a skilled workforce.

Results of Oxera's analysis

206. Table 4 presents the results of Oxera's TIRR calculations for the three time periods considered in Oxera's second report: 1995 to 2009, 1998 to 2009 and 2005 to 2009.[80] As we describe in paragraph 116, Oxera calculated the TIRR using two approaches to the valuation of the subscriber base: the year of investment, in which new subscribers are valued at the SAC in the year they were acquired; and annual revaluation, in which the subscriber base is revalued at the SAC in each year.

TABLE 4 **Oxera's estimates of the TIRR (pre-tax, nominal)**

			per cent
	1995–2009	*1998–2009*	*2005–2009*
TIRR (year of investment)	[✄]	[✄]	[✄]
TIRR (annual revaluation)	[✄]	[✄]	[✄]

Source: Oxera second report, Table 2.1.

207. Oxera also provided Ofcom with a rolling TIRR analysis (starting at different periods and ending in 2008) and with estimates of Sky's annual ROCE. These were provided as sensitivities to check the robustness of its overall conclusions.

208. On the basis of these results, Oxera compared the pre-tax TIRR derived from its calculations with a pre-tax WACC to estimate the 'profitability gap' (the difference between its TIRR and its cost of capital), as shown in Table 5.

TABLE 5 **Oxera's estimates of the profitability gap**

			per cent
	1995–2009	*1998–2009*	*2005–2009*
Base case: TIRR (pre-tax, nominal) less average WACC over relevant TIRR period	[✄]	[✄]	[✄]

Source: Oxera second report, Table 2.4.

Note: Range reflects the range in the WACC which is used as comparator to TIRR.

209. Oxera also looked at the effect of different valuation methodologies for Sky's asset base (market value, replacement cost[81] and book value). We set out a comparison of its different calculations of Sky's profitability in Table 6.

[80] In its first report to Ofcom, Oxera considered two time periods: 1995–2008 and 2004–2008. In its second report to Ofcom, it considered three periods: 1995–2009, 1998–2009 and 2005–2009). We only present the latter here.
[81] Oxera's replacement cost analysis considered the effect of including more costs in the SAC (its conservative case), and also of using either a year of investment or annual revaluation approach to calculating the subscriber base. This is described in paragraph 116.

TABLE 6 **Aggregate profitability estimates**

per cent

	Market value	*Replacement cost (base case)*		*Replacement cost (conservative case)*		*Book value*
		Year of investment	*Annual revaluation*	*Year of investment*	*Annual revaluation*	
TIRR (pre-tax, nominal)						
1995–2008	9	[✂]	[✂]	[✂]	[✂]	54
2004–2008	0	[✂]	[✂]	[✂]	[✂]	27
ROCE						
1995–2008	3	[✂]	[✂]	[✂]	[✂]	26
2004–2008	6	[✂]	[✂]	[✂]	[✂]	29

Source: Oxera first report, Table 4.5.

Note: Oxera noted that the ROCEs under the replacement cost approach do not include holding gains/losses in the numerator; if these were included the ROCEs would be higher.

- *Ofcom's conclusions on the basis of Oxera's analysis*

210. Based on Oxera's analysis of the different measures of aggregate profitability over different time periods as set out in Table 4, Ofcom concluded that Sky had earned a TIRR in the range of 21 to 28 per cent.[82] Ofcom also noted that Oxera's estimate of ROCE was consistent with this conclusion.

211. Ofcom found that, over the period 2005 to 2009, the profitability gap for Sky had been approximately nine percentage points, and that the difference had been persistent over time. Ofcom concluded that this profitability gap was significant.

Results of Sky's base case analysis

212. The Sky/PwC model of Sky's profitability showed five-year rolling TIRR figures (and profitability gaps), and also produced ROCE figures (and ROCE profitability gaps). The rolling five-year TIRRs and profitability gaps are shown in Table 7 and the ROCE results in Table 8.[83]

TABLE 7 **Sky's TIRR base case using the Sky/PwC model**

per cent

	2002–06	*2003–07*	*2004–08*	*2005–09*	*2006–10*	*2007–11*
Rolling 5-year TIRR	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
WACC	13.2	12.9	12.7	12.3	11.8	11.4
Profitability gap	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: Sky.

[82] Ofcom Pay TV Statement, paragraph 5.545. The range quoted by Ofcom appeared to look only at the year of investment approach and to have been rounded down; when considering all of the updated data in Table 3, the range was between [✂] and [✂] per cent.

[83] Sky referred us to a chart from Professor Grout's evidence to the CAT showing the movement in Sky's rolling TIRR based on Oxera's analysis. This chart used Oxera data to calculate TIRRs for Sky over rolling five-year periods, starting with the period 1990 to 1994, which was then compared with an average WACC (taken from Oxera's analysis). On the basis of this analysis, Sky submitted that *(a)* Oxera's proposition that the profitability gap had been stable over time was wrong; *(b)* its profitability gap might be declining; and *(c)* modifications to the profitability gap estimated by Oxera reduced it to around [✂] per cent. Professor Grout's evidence was effectively superseded by Sky/PwC's model so we have not discussed it in detail here.

TABLE 8 **Sky's ROCE base case using the Sky/PwC model**

per cent

	2002	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*
ROCE	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
WACC	13.1	12.2	13.4	14.2	13.1	11.8	10.9	11.6	11.5	11.0
Profitability gap	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: Sky.

Our base case analysis

213. We set out in Table 9 rolling five-year TIRRs for the last five years (ie for periods starting between 2002 and 2007, with each period being five years long). We set out the ROCEs for the last ten years in Table 10. Figure 3 shows the profitability gap on the basis of ROCE from 2002 to 2011.

TABLE 9 **Our base case of rolling TIRRs, 2002–06 to 2007–11**

per cent

	2002–06	*2003–07*	*2004–08*	*2005–09*	*2006–10*	*2007–11*
Rolling TIRR	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
WACC	13.2	12.9	12.7	12.3	11.8	11.4
Profitability gap	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis using the Sky/PwC model.

TABLE 10 **Our base case of ROCE, 2002 to 2011**

per cent

	2002	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*
ROCE	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
WACC	13.1	12.2	13.4	14.2	13.1	11.8	10.9	11.6	11.5	11.0
Profitability gap	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC analysis using the Sky/PwC model.

FIGURE 3

Sky's ROCE-based profitability gap, 2002 to 2011

[✂]

Source: CC analysis using Sky/PwC model.

214. Our base case generated a profitability gap for Sky which was higher than that found by both Oxera and Sky. We found a profitability gap of [✂] per cent for the period 2007 to 2011 using a TIRR methodology.

Sensitivity analysis

215. We considered the effect of changing certain assumptions on intangible assets in line with points raised by Sky and its advisers. We considered first the effect of including only certain of these additional intangible assets, noting that the effect of including each additional asset was not cumulative and the largest assets did not necessarily

have the largest impact on the TIRR as it was the movement in the value of each asset which impacted the TIRR:

(a) *The treatment of contractual obligations (both sports and movies)*. As described in paragraph 129, in our view, Sky's contractual obligations did not qualify as intangible assets and we excluded them from the base case. The effect of including these costs in the asset base would be to reduce the profitability gap (on a TIRR basis) by [✄] percentage points (2007 to 2011) to [✄] per cent.[84]

(b) *The treatment of skilled workforce.* The costs of creating a skilled workforce also did not qualify as an intangible asset for the purposes of our assessment. Nevertheless we considered the effect of including only this asset. The effect would be to reduce the profitability gap (on a TIRR basis) by [✄] percentage points to a gap of [✄] per cent in the period 2007 to 2011.

216. We considered next the cumulative effect of these two changes. We found that including contractual obligations and skilled workforce as intangible assets would have reduced the profitability gap by [✄] percentage points to a gap of [✄] per cent in the period 2007 to 2011.

217. For the reasons set out above, we did not consider that any of the other intangible assets should be included even as a sensitivity. (The cumulative effect of including all the intangible assets proposed by Sky was as set out in Sky/PwC's base case.)

218. Overall, it appeared to us that, even allowing for the two sensitivities we considered (see paragraph 216), the size of Sky's profitability gap was substantial. In fact, even under Sky's base case, ie including all the additional assets proposed by Sky (most of which we believed were not appropriate for a profitability analysis), which produced a capital employed figure which was larger than Sky's market capitalization, the size of the profitability gap was still large and the conclusions which we drew from our profitability analysis still held.

Interpretation of our analysis

219. We now discuss the interpretation of the profitability analysis, specifically:

(a) reasons for the profitability gap (paragraphs 220 to 259);

(b) the future profitability of Sky (paragraphs 260 to 267); and

(c) persistence of the profitability gap (paragraphs 268 to 271).

Reasons for the profitability gap

Oxera's assessment

220. Oxera considered[85] the extent to which Sky's performance reflected its successful risk-taking by considering both the scalability of Sky's investments and the demand risk faced by Sky.

---

[84] PwC criticized Oxera's use of a discount rate of 15 per cent, and also the use of one year's value to estimate the value of Sky's contractual obligations. As we excluded this potential asset from our base case, we did not estimate the effect of these assumptions.

[85] Oxera second report, paragraph 5.2.

221. The principal evidence Oxera considered on scalability was:

(a) Sky's asset intensity:[86] Oxera concluded that, in comparison with several market indices, Sky had a low asset intensity and hence the payback period on its investments was likely to be relatively short;

(b) equity analyst reports:[87] several reports claimed that the payback on the cost of acquiring subscribers was relatively short (between 18 and 25 months) and hence Sky's IRR was high;

(c) the observation that Sky did not enter into long contractual obligations (eg for movies, most contractual payments are calculated in practice on a fee per subscriber basis); and

(d) the fact that Sky described its investments in HD and Sky+ in its financial results as proportional to demand, stating that 'the majority of costs are geared to demand: Sky+HD customer acquisition costs have been incurred in proportion to take-up and will be recovered on average within 18 months'.[88]

222. Oxera said that the higher the demand uncertainty facing a company, the more likely it was that normal ex-ante expected returns could correspond to high ex-post returns. Therefore, evidence of high demand uncertainty would be consistent with high returns generated by successful risk-taking.

223. For this reason, Oxera considered Sky's investment in HD as one example of demand uncertainty provided by Sky. However, Oxera noted that, in this case, the levels of investment in the project were scalable and could be adjusted to changes in demand.

224. Oxera did not look more than ten years into the past as it believed that the payback period on Sky's investments tended to be short (less than five years), and so Sky's older investment decisions would not have been driven by expectations of returns more than ten years in the future.

225. Oxera noted that 'the costs to Sky of acquiring additional subscribers are significantly lower than the value of additional cash flows generated by these subscribers over their lifetime'. Oxera used a simplified incremental lifetime per subscriber cash-flow model to show that the payback for a new customer was less than one year, using 1994, 1995 and 1996 as the starting point.

226. Oxera looked at the volatility of growth in Sky's subscribers compared with other industries and found that it was low. Oxera also looked at the volatility of Sky's revenues compared with other industries and found that it was 'not … exceptionally high'. Oxera then considered the evolution of Sky's subscriber base, which it found to be relatively stable.

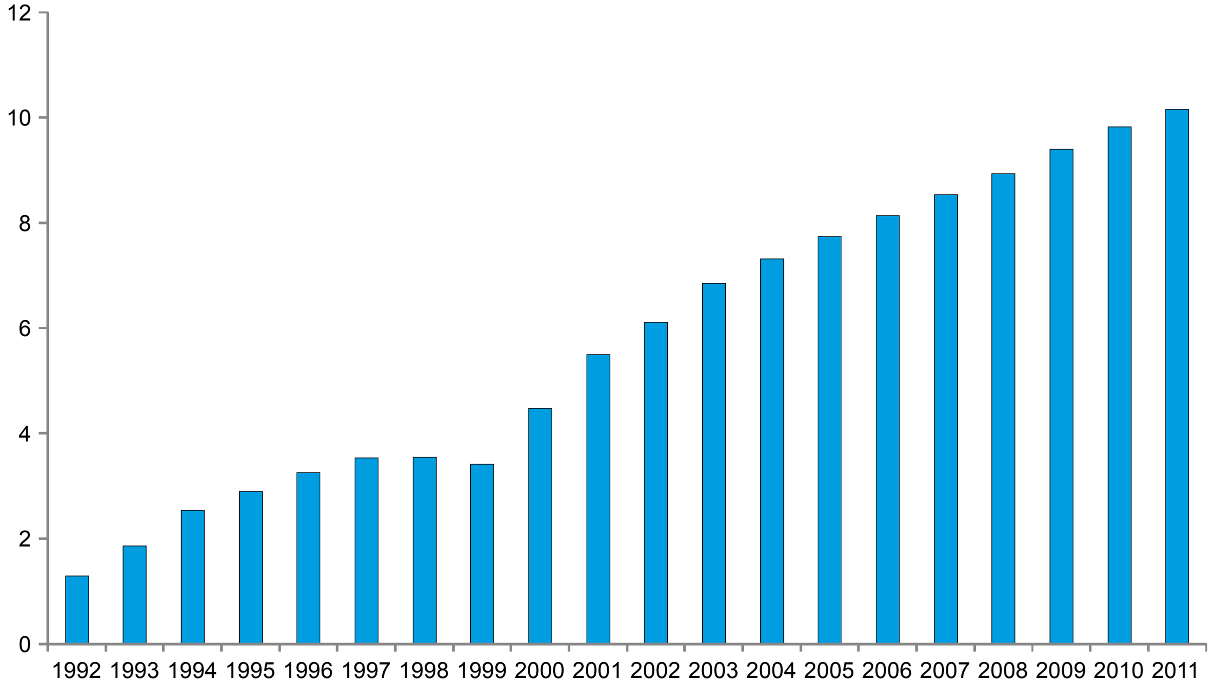
227. Finally, Oxera reviewed some equity analyst reports on Sky and noted that many analysts perceived Sky to have a stable subscriber base, although it was less stable in the business's early years (more than ten years ago).[89]

[86] Defined as total assets divided by total operating costs.
[87] Oxera second report, p38.
[88] ibid, p40, quoting British Sky Broadcasting Group plc 'Results for the 12 months ended 30 June 2009', p8.
[89] ibid, p42.

228. Figure 4 shows Sky's subscriber base from 1992 to 2011 (years ending June). By the end of 2010, Sky had more than 10 million subscribers.

FIGURE 4

Sky subscriber base



*Source: Sky/*PwC model.

229. Sky's subscriber base grew to over 10 million from less than 1.3 million in 1992. This growth was steady until 1997, at which point it levelled off, before a rapid increase in 2000 (possibly due to the launch of digital in 1998/99), which has continued each year to the time of our report.

230. On the basis of Oxera's analysis, Ofcom stated that Sky's profitability gap was likely to continue into the future if the market was left unchanged.[90] Ofcom also said that Sky's profitability gap was likely to exceed the necessary reward for significant risk taking.

Sky's views

231. Sky commented[91] on the difference between a company earning excess profits, ie in excess of its cost of capital, and excessive profits, ie with implications on the competitive state of the market. Sky believed that Ofcom had conflated these two ideas.

232. Sky submitted that 'it would be somewhat remarkable if Sky had not been found to have earned a return in excess of its cost of capital in the past' for two reasons:

(a) 'in the real world successful firms should be expected to be found to earn returns above their cost of capital'; and

[90] Pay TV Statement, Annex 3, paragraph 8.6.
[91] For example, Sky's response to Ofcom's third pay TV consultation, paragraph 4.28ff.

(b) there may be other reasons for high profitability such as superior performance and/or innovation.

233. Sky described its history of undertaking large and risky investments and it reiterated that, for this reason, ‘it should be entirely unsurprising that it is observed to have earned a return above its cost of capital in the past’.

234. Sky set out two possible reasons why it might have achieved returns over its cost of capital (ie excess profits), as follows:

(a) because its performance had been flattered by the commercial difficulties of its rivals, specifically the cable operators, and/or their failure to seize opportunities which were open to them as well as to Sky, for example in introducing satellite, PVRs and HD; and

(b) due to the innovation and success of Sky (Sky said that it ‘has a strong and consistent track record of being an innovator, and in particular a first mover, identifying opportunities, undertaking large-scale, risky investments to take advantage of such opportunities and executing well’).[92]

235. In his witness statement to the CAT, Sky’s Chief Operating Office (Mr Mike Darcey) summarized the main investments undertaken by Sky, which he believed demonstrated the risk that Sky had faced in creating its business, and hence the reason for its high profitability. Mr Darcey stated that these investments were large, risky and generally not scalable (ie the costs involved commitment to a policy which had a substantial total investment cost associated with it). These investments were:

(a) The development of a DTH satellite-based retail pay-TV business, and a pay-TV channel broadcasting business in the 1990s.

(b) The launch of digital in 1998. Initially, there was a slow take-up of digital boxes, priced at £199, so, in 1999, Sky took the decision to subsidize the boxes fully, offering them free to customers. The costs were not scalable as it would be difficult to offer these boxes to new but not old customers (at that time around 3.4 million customers). The total amount spent was £[✂] million, compared with a profit before tax in 1997/98 of £287 million. The decision led to a cancellation of dividends, and Sky’s credit rating was downgraded to junk by S&P and Moodys.

(c) In 2001, Sky introduced its Sky+ PVR box, initially with a £10 per month fee (which was removed for premium subscribers in 2003 and for non-premium subscribers in 2007). The reviews were positive but the take-up was slow so, in 2004, Sky decided to use this box to attract new customers. To avoid the costs of its 1999 investment in digital boxes, Sky delivered Sky+ boxes gradually to its existing customer base. [✂] In its response to our August 2011 provisional findings, Sky said that it launched its Sky+ PVR at a point in time when the potential value to consumers of this technology was little understood.

(d) In 2004, Sky determined that it would need to offer telephony and broadband to grow its subscriber base and, as Sky had no experience in this area, in 2005 it acquired Easynet (a telephony and broadband business) for £210 million. In total, Sky had invested £[✂] million in its provision of broadband and telephony services since 2005 (including the cost of Easynet, subsequent capital expenditure, and accumulated operating losses). In response to our August 2011 provisional

[92] Sky response to third consultation document, 4.60.

findings, Sky said that its delivery of these services had only recently become profitable such that, when considered together with the scale of investment required and Sky's limited initial experience in the provision of these services, the notion of a short payback period or that entry into providing these services was low risk was nonsensical.

(e) In 2006, Sky launched HD, which required investment in boxes but also investment in various areas of broadcasting cost (eg in Sky's facilities and in support to third parties seeking to develop HD services). Customers were initially charged £149, which was reduced to £49 in 2009 and to zero in 2010 if they took HD channels and paid £10 a month. Customers who did not want to subscribe to HD services could get a box for £49 in 2010 and activate it at a later stage for £10 a month. Sky had spent £[✂] million on the broadcasting activities associated with launching HD and £[✂] million on HD boxes, though it forecast further costs of £[✂] million [✂]. In response to our August 2011 provisional findings, Sky said that there was considerable scepticism about the value to consumers of HDTV services when Sky launched its HD service due to the high standard of SD digital picture quality in the UK.

236. Sky said that it rejected Ofcom's 'narrow view that Sky's success [was] essentially founded on taking big risks associated with developing pay TV services in the UK in the 1990s, and Sky should now be expected to earn little more than its cost of capital'.

237. Sky (and PwC) criticized the payback periods estimated by Oxera: Sky stated that it believed that the payback periods estimated by Oxera were nonsensical and that Oxera's model was riddled with errors.

238. PwC made the related points that:

(a) Sky had made a number of very large investments (PwC set out the cost of each of Sky's significant investment phases listed in paragraph 235); and

(b) these investment phases had occurred frequently (PwC demonstrated that Sky's large investment phases occurred every four years on average).

239. Sky stated that all available evidence pointed to the fact that, by the time it was required to make substantial investments in digital satellite broadcasting, Sky had not yet made a return on its investments in the 1990s in analogue satellite broadcasting or the provision of pay-TV services.

Assessment of reasons for the profitability gap

240. We noted that many of the large investment decisions which Sky highlighted had a large impact on the cash flows in individual years, though, for our purposes, an analysis which considered longer periods of time gave a better view of Sky's profitability.

241. Having made extensive enquiries and reviewed the evidence we received, it appeared to us that Sky's investments could be simplified into three separate stages, as follows:

(a) In the early 1990s, Sky made large (relative to its size at the time) and risky investments. It was reasonable that Sky should have been rewarded for these large investments which it successfully executed, but, in our view, the evidence we saw did not indicate that returns in the last ten years were still paying back these investments.

(b) Sky's investments in the latter half of the 1990s and into the 2000s, including the substantial costs of moving to digital services. In our view, the evidence did not indicate that the substantial returns in the last ten years were still paying back these investments.

(c) In the more recent past (ie in the last ten years), the large investments which might have caused Sky to incur some risk were the introduction of PVRs (starting in 2001), HD (starting in 2006) and Easynet (starting in 2005) with the associated local loop unbundling and start-up losses. However, it was not clear to us that these more recent investments had been particularly large in the context of Sky's significant cash flows and profits (over £1 billion of operating profit in the year ended June 2010) or anywhere near as risky as Sky's earlier investments in the 1990s. Indeed, we noted that the way in which PVRs and HD were rolled out was designed to mitigate risk. We discuss these investments further in the following sections.

242. We noted that, on the basis of the most recent analyst reports, Sky's profits were expected to at least be maintained at their current level in the future without any significant further investments.

243. We reviewed Sky's internal documents, which indicated that Sky's more recent investments were scalable and that they involved limited risk to Sky. We set out in the following sections some of the most relevant evidence we received.[93]

- *Sky+*

244. It was clear from Sky's internal documents that Sky incurred significant costs implementing the Sky+ project. One strategy paper, considering the various possible outcomes of the project, stated that [✂].

245. Sky conducted substantial analysis both before and during the roll-out of Sky+ to consider the effect of take-up being too fast. Due to the costs of each new subscriber, a fast take-up would have increased SAC and depressed profits in the short term, which would have created a problem for Sky's results, particularly if it was also heavily marketed or priced too low. However, these short-term costs were offset by the fact that Sky+ was seen to reduce churn and, therefore, it was good as both an offensive and defensive competitive measure.

246. Sky's internal documents indicated that Sky was able to control the uptake of Sky+ by: *(a)* its pricing of the box (ie by releasing it with a staggered reduction in price over time or by offering it free just to new customers or by offering it free to all customers); *(b)* its level of marketing; and *(c)* the subscription fees charged for its use. [✂]

247. Based on the evidence above, it appeared to us that, although Sky clearly incurred significant costs in launching Sky+, these costs were largely within Sky's control and, therefore, there was little unmitigated risk.

[93] In many cases the views were repeated in several documents.

- *Easynet/broadband*

248. Sky's roll-out of broadband involved the initial acquisition of Easynet,[94] as well as the costs of unbundling exchanges, upgrading its network and start-up losses, which together cost Sky more than the initial cost of Easynet.

249. Given the strategic significance of this acquisition for Sky, a substantial amount of internal and external analysis was carried out in relation to it. The banks advising Sky on the acquisition (Lazard and Morgan Stanley) [✂]. However, from all the documents we reviewed, we did not see any evidence that the acquisition was considered by Sky at the time as risky.

250. Sky provided us with many internal documents which considered the roll-out of exchange unbundling. From this evidence, it appeared that this project was clearly managed to reduce risk. We noted:

(a) [✂], ie Sky chose not to take the risk as [✂];

(b) [✂];

(c) [✂], indicating that the investments were scalable and could be managed so that costs only increased in line with take-up; and

(d) [✂].[95]

251. Based on this evidence, it appeared to us that Sky's investments in broadband were structured to minimize risk and designed to achieve a short payback period.

- *HD*

252. In relation to HD, [✂].

253. [✂]

254. [✂]

255. Based on this evidence, it appeared to us that Sky's investments in HD were not perceived by Sky's board to be high risk, and these investments were expected to achieve a payback in a relatively short period.

- *Assessment of Sky's recent investments*

256. We recognized that many of Sky's investments involved substantial sums of money and some risk. However, we considered these investments in the context of Sky as a large company.

257. Overall, the evidence we saw with regard to Sky's recent investments suggested that *(a)* Sky believed itself capable of managing the associated risks, *(b)* the costs were largely scalable and largely within Sky's control, and *(c)* the payback periods were relatively short with positive returns expected in most cases from the outset. In relation to Sky's investment in HDTV and Sky+, internal documents indicated pay-

---

[94] In September 2010, Sky sold Easynet but kept the UK network assets that it had acquired.
[95] [✂]

back periods in the range [✂]. We did not see any evidence to suggest that Sky was taking a material risk at the time.

258. In our view, Sky's recent investments were different from some of Sky's former investments. For example, in the roll-out of digital, once the project had started it would have been very difficult to stop and so the risk of the investment was hard to mitigate. In our view, Sky's recent investments were not like this. Therefore, it appeared to us that Sky did not risk substantial capital over the last ten years which could be said to justify the level of return that Sky was achieving.

259. We considered Sky's argument that some of its most successful investments were low-cost investments and some were relatively risk-free, and that these had contributed directly to Sky's profitability even though its competitors could have undertaken the same investments. However, we would generally expect any such competitive advantage to be competed away except where it would be impossible for competitors to do so because of barriers to entry or Sky's market power. We would not expect high profitability to persist over the long term or for one company to outperform consistently over a long period if it was operating in a competitive environment (see paragraph 1).

Sky's future profitability

260. In order to assess Sky's future profitability, we reviewed Sky's public statements and forecasts and several analyst reports. We found that, generally, both Sky's profits and its cash flows were expected[96] to increase.

261. Sky said that it was confident (as far as it was able, given the pace of change) that its current STB would not need an upgrade soon. Sky submitted evidence that, 'with current set top boxes including 1 Terabyte hard drives, and able to deliver HD, VOD and even 3D, [it] is more confident than it has been for many years that it is well placed to deliver the services required in the foreseeable future using its existing technology'.

262. In an article on 17 November 2010, Reuters reported:

> BSkyB chief executive Jeremy Darroch told the conference that profit margins were likely to increase now. This month, the company reached its long-held target of 10 million subscribers, or 36 percent of British and Irish households.
>
> 'We should see good growth in margins from here,' he said. 'Widening margins will be an important part of the next two to three years.'
>
> He added that revenue growth would sometimes come from increasing subscriber numbers and sometimes by selling more services to additional subscribers ….

263. We noted that Sky's recent results announcements showed strong growth in revenues but even greater growth in profit. In the nine months to 31 March 2012, Sky's revenues grew 5 per cent, but its adjusted earnings before interest, tax, depreciation and amortization (EBITDA) grew 13 per cent and its adjusted operating profit grew 15 per cent. These results reflected Sky's growing customer base (now at over

[96] By Sky and by equity analysts.

10.5 million), its increasing numbers of products sold to each customer and its increasing revenues per customer. In addition, churn decreased over the period.

264. [✄]

265. We reviewed numerous analyst reports to ascertain their views on Sky's future profitability. We found that they all forecast in the same direction, ie that Sky's revenues were expected to grow with little need for further investment, that margins would increase and that it would generate substantial free cash flows. Below is a selection of some recent views (which appeared to us to be typical):

(a) 'We expect profit growth to outpace revenue growth going forwards.'[97]

(b) Bank of America Merrill Lynch forecasts growth in Sky's ROCE from 21 per cent in 2010 to 31 per cent in 2014.[98]

(c) JP Morgan Cazenove noted that Sky's 'top-line is growing faster than peers, margins are increasing … further cash returns potential'.[99]

266. Given statements from Sky, [✄] and the forecasts of equity analysts, it appeared to us that Sky's profitability was likely to increase in the future.

267. Furthermore, it appeared to us that if Sky's large and stable customer base meant that Sky faced lower demand risk and therefore a lower cost of capital, then even at the same level of profitability, Sky's profitability gap would increase. In addition, as Sky's future profitability was expected to come more from increasing ARPU rather than from increasing the number of subscribers, the return on capital might reasonably be expected to increase as its profit margin would be growing more quickly than its overall asset base.

Persistence of the profitability gap

268. The intention of our profitability analysis was to assess both the historical profitability of Sky and also its likely future profitability. By necessity, the financial data which formed the basis of our analysis was historical but recent data was likely to be a better indicator of the future than data from many years in the past. Typically, the CC has considered a historical time period of around five years.

269. However, the variability in Sky's profitability demonstrates why we needed to consider the profitability of Sky over a reasonably long time period, ie so that low returns in one year and high returns in another year could be considered together, giving an overall view of Sky's profits and profitability.[100]

270. We recognized that it was possible for a successful, well-run company to earn excess profits within a competitive market, particularly where significant investment risks had been taken. However, we would not generally expect such profits to persist for a significant period of time (see paragraph 1). In a competitive market, any persistent excess profits would be expected to be eroded by new entrants.

271. From our analysis set out in Tables 9 and 10, we found that Sky achieved persistent profits in excess of its cost of capital:

---

[97] Goldman Sachs, 2 December 2011.
[98] Bank of America Merrill Lynch, 16 December 2011.
[99] JP Morgan Cazenove, 25 November 2011.
[100] See *CC3*, paragraphs 3.81 to 3.83.

(a) The most recent five-year period (2007 to 2011) was of most relevance to our consideration of Sky's profitability. We noted that Sky told us that this was a period in which it grew its business significantly in terms of revenues and subscriber numbers[101] but we found that the excess profits earned by Sky in this period were not explained by Sky making large, risky investments (see paragraphs 240 to 243).

(b) Sky also made excess profits on a rolling TIRR basis in all five-year periods since 2002–2006 and on a ROCE basis for the ten years since 2002. We noted that analysis of the profitability gap using annual ROCE showed some movement in Sky's profitability gap over the last ten years; however, this had also been persistently high at around [✂] to [✂] per cent since 2005.

(c) There had not been a trend of consistently rising profitability through Sky's history but variation. We noted that there was substantial volatility in the 1990s due to Sky's low (and at times negative) net assets. However, any comparison of returns and assets (eg ROCE or TIRR) when the net assets were very low or negative was less meaningful, so we were limited in what we could say about these periods. After that time, though, Sky's profitability increased, whether assessed on a TIRR or a ROCE basis. This reflected the pattern of Sky's investment which we considered earlier (paragraphs 240 to 243). In the last ten years, Sky made lower-risk, more scalable investments with short payback periods, and this was reflected in Sky's growing profitability.

From the evidence we saw, it appeared to us that Sky's overall profitability was not likely to decrease in the future. On the basis of this evidence, it appeared that our assessment of Sky's profitability in the period 2007 to 2011 was likely to be a good indicator of its profitability and was not likely to overstate its future profitability.

Disaggregated profitability analysis

272. In addition to our analysis of Sky's aggregate profitability, we also assessed Sky's disaggregated profitability. We did so in order to understand the sources of Sky's aggregate profitability and to inform our overall assessment. Our disaggregated profitability analysis included an analysis of the profitability of Sky's movies business. Our analysis is set out in the following sections:

(a) Ofcom's disaggregated profitability findings (paragraphs 273 to 305), including Ofcom's pricing models (paragraphs 302 to 305);

(b) Sky's views (paragraphs 306 to 311); and

(c) our assessment of Sky's disaggregated profitability, including:

(i) our analysis of the disaggregated costs of Sky's movies business (paragraphs 312 to 322); and

(ii) other evidence on the profitability of Sky's movies business (paragraphs 323 to 328).

---

[101] Sky told us that this was achieved via a significant transformation of Sky's business, including *(a)* the adoption of a new retailing strategy (aimed at competing more effectively with multichannel FTA TV); *(b)* diversification of its product offering (principally as a result of moving into providing telephony and broadband services); *(c)* driving take-up of Sky+; and *(d)* the launch and driving of HDTV services, which have been highly successful.

Ofcom's and Oxera's disaggregated profitability analysis

273. Ofcom performed some initial analysis on Sky's disaggregated profitability, which it reported in its Second Pay TV Consultation, and it then commissioned Oxera to perform further analysis. Oxera presented its analysis in its first report. We set out in this section a summary of this work, including the pricing models Ofcom produced as part of its analysis. We also summarize Sky's views on these analyses.

Ofcom's analysis

274. In its Second Pay TV Consultation,[102] Ofcom made its first attempt to disaggregate the profitability of Sky's wholesale business from Sky's overall profitability. Ofcom considered a notional business unit which it called PremiumChannelCo, which included all Sky's premium channels (including all the sport and movie channels which Sky supplies on a wholesale basis).

275. Ofcom then estimated the revenues and costs associated with PremiumChannelCo, on the assumption that PremiumChannelCo purchased premium content, packaged it into channels and supplied those channels to Virgin Media (and other cable operators), Sky's retail business and Sky's commercial business.[103] Ofcom assumed that revenues were set using the same rate card.

276. Based on its analysis of costs and revenues in 2008, Ofcom found that PremiumChannelCo could be expected to earn gross margins of around [✂] per cent on premium sports channels and around [✂] per cent on premium movies channels. Ofcom found that, overall, PremiumChannelCo could be expected to achieve an operating margin of around [✂] per cent.[104]

Oxera's analysis

277. Oxera considered three types of disaggregated profitability analysis:

(a) wholesale/retail;

(b) premium/basic; and

(c) sports/movies.

278. Oxera summarized its conclusions as follows:[105]

> Returns for wholesale activities appear higher than for retail activities. In this analysis, a significant share of wholesale revenues (comprising the internal charge from wholesale to retail) was calculated using third-party wholesale prices. These results seem to hold under a number of cost allocation approaches and sensitivity checks.
>
> The assessment of returns for basic and premium channels suggests that, at the wholesale level, returns for basic channels appear lower than for premium channels. Although this relative relationship seems to be consistent for different approaches to cost and revenue allocation,

---

[102] Ofcom second pay TV consultation, Annex 9, paragraph 2.1.
[103] ibid, paragraph 2.4.
[104] ibid, paragraph 2.5.
[105] Oxera first report, Annex 9 of Ofcom third pay TV consultation, section 5.

> the results should be interpreted as indicative given the adopted allocation approaches. At the retail level, the analysis seems to provide inconclusive results since, depending on the approach to cost allocation, basic channels appear either more or less profitable than premium channels.
>
> There are several plausible approaches to the allocation of cost and revenues between sports and movies channel. The results of the analysis at this level of disaggregation are not sufficiently robust to conclude on the profitability of movies and sports channels, although the analysis seems to provide some weak evidence that movies channels may have higher margins than sports channels (given the adopted approaches to cost and revenue allocation).

279. Oxera included the caution that:

> Unlike analysis at the aggregate level, which uses directly observed data, disaggregate profitability analysis relies on assumptions about the allocation of costs, revenues and assets, and hence is inherently more uncertain. The results presented in this section should therefore be interpreted in the context of the underlying costs and revenue allocation approaches.

280. We present each of Oxera's analyses in turn.

Wholesale/retail

281. Oxera used Ofcom's description of the value chain to define Sky's wholesale and retail activities.[106] Oxera then allocated costs between retail[107] and wholesale[108] activities in order to assess relative returns between these activities. The analysis was based on Sky's statutory accounts, management accounts and specific data on subscriber numbers and prices. Oxera estimated Sky's internal revenue between its wholesale and retail activities on the basis of Sky's wholesale prices. Oxera cross-checked its results with those from the cost allocation analysis carried out by Analysys Mason on behalf of Ofcom.

282. Table 11 presents Oxera's results.

[106] Oxera first report, section 5.2.
[107] Retail activities included the provision of pay-TV services to commercial and residential subscribers, which included the purchasing of channels from Sky on a wholesale basis and from third parties, packaging channels into bundles, and the subsequent sale of bundles to customers. The provision of platform services and transmission-related functions was also included within the scope of retail activities.
[108] Wholesale activities included the acquisition of content from content providers, the packaging of the acquired content into channels, and the subsequent distribution of channels to retailers, including both Sky and third parties.

TABLE 11 **Results of the disaggregated profitability analysis, 2004 to 2008**

per cent

	TIRR	*ROCE (average)*	*ROS (average)*
Profitability based on high-level cost allocation			
Retail	[✂]	[✂]	[✂]
Wholesale	[✂]	[✂]	[✂]
Profitability based on Analysys Mason cost allocation			
Retail	[✂]	[✂]	[✂]
Wholesale	[✂]	[✂]	[✂]

Source: Oxera first report, Table 5.1.

Note: TIRR measured on the basis of both replacement costs (annual revaluation) and replacement costs (year of investment); the former is shown in brackets. ROCE estimated on the basis of replacement costs – year of investment.

283. Oxera concluded that[109] 'the returns for Sky's wholesale activities appear higher than the returns for Sky's retail activities. These results seemed to hold under a number of cost allocation approaches and sensitivity checks'.

Basic/premium

284. Oxera also estimated the margins and ROS for Sky's premium and basic channels. Oxera used two approaches for the allocation of costs:

(a) Sky subscribers who bought basic and premium packages were treated as premium customers, and those who bought basic packages only were treated as basic customers (under this approach all Sky's customers were only counted once); and

(b) all Sky subscribers were treated as basic customers, and those who bought basic and premium packages were treated as premium customers (under this approach some of Sky's customers were counted twice).

285. The difference between the approaches affected the allocation of common costs at the retail and wholesale levels, as this allocation was based on the number of basic and premium subscribers.

286. Oxera also used two approaches for the allocation of revenues at the retail level, which related to the treatment of customers subscribing to basic and premium packages.

287. Oxera stated that:

> The issue in retail is that retail prices are observed for bundles of basic and premium customers (ie there are customers who purchase only basic channels and others who purchase basic and premium channels). This raises a question of how to treat the revenue from customers who purchase basic and premium channels in a bundle.
>
> *(a)* Under one approach (approach 1), these customers are treated as premium customers. Thus, from the profitability perspective, the costs of basic channels are recovered from basic packages only,

[109] Oxera first report, p iii.

while costs of premium channels are recovered from basic/premium bundles. This approach represents one extreme, insofar as basic channels receive the lower end of the possible range for the revenue and premium channels receive the upper end.

(b) Under an alternative approach (approach 2), the premium component of the basic/premium package could be delineated on an incremental basis. This means that customers subscribing to basic/premium bundles would be treated as basic customers who generate revenue under the basic price, as well as premium customers who generate revenues under the price which is calculated as the difference between the price of the bundle and the basic price. This provides another end of the spectrum for the possible treatment of basic/premium packages. Under this approach, basic packages receive the upper end of the possible range for the revenue, while premium channels receive the lower end.

These approaches affect the allocation of revenues between basic and premium channels at the retail level.

288. Oxera concluded:

> At the wholesale level, returns for basic channels appear lower than for premium channels. Although this relative relationship seems consistent for different approaches to cost and revenue allocation, the results should be interpreted as indicative, given the allocation approaches adopted.
>
> At the retail level, the analysis seems to provide inconclusive results since, depending on the approach to cost allocation, basic channels appear either more or less profitable than premium channels.

Sports/movies

289. Oxera also estimated[110] the margins (over the cost of content) and the ROS for Sky's sport and movie channels. Oxera's analysis involved two stages:

(a) allocation of costs and revenues between basic and premium channels; and

(b) allocation of costs and revenues for premium channels between sports and movies.

290. Oxera used two approaches for cost and revenue allocation at the basic/premium level (as in its analysis of basic/premium channels).

291. Oxera also used two approaches for the allocation of revenues from packages which combine sports and movies channels: a preference-based approach and a pro-rata approach. Oxera found that the results of these approaches were similar.[111]

[110] ibid, section 5.4.
[111] ibid, Appendix 2. The preference-based approach used data from a consumer survey to allocate revenue based on the value customers subscribing to a bundle attached to either sports or movies (ie who bought the package because of sports or because of movies). The pro-rata approach allocated revenue pro-rata to the revenues from sports and movies on a stand-alone basis.

292. Table 12 presents Oxera's estimates of the ROS for Sky's sport and movie channels under the preference-based allocation approach.

TABLE 12 **Estimates of ROS for sports and movies channels—preference-based allocation, 2004 to 2008**

[✂]

Source: Oxera first report, Table 5.4.

293. Table 13 shows the results of Oxera's margin analysis.

TABLE 13 **Estimates of margins over direct costs for sports and movies channels—preference-based allocation, 2004 to 2008**

[✂]

Source: Oxera first report, Table 5.5.

Note: Oxera's calculations of margins over direct costs were estimated as (revenues – direct costs)/revenues. Ofcom also presented these figures in the Pay TV Statement using direct costs rather than revenues as the denominator.

294. Oxera concluded that:

> At the retail level, the results seem to suggest that sports channels have higher returns than movies channels. Results also vary significantly (in terms of levels of returns) depending on the approach adopted for allocation of revenues between basic and premium channels.
>
> At the wholesale level, the results seem to suggest that sports channels appear less profitable than movies channels. The difference between returns for sports and movies channels seems sensitive to the adopted approach to the allocation of revenues from packages combining sports and movies channels to these channels separately.

295. Oxera then set out an alternative approach for the allocation of revenues between sports and movies channels at the level of Sky's wholesale activities. Oxera described this approach as follows:

> Under this approach revenues from packages that combine sports and movies channels (subscription revenues excluding commercial revenues) were allocated to these channels separately on the basis of incremental prices. Specifically, revenues allocated to sports (movies) channels were estimated as the difference between package prices and standalone prices for movies (sports) channels.
>
> In relation to commercial revenues, the analysis assumed that they are primarily generated through the provision of sports channels, as some commercial premises, such as public houses, are not allowed to buy movies channels. Therefore, commercial revenues were allocated to movies channels on an incremental price basis. Advertising revenues were allocated on the same basis as [the analysis described earlier].

296. Table 14 presents the resulting estimates of ROS and margins, for both sports and movies channels, on the basis of this approach.

TABLE 14 **Estimates of ROS and margins over direct costs for sports and movies channels using an incremental prices approach, 2004 to 2008**

[✄]

Source: Oxera first report, Table 5.6.

Note: Oxera's calculations of margins over direct costs were estimated as (revenues – direct costs)/revenues. Ofcom also presented these figures in the Pay TV Statement using direct costs rather than revenues as the denominator.

297. Oxera said that this approach provided:

> the upper and lower ends of the range for the allocation of revenues between sports and movies channels. In particular, the approach where revenue allocated to movies channels is estimated on the basis of the price of the package less stand-alone price of sports channels could be seen as the lower end of the range for revenues that could be allocated to movies. Similarly, the approach where revenue allocated to movies channels is estimated on the basis of stand-alone price of movies channels could be seen as the upper end of the range.

298. Oxera concluded:

> The results under the incremental price approach suggest that movies channels appear to have higher margins and ROS than sports channels at both ends of the range for revenues allocation.
>
> On balance, the results of the analysis at this level of disaggregation are not sufficiently robust to conclude on the profitability of movies and sports channels, although the analysis seems to provide some weak evidence that movies channels may have higher margins than sports channels (given the adopted approaches to cost and revenue allocation).

Benchmarking of disaggregated returns

299. Oxera used subsets of the comparators which it used for benchmarking Sky's aggregate profitability (see paragraphs 75 to 82) to benchmark Sky's retail and wholesale businesses separately.

300. Oxera compared both ROCE and ROS as metrics of profitability.

301. Oxera found that:

> On balance, it would seem appropriate not to draw firm conclusions about Sky retail's profitability compared with the retail comparators. However, the evidence that Sky's aggregated profitability may be driven by its relatively high wholesale returns is further reinforced in light of the above analysis.[112]

Ofcom's pricing models

302. Ofcom set out its pricing models in its Third Pay TV Consultation.[113] Ofcom used these models primarily to determine the price for a WMO remedy, but the cost-plus

[112] Oxera first report, paragraph 6.2.2.
[113] Ofcom Third Pay TV Consultation, section 9.

models were also used as part of Ofcom's consideration of the disaggregated profitability analysis.

303. Ofcom used two types of models, which were:

(a) a 'revenue-minus' model; and

(b) 'cost-plus' models.[114]

304. The revenue-minus model used DCF analysis to determine the wholesale price that an efficient retailer could afford to pay given its own retail costs and the need to earn a return, while at the same time matching Sky's current retail prices.[115]

305. The cost-plus models were used as a cross-check to the revenue-minus model. They were also based on a DCF and used to determine the price that Sky's wholesale business would need to charge in order to earn a reasonable return given its input costs.

Sky's views

306. Sky said that there were considerable differences between Oxera's and Ofcom's analyses. Sky stated that Ofcom's analysis was not fit for purpose and could not form the basis for reliable conclusions. In addition, Sky said:

> Ofcom has not been consistently fair or reasonable in reporting the results of Oxera's analysis. Ofcom has often overstated the strength of Oxera's findings in its disaggregated profitability analysis, or discussed Oxera's analysis in such a way as to give the impression that Oxera's findings were more conclusive than they are in reality.

307. Sky noted that there were many difficulties in performing an analysis of its disaggregated profitability, for the following reasons:

(a) The approach used to measure profitability. Sky said that TV channel broadcasting businesses tended to have few assets and so measures such as ROCE were not useful. Sky said that ROS tended to be a better measure but it relied on the presence of good comparators. Sky added that the meaningfulness of Ofcom's use of 'margin over direct costs' was questionable.

(b) The fact that the majority of revenues for Sky's premium channel activities arose from notional internal transfers. Sky said that the majority (over 90 per cent) of subscribers to its premium movie channels subscribed through Sky, so the results of the profitability analysis relied on assumptions about a notional transfer price. Sky said that its wholesale rate-card charges might be higher than would be charged to its own retail business on an arm's length basis due to the superior performance of its own retail business compared with its retail competitors.

(c) The majority of Sky's revenues from its premium channel business were common revenues. Sky said that the majority of its premium channel revenues arose from the sale of packages which included both sports and movies so the results of the analysis would reflect the allocation assumptions used to separate the revenues.

---

[114] The cost-plus analysis consisted of 11 separate models, referred to as the cost-plus models.
[115] Ofcom Third Pay TV Consultation, paragraph 9.2.

308. Sky referred to Mr Hulbert's evidence to the CAT in which he stated that the wholesale ROS found by Oxera, which was in the range of [✄] to [✄] per cent, was entirely normal when compared with a more reasonable set of comparators. Mr Hulbert said that successful basic channels often achieved a ROS of [✄] per cent or more, and established premium channels [✄].

309. Sky submitted evidence that criticized Oxera's analysis. Sky submitted that:

> While identifying appropriate comparators for Sky's notional Premium Wholesale business is not straightforward, it is feasible. Furthermore, it is certainly possible to distinguish between reasonable comparators, such as those provided by Sky, and poor comparators, such as those used by Oxera.

310. Sky also criticized the following aspects of Ofcom's pricing models:

(a) the use of a ROCE approach;

(b) the use of a fully allocated cost/fully allocated revenue/fully allocated assets approach;

(c) the use of a DCF approach, with constant charges and aggressive assumptions about growth in subscriber numbers in early years; and

(d) the margin of error in Ofcom's calculated cost-plus charges.

311. Sky said that the proposition that any real-world business would consider setting wholesale charges using a ROCE approach to profitability and a DCF analysis based on a ten-year time horizon was wrong.

Our analysis of Sky's disaggregated profitability

312. We agreed with Sky that it was difficult to analyse separately the profitability of individual products which were sold in a bundle. Estimates of the profitability of each of the separate parts of a business are sensitive to the assumptions needed to allocate revenues and costs, and to determine an appropriate asset base. Nevertheless, we sought to analyse the disaggregated profitability of Sky's movies business, by considering:

(a) the disaggregated costs of Sky's movies business (see paragraphs 313 to 322); and

(b) other evidence (see paragraphs 323 to 328).

Assessment of the disaggregated costs of Sky's movies business

313. We asked Sky to perform an exercise to disaggregate the costs of its different businesses for the financial year 2009/10 to improve our understanding of the costs of its movies business and to test the cost allocation assumptions made by Oxera in its disaggregated profitability analysis.

314. Sky raised a number of concerns about this analysis. In particular, it noted that:

(a) the amount of time afforded to conduct this task meant that it could not be fit for purpose and to conduct an exercise of the requisite standard significantly more time would be required than we had allowed;

(b) Sky would need to seek external assistance as it did not have the requisite skills and knowledge to conduct such an exercise properly; and

(c) the use of a single year's data limited the usefulness of the exercise as Sky's revenues and costs were subject to significant change over time.

315. We recognized that this was not a straightforward exercise as some allocations of cost would be matters of judgement, but we believed that Sky had the knowledge and experience of its own business to respond in a meaningful way. While we noted Sky's concerns, we did not believe that these issues negated the usefulness of the exercise.

316. Following an approach which we agreed with Sky, Sky's analysis attributed total operating costs for the financial year 2009/10 between the following categories:

(a) retail;

(b) wholesale;

(c) platform; and

(d) non-TV activities.

317. It then subdivided costs attributable to the wholesale category between:

(a) basic channels only;

(b) sports channels only;

(c) movie channels only; and

(d) costs which were common across one or more of the above categories.

318. We also asked Sky to set out in detail the method it used for each allocation and the key assumptions behind each allocation.

319. We took Sky's cost allocation and sought to allocate the remaining common costs which Sky had not allocated, based on a range of assumptions. We believed that these assumptions gave a lower end and an upper end for the range of the costs which could be allocated to Sky's movies activities for the financial year 2009/10:[116]

(a) a low-end assumption (in cost terms) that all costs which Sky had not allocated were common costs;

(b) a high-end assumption that none of the costs which Sky had not allocated were common costs such that, at least initially, they were allocated (both between wholesale and the rest of Sky and, within wholesale, between basic/FTA, movies and sports) based on a simple two-stage cost allocation:

(i) allocating total 'common' costs based on the total cost category as a percentage of total operating expenditure (eg wholesale operating expenditure as a percentage of total operating expenditure); and

[116] We did not believe that the results of this analysis would be materially different if it was performed for different years and we therefore did not update these figures.

(ii) allocating the resulting revised wholesale operating expenditure, with whole-sale 'common' costs based on wholesale cost as a percentage of wholesale operating expenditure (eg movies operating expenditure as a percentage of wholesale operating expenditure); and

(c) an illustrative mid-range assumption which accepted Sky's total cost allocation but reallocated wholesale-only common costs based on the revised wholesale percentage of the total set out in stage *(b)*(ii) above.

320. We recognized that estimating an asset base for each disaggregated part of Sky's business was difficult because Sky's assets could not be allocated to the different parts of its business without making many assumptions. Therefore, our assessment of Sky's disaggregated profitability was based on an ROS approach.

321. The results of the cost allocation approaches described above gave a range for Sky's movies wholesale costs of between £[✂] million and £[✂] million ([✂] to [✂] per cent of total operating expenditure) for the financial year 2009/10, compared with revenues of between £[✂] million and £[✂] million for Sky's movies business (depending on the assumptions used to allocate revenues).

322. We compared the results to the analysis performed by Analysys Mason for Ofcom using Sky data for financial year 2007/08 and financial year 2006/07 (the latest years for which it performed the exercise). Analysys Mason's results found that approximately [✂] per cent of Sky's wholesale operating expenditure was attributable to Sky's movies business. Therefore, the results of our analysis based on Sky's cost allocations produced figures which were [✂] those estimated by Analysys Mason. Whilst this comparison was a useful cross-check at a high level, we noted that care must be taken in drawing inferences from this comparison as Analysys Mason used a different data set.[117]

Other evidence on the profitability of Sky's movies business

323. In order to understand the profitability of Sky's movies business, we also considered other evidence. In particular, we reviewed many internal documents provided to us by Sky. However, out of the large numbers of documents which we reviewed, few addressed the profitability of Sky's movies activities.

324. [✂]

325. Sky told us that [✂].

326. [✂]

327. In addition to the evidence from Sky's internal documents, we noted more generally that the cost to Sky of acquiring movie content was much lower than the cost of acquiring sports content, and this difference was [✂] than the difference in the prices to consumers of the channels containing the content. In particular, we noted that:

(a) in the year ended June 2010, Sky's sport programming costs were £[✂] million, whilst its movie programming costs were £[✂] million; and

(b) as at December 2010, the incremental retail price of dual movies was £16 while that of dual sports was £20.

---

[117] [✂]

328. We noted that [✄].

Assessment of Sky's disaggregated profitability

329. In our view, the conclusions drawn from an analysis of Sky's disaggregated profitability should be treated with caution because of the sensitivity of the results to the assumptions made. Therefore, for the purposes of our assessment, we placed less weight on Oxera's disaggregated profitability analysis and Ofcom's pricing models and more weight on the more robust profitability analysis which we undertook (ie the TIRR and ROCE aggregate profitability analysis). For this reason, we undertook limited further disaggregated profitability analysis ourselves. However, on the basis of our review of the disaggregated profitability analyses performed by others, our own disaggregated cost analysis, and the other evidence which we have seen, we reached the following conclusions:

(a) The strongest aspect of Oxera's disaggregated profitability analysis was that Sky's wholesale activities were more profitable than its retail activities (see paragraphs 278 and 283), though we noted that, as Sky's wholesale revenues were calculated using third party wholesale prices, we should be cautious about placing reliance on these results on their own. We noted in Section 8 of the main report that third-party wholesale prices for certain of Sky's products incorporating Sky Movies [✄] had decreased, indicating that this disaggregated profitability analysis might overstate the future profitability of Sky's wholesale activities.

(b) Our assessment of Sky's disaggregated costs produced figures which were [✄] those produced by Analysys Mason.

(c) There was [✄]. While we acknowledged that judgements were needed in the allocation of costs and of revenues, the various pieces of analysis [✄].

(d) Taking all the evidence together, it appeared to us that the profitability gap calculated for Sky overall was unlikely to overestimate the profitability of Sky's movie activities in the periods we considered. However, we noted that the past profitability of Sky Movies might not be the best guide to the future profitability of Sky Movies, in particular given the changes in the competitive landscape that were now taking place (see Sections 4 to 7 of the main report).

Sky's cost of capital

Oxera's calculations of Sky's historical cost of capital

1. Ofcom asked Oxera to estimate Sky's cost of capital.

2. Oxera noted that the purpose of this analysis was to enable an estimation of the size of the profitability gap, rather than to provide a precise estimate of Sky's cost of capital. For this reason, Oxera's analysis was at a high level relative to the depth of analysis which would typically be undertaken in a price control review, for example.

3. Oxera said that the cost of capital represented an appropriate benchmark for returns because, in competitive markets characterized by free entry and exit, companies could be expected to make profits that were in the long run in line with the minimum returns required for investors.

4. Oxera calculated an average WACC for Sky for each of three multi-year periods.

5. Oxera measured Sky's WACC as the cost of equity (c_e) plus the cost of debt (c_d), weighted by the gearing ratio (g), as shown by the following formula:

$$WACC = c_d.g + c_e.(1–g)$$

Estimates in Oxera's calculations

6. Oxera estimated the cost of equity using the capital asset pricing model (CAPM). The CAPM relates the cost of equity to the risk-free rate (r_f), the expected return on the market portfolio (r_m), and a company-specific measure of investors' exposure to systematic risk (beta or β):

$$c_e = r_f + \beta \,.\, (r_m - r_f)$$

7. Oxera estimated the individual parameters of the WACC as follows:

   (a) The nominal risk-free rate. The spot yield[118] to maturity on a UK gilt index with maturity equal to five years.[119]

   (b) The equity risk premium (ERP or $r_m – r_f$ in the equation above). Based on Oxera's assessment,[120] it assumed a range of 3.5 to 5.0 per cent for the period between 1995 and 2007 and a range of 3.5 to 5.5 per cent for 2008 and 2009 to reflect the financial crisis.

   (c) The equity beta. The raw equity betas were estimated from a regression of the daily returns to Sky's equity on the daily returns on the FTSE All-Share Index, using one-year and five-year estimation periods. These betas were then de-geared at the average gearing over the estimation period and regeared at spot

[118] Oxera used a three-year average in 2009.
[119] Oxera noted that changing the maturity of the gilt yield from five years to 10, 15, 20 or 30 years resulted in a change (increase or decrease) in the WACC estimate of a maximum of 100 basis points.
[120] Oxera stated that this ERP range was based on its advice to rolling stock leasing companies in the CC's 2009 rolling stock leasing market investigation.

gearing at the end of the period to produce the equity betas used in the calculation.

(d) Cost of debt: for the period 1999 to 2004, Oxera used the spot yield to maturity of Sky's sterling denominated bond maturing in July 2009; for the period 2005 to 2009, Oxera used Sky's bond maturing in 2017. Due to the lack of availability of sufficient information on corporate bonds with a similar credit rating to Sky, in the period prior to 1999 Oxera estimated the cost of debt as the sum of the contemporary risk-free rate and the spread between the yield on Sky's sterling denominated bond issued in 1999 and the risk-free benchmark rate as at 1999.

(e) Gearing: the ratio of the market value of debt[121] to the market value of debt plus equity as at the estimation date.

8. Table 1 shows Oxera's estimates of the parameters in the WACC, calculated in accordance with these principles.

TABLE 1 **Estimates of WACC parameters**

	1995		*1998*		*2005*	
	Low	*High*	*Low*	*High*	*Low*	*High*
Risk free rate, nominal (%)	8.2	8.2	6.3	6.3	4.1	4.1
ERP (%)	3.5	5.0	3.5	5.0	3.5	5.0
Raw equity beta	0.81	0.94	0.81	0.86	1.11	1.33
Equity beta	0.89	0.94	0.82	0.85	1.11	1.29
Cost of equity (%)	11.3	12.9	9.2	10.6	8.0	10.5
Cost of debt (%)	10.8	10.8	9.0	9.0	5.8	5.8
Historical gearing (%)	5.4	13.7	5.4	7.1	3.6	6.9
Spot gearing (%)	13.7	13.7	6.5	6.5	3.7	3.7
Tax rate (%)	33	33	31	31	30	30
Assumed inflation (%)	3.5	3.5	3.7	3.7	2.9	2.9

Source: Oxera second report, Table A2.1.

Results of Oxera's calculations

9. Table 2 shows Oxera's results.

TABLE 2 **Cost of capital for Sky**

	1995–2009	*1998–2009*	*2005–2009*
Pre-tax nominal (average over the period) (%)	13.2	13.1	12.4
Range	11.4–15.0	11.3–14.9	10.7–14.1
Pre-tax nominal (beginning of the period) (%)	17.1	14.0	12.9
Range	16.0–18.1	13.0–14.9	11.2–14.7
Pre-tax real (average over the period) (%)	9.9	9.7	8.5
Range	8.1–11.6	8.0–11.4	6.9–10.2

Source: Oxera second report.

10. Oxera noted a downward trend in Sky's cost of capital over the period 1995 to 2009, driven primarily by a fall in the risk-free rate.

[121] It is normal practice to use book value as a proxy for market value of debt in circumstances where there is no reason to suspect impairment of debt.

11. As a cross-check, Oxera benchmarked its estimates with a number of regulatory determinations made in the period 1994 to 1996. Oxera found that these determinations made by Ofwat, Oftel and the CAA were equivalent to setting a pre-tax cost of capital in the range of 9 to 13 per cent. Oxera compared these rates with its estimates for Sky's cost of capital of 13.2 per cent average over the period 1995 to 2009 and 17.1 per cent at the start of the period.

Ofcom's assessment of the forward-looking cost of capital from 2010 onwards

12. In Ofcom's Pay TV Statement, it considered whether Sky's returns would continue to exceed its cost of capital.

13. Ofcom's methodology for calculating the relevant parameters for the WACC was as follows:

(a) *Risk-free rate.* Ofcom assessed the forward-looking real risk-free rate to be in the range 1.5 to 2.0 per cent based on historic yields on five-year index-linked gilts. It chose a point estimate at the top of this range to reflect its view that gilt yields had been depressed due to financial market conditions and were likely to rise in future. It added an inflation assumption of 2.5 per cent to its estimate based on Bank of England target rates and in line with its assumption in the Openreach charge control (2009).

(b) *ERP.* Ofcom estimated a range of 4 to 5 per cent for the ERP, taking into consideration a range of evidence but placing most weight on historical estimates from Dimson, Marsh and Staunton. Ofcom selected the top of this range as a point estimate in response to increased equity market volatility.

(c) *Equity beta*. Ofcom relied on an analysis conducted by Brattle Group to estimate Sky's beta based on daily data over the most recent two-year period.

(d) *Debt premium.* Ofcom assessed Sky's debt premium based on yields as at February 2010 for Sky's ten-year US$ denominated bond and equivalent gilt yields, suggesting a premium of 1.5 per cent. It noted that a long-term debt premium would sit in the range of 1.0 to 2.0 per cent.

(e) *Gearing*. Ofcom assumed an 'optimal' gearing level of 30 per cent based on an assumption that it used for BT of 35 per cent.

14. On the basis of this methodology, Ofcom assumed the parameters for Sky's WACC as shown in Table 3. Using these numbers, Ofcom calculated Sky's WACC from 2010 onwards to be 10.3 per cent.

TABLE 3 **Forward-looking WACC parameters**

Risk-free rate, nominal (%)	4.5
ERP (%)	5.0
Equity beta	0.85
Debt premium (%)	1.5
Gearing (%)	30
Pre-tax nominal WACC (%)	10.3

Source: Ofcom Pay TV Statement, Annex 3, Figure 12.

PwC's assessment of the WACC

15. PwC, on behalf of Sky, also adopted the CAPM approach to estimating the WACC. PwC's approach was more granular than Oxera's in that PwC estimated a WACC for each year from 1992 to 2011. Although PwC adopted a similar approach to Oxera, there were a number of differences:

    (a) PwC estimated the risk-free rate based on 20-year government gilts (on a five-year rolling basis) due to the recent volatility in spot gilt yields.

    (b) PwC estimated Sky's beta using monthly estimates, although PwC believed that Sky's beta was spuriously low in the period 1999 to 2002 inclusive and so adjusted the beta in that period so that it moved in a linear way in its model from 1998 to 2003.

    (c) PwC took a mid-point estimate for the equity risk premium of 5 per cent based on a number of estimates. This was at the top of the range proposed by Oxera.

16. We set out in Table 4 the results of PwC's analysis for the period from 2000 to 2011.

TABLE 4 **PwC's base case WACC estimate**

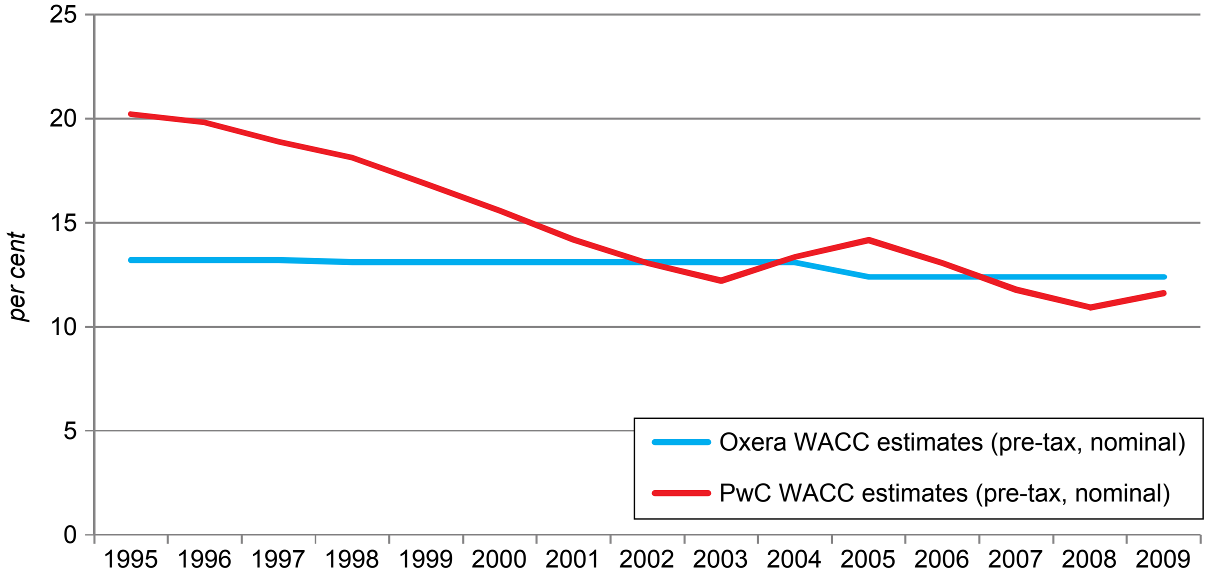
Parameter	*2000*	*2001*	*2002*	*2003*	*2004*	*2005*	*2006*	*2007*	*2008*	*2009*	*2010*	*2011*
Risk-free rate (%)	6.2	5.5	4.9	4.6	4.6	4.6	4.6	4.5	4.5	4.5	4.5	4.5
EMRP (%)	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0	5.0
Debt premium (%)	3.6	3.7	3.9	2.7	1.9	1.5	1.3	1.4	3.5	4.5	2.5	2.3
Equity beta	1.0	0.9	0.9	0.9	1.0	1.2	1.0	0.9	0.7	0.9	0.9	0.9
Asset beta	0.9	0.9	0.8	0.8	0.9	1.1	0.9	0.8	0.6	0.7	0.8	0.7
Equity beta	1.0	0.9	0.9	0.9	1.0	1.2	1.0	0.9	0.7	0.9	0.9	0.9
Gearing (%)	6.7	8.4	9.0	8.9	9.1	9.6	11.6	12.0	14.2	17.5	19.1	20.0
Tax (%)	30.0	30.0	30.0	30.0	30.0	30.0	30.0	30.0	28.0	28.0	28.0	26.0
Cost of equity (post-tax) (%)	11.2	10.3	9.4	8.9	9.8	10.5	9.8	8.8	8.2	8.8	9.1	8.9
Cost of equity (pre-tax) (%)	16.0	14.6	13.5	12.7	14.0	15.0	14.0	12.6	11.4	12.2	12.6	12.0
Cost of debt (post-tax) (%)	6.9	6.5	6.2	5.1	4.6	4.3	4.1	4.1	5.8	6.4	5.0	5.1
Cost of debt (pre-tax) (%)	9.8	9.2	8.8	7.3	6.5	6.2	5.9	5.8	8.0	8.9	6.9	6.8
WACC (Pre-tax) (%)	15.6	14.2	13.1	12.2	13.4	14.2	13.1	11.8	10.9	11.6	11.5	11.0

Source: PwC's analysis of Sky's WACC, 7 September 2011.

17. The assessment generated a similar cost of capital as Oxera's for the period following 2000 as shown in Figure 1, though the differences were greater in the period prior to 2000.

FIGURE 1

Comparison of PwC and Oxera estimates of Sky's cost of capital



Source: PwC.

Assessment of the cost of capital

Oxera's historical estimates

18. For each of the parameters of Sky's WACC, we reviewed Oxera's methodology to assess whether it represented a reasonable approach. In our review, we focused on the assessment of the WACC in the recent past (ie since 2000).

19. Oxera's estimate of the risk-free rate was based on the spot yield on a UK five-year gilt index, which produced a relatively low value in 2005 of 1.2 per cent (real). The CC's typical approach is to examine a wider range of maturities and time periods and it has consequently tended to assess the forward-looking risk-free rate above spot yields. In the Heathrow and Gatwick report,[122] the CC assessed the real risk-free rate to be 2.5 per cent, and in its Stansted report,[123] the CC assessed it to be 2.0 per cent. Consequently, we judged that Oxera's estimate was likely to be on the low side.

20. Oxera estimated the ERP to lie between 3.5 and 5.0 per cent in 2005 to 2007. This range appeared reasonable in comparison with the CC's assessment in its Heathrow and Gatwick report (2.5 to 4.5 per cent), and in its Stansted report (3.0 to 5.0 per cent). Oxera raised the upper end of the range to 5.5 per cent in 2008 and 2009 to reflect the financial crisis. We noted that the upper end of this range was above the ERP of 5.0 per cent assessed by the CC in the Bristol Water case.[124]

[122] *BAA Ltd: a report on the economic regulation of the London airports companies (Heathrow Airport Ltd and Gatwick Airport Ltd)*, CC, September 2007: www.competition-commission.org.uk/our-work/directory-of-all-inquiries/heathrow-and-gatwick-quinquennial-review.
[123] *Stansted Airport Ltd: Q5 price control review*, CC, October 2008: www.competition-commission.org.uk/our-work/directory-of-all-inquiries/stansted-price-control-review.
[124] *Bristol Water plc: a reference under section 12(3)(a) of the Water Industry Act 1991*, CC, August 2010: www.competition-commission.org.uk/our-work/directory-of-all-inquiries/bristol-water-plc-water-price-limits-determination.

21. To assess the reasonableness of Oxera's calculations of the ERP and risk-free rate, we considered the real market return over the period 2005 to 2009. The market return is the sum of the risk-free rate and the ERP, ie it is the return that investors expect from the market on average. Oxera's modelling suggested that this was 5.8 per cent over the period 2005 to 2009. The CC has, in the recent past,[125] assessed the market return to be in the range of 5 to 7 per cent. Since Oxera's estimate of the market return sits around the mid-point of this range, the two elements of its estimate appeared to us to be reasonable.

22. Oxera calculated a range for the equity beta based on daily returns over one-year and five-year estimation periods. In previous regulatory inquiries, the CC has tended to estimate beta over a two-year period or longer. We looked at whether the use of only five-year data would have changed Oxera's results significantly, but found that it would not.

23. We noted that Oxera's estimate of Sky's cost of debt was based on a small proportion of Sky's total debt issuance and, therefore, might not be representative of its overall cost of debt. To establish whether this was the case, we considered average redemption yields on an index of BBB rated corporate bonds over the period 2005 to 2009. We found that these yields averaged 6.5 per cent, which led us to conclude that Oxera's estimate of 6.3 per cent over the same period was reasonable.

24. We noted that Oxera's estimates for the cost of debt in periods prior to 1999 might be less reliable than its estimates in later periods as they were based on the yield spread on a bond issued by Sky in 1999. However, we did not examine this further as the cost of capital in these years was not very important to our overall analysis, and it was unlikely to make much difference to our overall calculations.

25. With regard to gearing, it was not obvious to us that spot gearing, as used by Oxera, provided a better prediction of forward-looking gearing than the historical average and so we questioned Oxera's methodology of regearing the observed equity beta to spot gearing levels. In addition, we noted that there were various ways in which to perform the regearing calculation which increased the uncertainty surrounding the results.

26. We also noted that Oxera's estimates of historical gearing appeared low in comparison with those of Brattle Group. For example, Brattle Group estimated average gearing in 2005 at around 9 per cent, while Oxera used 3.7 per cent. This difference resulted from different approaches to Sky's working capital as Oxera based the gearing figures on 'net debt', which represented long-term liabilities less cash balances, while Brattle Group adopted a gearing figure which represented long-term liabilities plus any negative working capital. In our view, something in between these two approaches was most appropriate, ie an assessment of gearing based on long-term debt with no deduction for cash and no addition for negative working capital. This was because we viewed the cash on Sky's balance sheet as working capital and necessary to meet its large current liabilities, and because we were not convinced that Sky was using its negative working capital as a source of finance (see paragraphs 184 to 189).

27. Given the problems associated with ascertaining the precise level of gearing to use in the regearing calculation, and the questionable desirability of regearing (see paragraph 25), we considered calculating the cost of equity based on observed equity

[125] For example, *Bristol Water plc: a reference under section 12(3)(a) of the Water Industry Act 1991*, CC, August 2010.

betas. However, in practice, we found that this made very little or no difference to the WACC, or the resulting profitability gap.

PwC's WACC estimates

28. We also considered PwC's approach and the assumptions used in its analysis, noting that PwC largely followed the same approach as Oxera.

29. We noted that there were some differences in the analyses but that these differences had minimal effect on the WACC in recent years. The results of the Oxera and PwC analysis in the period following 2000 were, as PwC noted, 'broadly in line with each other' so a profitability analysis focused on the period since 2000 would produce a similar result whether we adopted the WACC estimated by PwC or by Oxera.

Overall assessment of WACC

30. Having considered the estimates of the parameters used by Oxera in calculating Sky's historic cost of capital, we found them to be reasonable.

31. We also considered PwC's estimate of the WACC and, in our base case, we used this estimate, not because we believed it to be superior to Oxera's estimate, but because both estimates were reasonable (and produced very similar results for the period we were considering) and in those circumstances we were content to use the approach and results favoured by the parties.

Ofcom's forward-looking assessment

32. In relation to Ofcom's forward-looking estimates, we noted that the risk-free rate and the ERP assumed by Ofcom were equivalent to the CC's estimates of these parameters in its 2010 report on Bristol Water. As this CC assessment was detailed (ie it was for the purpose of price regulation) and recent, we judged that some reliance could be placed on these estimates and applied to this case.

33. Brattle Group assessed Sky's equity beta to be 0.67 as at January 2010 but noted that this point estimate was within a range of 0.4 to 0.95. Ofcom's choice of 0.85 was towards the upper end of this range. We calculated that changing the beta to 0.67 (ie the point estimate proposed by Brattle Group) would lower the cost of capital to around 9.9 per cent (on the assumption that gearing was 20 per cent). However, we noted that there was considerable uncertainty inherent in any beta estimate.

34. In our view, Ofcom's cost of debt calculation suffered from the same methodological problem as Oxera's calculation in that, because it was based on only one debt instrument, at one point in time, it might not reflect accurately the forward-looking cost of debt faced by an efficient operator. However, we found that, when compared with recent yields on BBB-rated corporate debt of around 6.5 per cent in 2010, Ofcom's assessment of 6.0 per cent appeared reasonable.

35. Ofcom provided little explanation for its gearing assumption of 30 per cent. According to Brattle Group,[126] Sky's gearing was around 20 per cent at 30 June 2009 and our own calculations, on a similar basis, indicated that it was around 18 per cent at 30 June 2010. Substituting a gearing rate of 20 per cent into the WACC calculation increased the pre-tax WACC by 60 basis points to 10.9 per cent.

---

[126] See p4 of Brattle Group's report 'Estimate of BSB's Equity Beta', January 2010.

36. We noted that, although Ofcom appeared to have chosen a high gearing ratio, this was counterbalanced by its choice of a beta estimate towards the upper end of the range. Overall, we judged that Ofcom's forward-looking estimate of Sky's WACC at 10.3 per cent was reasonable.

Treatment of tax

37. Oxera and Ofcom estimated Sky's cost of capital on a pre-tax basis, assuming the statutory rate. However, we noted that, if Sky had not paid the statutory rate of tax on its profits, the cost of capital would be overestimated. Oxera noted[127] that 'it may be reasonably expected that Sky was not paying the statutory tax rate for a number of years after 1995 due to carried forward tax losses. Thus, for a number of years in the TIRR period, Sky's effective tax rate will have been lower than the statutory tax rate.' This observation would tend to suggest that, particularly in the earlier years, Oxera's estimates might be towards the upper end of the reasonable range. However, since our analysis was focused on the latter years in the period, we did not examine this issue further.

[127] Oxera's second report, February 2010, Section 2.3.2.

Research by Ofcom and pay-TV retailers on the significance of Sky's linear movie channels in driving consumers' choice of pay-TV provider

Ofcom's consumer research

1. We begin by providing a summary of the consumer research conducted by Ofcom in recent years which is relevant to our investigation, before discussing some of this research in more detail.

2. Ofcom carried out consumer research to look into the significance of movies in consumers' choice of pay-TV provider. In its Pay TV Statement, Ofcom stated that earlier research suggested that sports and movies were the genres which stood out as being among the most valued by consumers and which also had a high degree of exclusivity to pay-TV providers.[1] On this basis, Ofcom stated that it would expect channels with this content to be key drivers of pay-TV subscriptions. Ofcom also noted the sums paid for content rights, and statements by parties operating in the market, in support of its view of the importance of movies content.[2]

3. In its Pay TV Statement, in response to comments by Sky about its 2009 Omnibus Survey, Ofcom said that this survey supported the view that Sky Sports was highly important to those households which subscribed to it, and also, though to a lesser extent, supported the view that Sky's movie channels were important.[3]

4. Table 1 summarizes the results from a number of different Ofcom consumer surveys which are relevant to our analysis.

[1] Pay TV Statement, paragraph 4.111. Ofcom Pay TV research phase one (June/July 2006).
[2] Ofcom stated in its reference document that the three genres that are most valued by consumers are sports, soap operas and movies. Of these, soap operas are widely available on FTA TV, and so are unlikely to be a primary driver of pay-TV subscriptions. The same is true of other genres which are valued by consumers, such as comedy, drama and documentaries. Sports and movies stand out as being among the genres most valued by consumers, and also as having a high degree of exclusivity to pay TV. (Ofcom market investigation reference to the Competition Commission, paragraph A2.10.)
[3] Pay TV statement, Annex 6, paragraph 5.33.

TABLE 1 **Brief summary of main Ofcom surveys**

per cent

	All pay-TV subscribers	*Sky subscribers*	*Sky Movies subscribers*	*Sky Movies & Sports subscribers*
Movie content is important*	6	8†		
Subscribe to Sky Movies because of Sky Sports and Sky Movies did not cost much extra**				44
Subscribe to Sky Sports because of Sky Movies and Sky Sports did not cost much extra**				26
Having Sky Movies is as important as having Sky Sports**				26
Switch provider if no movies***			8‡	38§
Switch to FTA if no movies***			32‡	22§

Sources: *Ofcom's Omnibus Survey (2009).
**Ofcom's Willingness to Pay Survey (2008)—includes results from both first and second wave and excludes those answering 'don't know' and 'none of those'. We show more detailed results in Appendix 4.11, Table 1.
***Ofcom's Online Content Omnibus Survey (2008).

†We show the proportion of Sky subscribers rather than Sky Movies subscribers because we are concerned with the significance for the pay-TV market as a whole.
‡Small sample size of 54 consumers.
§We need to interpret these proportions with care as the question asked about the removal of both Sky Movies and Sports together and thus we cannot be sure of the impact that movies element has on subscribers to both sports and movies in their decision of switching.
Note: Some of the results should be treated as indicative as the sample size is very small. For instance, the base of Sky Movies subscribers in the Ofcom Online Content Omnibus consists of only 54 consumers.

5. At the end of 2009, Ofcom commissioned a survey in response to its Third Pay TV Consultation (Ofcom's Omnibus Survey (2009)) which aimed to understand better the factors that consumers regarded as important in their choice of pay-TV provider. The results showed that, among all pay-TV subscribers, the availability of movie channels constituted a main decision factor for 6 per cent of customers, and was slightly more important among Sky subscribers, with 8 per cent regarding movies as an important factor in their decision to subscribe to pay TV. However, these results did not in themselves provide clear evidence on the significance of movies to consumers' choice of TV service as consumers might have considered access to movies as being included in the option of having access to more channels which constituted the single most significant reason to subscribe to pay-TV services, both among all pay-TV consumers and among subscribers to Sky (52 and 57 per cent respectively). Additionally, Ofcom pointed out that these figures could not be interpreted as indicating how important Sky Movies would be to a household choosing between two pay-TV providers if one of the providers offered Sky Movies and the other did not.

6. Ofcom's survey results also showed that 8 per cent of all subscribers who regard programming and channels as an important feature in their choice of TV service (and 9 per cent of such Sky subscribers) believed Sky's movie channels to be one of the three most important types of channel. Since 65 per cent of all subscribers (71 per cent of Sky subscribers) considered programming and channels an important feature of their TV service, these numbers suggested that 5 per cent of all subscribers (6 per cent of Sky subscribers) considered access to Sky Movies to be important. However, these percentages needed to be interpreted with caution as the questions focused on TV services generally rather than on pay TV and there are many programmes or channels that are available without the need for a pay-TV subscription.

7. The survey also asked consumers about any previous considerations they might have had about choosing a pay-TV provider. Among Sky subscribers, the vast majority, ie 72 per cent, had not considered any other provider, while 14 per cent had considered Virgin Media before signing up with Sky. Of those who had considered Virgin

Media before, 8 per cent said that they had picked Sky over Virgin Media because they wanted to get Sky Movies. However, we were not sure to what extent this could be interpreted as evidence for the significance of Sky Movies in consumers' choice of pay-TV provider as both Virgin Media and Sky actually provided access to Sky Movies and this evidence might have reflected a lack of awareness among consumers of the services and channels offered by the various pay-TV providers. Among those Sky subscribers who had not considered Virgin Media previously as a provider, 3 per cent picked Sky because they were not sure whether Sky Movies was available on the cable platform.

8. Ofcom's Online Content Omnibus Survey in 2008 included questions asking Sky and Virgin Media subscribers their reaction if Sky Movies and Sky Sports channels were no longer available, either on the TV service to which they currently subscribed, or on any other channel. 8 per cent of a small sample (54) of Sky Movies subscribers said that they would switch to a different pay-TV provider and 32 per cent said they would switch to FTA services. There was a larger sample of subscribers (122) taking Sky Movies together with Sky Sports and, of these, 38 per cent said that they would switch to a different pay-TV provider and only 22 per cent said they would switch to FTA services, but these results were likely to reflect the unavailability of Sky Sports as well as Sky Movies. For this reason, and because of the small sample taking only Sky Movies, it was difficult to draw conclusions from these results.

9. In 2008, Ofcom commissioned a Willingness to Pay survey which Ofcom said found that subscribers were willing to pay a substantial premium for access to different premium channels, such as movies and sports. The results of this survey also showed that, among subscribers who signed up for bundled premium packages (ie movies and sports together), 44 per cent said that they subscribed to Sky Movies because they wanted Sky Sports and Sky Movies did not cost much extra, 26 per cent subscribed to Sky Sports because they wanted Sky Movies and Sky Sports did not cost much extra and 26 per cent said that they wanted both Sky Movies and Sky Sports.[4] These results suggested that, although access to sports was regarded as important by more consumers, access to movies could also prove to be a significant factor in consumers' choice of pay-TV provider.

10. The results of earlier Ofcom surveys, conducted during 2006 and 2007, provided additional evidence about the significance of movies in consumers' choice of pay-TV provider.[5] The results of these surveys suggested that access to Sky Movies was important to around 2 per cent of pay-TV subscribers. However, in terms of switching, 42 per cent of Sky Movies subscribers on Virgin Media said that they would switch from Virgin Media to Sky if movies were to become unavailable on Virgin Media. However, caution was needed in assessing the significance of this evidence given that the surveys were quite old and, in relation to the results on switching, Ofcom believed that they might have been subject to stated preference bias.[6]

11. Sky referred to earlier Ofcom research which it said was relevant to assessing the significance of movies. Sky noted Ofcom's research in 2005, which found that 'film channels' was a main reason to subscribe to pay TV for 10 per cent of respondents

---

[4] There were two waves to this research which showed significantly different results for responses to this question. Sky suggested that this showed the results were unreliable, but we note that question ordering provides a possible explanation for the difference; and our view was that while there were some uncertainties about the interpretation of this survey question, they were not such that we should entirely ignore the responses.
[5] The three surveys conducted during 2006 and 2007 are referred as the Phase 1, Phase 2 and Phase 3 Pay TV research.
[6] Ofcom considered that respondents may have exaggerated the likelihood of switching to alternative providers following the loss of Sky's premium channels. To adjust for this possibility, when using these figures to assess the impact on Sky's profitability of withdrawing supply of their premium channels, Ofcom reduced the number of customers stating a likelihood of switching away from Virgin Media by 10 per cent.

with a Sky subscription and for 6 per cent of respondents with a cable subscription.[7] Sky also noted Ofcom's 2006 research, which showed that movies were regarded as a 'must-have' genre by just 12 per cent of pay-TV subscribers (a similar proportion as considered children's channels 'must have'), and that consumers placed movies at a similar level of significance to comedy, which were both much less important than soap operas (and sports).[8]

12. We now discuss some of these surveys conducted by Ofcom in more detail individually.

Ofcom's 2009 omnibus survey

13. Ofcom commissioned several surveys which sought to examine directly, or indirectly, the significance of Sky's linear movie channels in driving consumers' choice of pay-TV provider. The most recent of these surveys was the Omnibus survey by TNS in 2009. This survey asked several questions that could, in principle, provide insights into the significance of Sky's linear movie channels in driving consumers' choice of pay-TV provider. In its Pay TV Statement, Ofcom referred to the results of this survey in relation to Sky Sports customers. However, as we were interested in the significance of Sky's movie channels, we analysed the results of the survey in detail (see paragraphs 14 to 18 below).

14. Table 2 shows that just 6 per cent of people who subscribe to a pay-TV service cited (unprompted) movie channels as one of the reasons for doing so (which we interpret to mean linear movie channels rather than a PPV service). This result was in contrast to the 19 per cent of pay-TV subscribers who cited sports channels as one of the reasons for subscribing. The figure for movies was similar to the proportion that cited access to children's channels as one of the reasons for subscribing. These figures rise to 8 per cent (movies), 23 per cent (sports) and 7 per cent (children's channels) when looking solely at Sky's subscribers. However, 52 per cent of pay-TV subscribers (and 57 per cent of Sky's subscribers) said that they subscribed to a pay-TV service in order 'to access more channels', which might encompass more movie channels too. Therefore, what this evidence said about the significance of movies in driving consumers' choice of pay-TV provider was unclear.

[7] Sky references Figure 23 in Annex 14 of Ofcom's First Consultation Document. Figure constructed based on consumer research: Ofcom FAPL Omnibus research in March 2005.
[8] Sky references Figures 28 and 29 in Annex 14 of Ofcom's First Consultation Document. Figures constructed based on the results of Ofcom pay-TV research phase 1 conducted in May–July 2006.

TABLE 2 **Main reasons for a pay-TV service subscription**

	All pay-TV subscribers	*All Sky subscribers*
		per cent
To access more channels	52	57
Sports channels	19	23
It comes with my broadband/phone	7	4
Movies channels	6	8
Other reason	6	6
Want access to children's channels	6	7
Special offer	5	4
Poor reception of Freeview/terrestrial TV	4	5
Partner wanted it	3	3
Unhappy with Freeview TV	3	3
'On-demand' TV	2	1
More choice variety	2	2
Someone else wants it/pays for it	1	1
Wanted Sky+	1	1
It's cheaper	1	1
To get digital TV	1	0
Specific content	1	1
To get HD	0	1
Wildlife channels	0	0
Football Association Premier League	0	0
I do not	0	0
Do not know	10	7
Sample base	817	580
Weighted population base	9,461	6,235

Source: Ofcom Omnibus Survey, October & November 2009 carried out by TNS.

Notes:
1. Question asked: Q.14 Why do you subscribe to a pay TV service?
2. Only the wave 1 sample was asked this question.
3. Pay-TV subscribers included all individuals who subscribed to subscription satellite (ie Sky), cable (ie Virgin Media, Smallworld or Wight Cable), subscription TV through broadband (ie Tiscali, BT Vision) and monthly subscription charge (ie Freeview with Top Up) who were personally or jointly responsible for making the decision regarding TV services in the household.

15. The survey also asked respondents what three features of their current TV service were most important to them. Table 3 shows the results. 65 per cent of pay-TV subscribers said that programming (or channels) was one of the three most important features (this figure rose to 71 per cent among Sky's subscribers). Of these subscribers, just 8 per cent (9 per cent among Sky's subscribers) said that Sky Movies was one of the three particular types of programme (or channel) that was most important to them, in contrast with 23 per cent (26 per cent among Sky subscribers) who referred to Sky Sports, as shown in Table 4. However, several of the most popular types of programme or channel are available free, ie without a need for a pay-TV subscription at all (which is not surprising given that the question asked about the features that were important to a respondent's current TV service, not just the pay-TV element). Therefore, again, it was difficult to infer from these results how important movies might have been in driving consumers' choice of pay-TV provider.

TABLE 3 **Significance of programmes and channels in the TV service choice**

per cent

	All pay-TV subscribers	*All Sky subscribers*
Programming or channels are important	65	71
On-screen interactive	12	13
Video on demand	6	5
HD	4	4
Sample base	817	580
Weighted population base	9,461	6,235

Source: Ofcom Omnibus Survey, October & November 2009, carried out by TNS.

Notes:
1. Question asked: Q.15 Which THREE features of your current TV service from <?> are most important to you? PROBE: Anything else ?
2. Only the wave 1 sample was asked this question.
3. Pay-TV subscribers included all individuals who subscribed to subscription satellite (ie Sky), cable (ie Virgin Media, Smallworld or Wight Cable), subscription TV through broadband (ie Tiscali, BT Vision) and monthly subscription charge (ie Freeview with Top Up) who were personally or jointly responsible for making the decision regarding TV services in the household.
4. Programming or channels referred to: being able to watch particular programmes, or types of programmes; being able to watch particular channels, or types of channel; access to programmes or channels that were *only* available through own TV provider; or anything else. On-screen interactive included: on-screen programme guide, as well as on-screen interactive services through the ‘red button’. Video on demand includes: TVOD, free VOD, and PPV live events (eg boxing).

TABLE 4 **Importance of channels and programmes**

per cent

	All pay-TV subscribers	*All Sky subscribers*
PSB channels	42	38
Educational content channels	24	27
Entertainment channels	24	24
Sky Sports channels	23	26
Other BBC channels	21	20
News channels	19	19
Children’s channels	18	18
Sky Movies channels	8	9
Sample base	549	422
Weighted population base	6,108	4,420

Source: Ofcom Omnibus Survey, October & November 2009, carried out by TNS.

Notes:
1. Question asked: Q.15A Which THREE particular types of programmes or channels are important to you?
2. Only the wave 1 sample was asked this question.
3. Sample was restricted to those who found programming or channels important in their choice of TV service.
4. Pay-TV subscribers included all individuals who subscribed to subscription satellite (ie Sky), cable (ie Virgin Media, Smallworld or Wight Cable), subscription TV through broadband (ie Tiscali, BT Vision) and monthly subscription charge (ie Freeview with Top Up) who were personally or jointly responsible for making the decision regarding TV services in the household.
5. We grouped channels and programmes based on their genre and computed the aggregated proportions. Thus, Sky Movies channels include all movies channels offered by Sky. Sky Sports include Sky Sports 1/2/3/Extra and Sky Sports News. News Channels include BBC News 24, Sky News, general news channel, and general current affairs channel. PSB channels include BBC1, BBC2, ITV1, Channel 4 and Five. Educational content channels include general education channels, Discovery channel, and Documentaries. Children’s channels include CBeebies, CBBC and general children's channel. Entertainment channel includes general entertainment channel, E4, Film4, ITV2, ITV3, ITV4 and More4. Other BBC channels include BBC3 and BBC4. The list is not inclusive of all channels prompted in the question.

16. Ofcom’s survey also asked respondents some specific questions about which providers they considered when choosing their pay-TV service and why they chose the provider they did. The survey also asked (for a sub-sample) why they did not consider a particular provider, with the focus on the interaction between Sky and Virgin Media. Tables 5, 6, 7, 8 and 9 present the detailed results.

TABLE 5 **Different TV provider considered by pay-TV customers**

per cent

Other TV provider considered	*Wave 1* Sky	*Wave 1* Virgin Media	*Wave 1* BT Vision	*Wave 2* Sky	*Wave 2* Virgin Media	*Wave 2* BT Vision
Sky	0	35	26	0	27	31
Freesat	0	1	0	0	0	6
Virgin Media	14	0	10	12	0	25
Smallworld	0	0	0	0	0	0
Freeview	3	2	0	4	1	9
Freeview with TUTV	0	0	0	1	0	0
Tiscali	0	0	3	0	0	0
BT Vision	2	8	0	2	2	0
Other service	3	0	0	3	1	0
DNK	8	14	2	9	9	10
No other service considered	72	46	58	72	60	48
Sample base	580	218	18	598	223	21
Weighted population base	6,235	2,998	202	6,497	3,087	228

Source: Ofcom Omnibus Survey, October & November 2009, carried out by TNS.

Notes:
1. Question asked: Q.16 Thinking back to when you chose <?> for your TV service, which, if any, other TV providers did you consider?
2. Both wave 1 and wave 2 samples were asked this question.
3. Samples were restricted to all customers who were personally or jointly responsible for making the decision regarding TV services in the household. Only Sky, Virgin Media and BT Vision customers answered the question regarding other potential provider considered.

TABLE 6 **Main reasons for selecting Sky for TV service**

Reasons for picking Sky over Virgin Media	*%*
Sky was cheaper/competitively priced offer	26
I wanted to get Sky Sports	21
Sky has more channels	18
Cable isn't available in my area/I can't have a cable where I live	18
I wanted Sky+ service	18
Range of services included in offer (eg broadband, telephone)	17
I wanted HD channels	16
I trust the Sky brand more	15
Recommendation/word of mouth	14
I wanted the broadband or telephone	13
Installation fee was cheaper	9
I wanted to get Sky Movies	8
I wanted red button interactive features on Sky Sports channels	4
I wanted on demand movies	1
I didn't want a cable put in	1
I wanted red button interactive features PROBE: Was this on any particular channels?	0
Other reason	21
Sample base	120
Weighted population base	1,664

Source: Ofcom Omnibus Survey, October & November 2009, carried out by TNS.

Notes:
1. Question asked: Why did you choose Sky for your TV service rather than Virgin Media?
2. Responses include unprompted (Q.17a) and prompted (Q.17b).
3. Both wave 1 and wave 2 samples were asked this question.
4. Combined sample was restricted to all Sky customers who were personally or jointly responsible for making the decision regarding TV services in the household.

TABLE 7 **Main reasons among Sky subscribers for not considering Virgin Media**

Reasons for not considering Virgin Media	%
Can't get Virgin Media/cable TV where I live	36
Just didn't think about other options	23
Sky seemed the obvious choice for Sky channels	18
Recommendation	8
Never heard of Virgin Media/cable TV	7
Not available at the time	7
Previous bad experience	6
Didn't think you could get Sky Sports on Virgin Media/cable TV	5
Didn't think you could get Sky Movies on Virgin Media/cable TV	3
Too expensive	2
Already had Sky previously	2
They have a bad reputation	1
Got a special offer from another company	1
Someone else's choice in the household	0
Do not know	13
Other reason	9
Sample base	519
Weighted population base	5,369

Source: Ofcom Omnibus Survey, October & November 2009, carried out by TNS.

Notes:
1. Question asked: Q.19a & b Why didn't you consider Virgin Media or cable TV for your TV service?
2. Only the wave 1 sample was asked this question.
3. Sample was restricted to all Sky customers who were personally or jointly responsible for making the decision regarding TV services in the household.

TABLE 8 **Main reasons for selecting Virgin Media for TV service**

Reasons for picking Virgin Media over Sky	%
Virgin Media was cheaper/competitively priced offer	46
Installation fee was cheaper	23
I wanted the broadband or telephone	19
Range of services included in offer (eg broadband, telephone)	18
I didn't want a satellite dish on my home	13
Do not know	7
Recommendation/word of mouth	7
Negative comments about Sky	5
I trust the Virgin Media brand more	3
I can't put a satellite dish on my home	3
I wanted V+ service	2
I wanted to get Sky Sports	1
Virgin Media has more channels	1
I wanted HD channels	1
I wanted on-demand movies.	1
I wanted to get Sky Movies	0
I wanted interactive features PROBE: Was this on any particular channels?	0
Other reasons	21
Sample base	127
Weighted population base	1,877

Source: Ofcom Omnibus Survey, October & November 2009, carried out by TNS.

Notes:
1. Question asked: Why did you choose Virgin Media for your TV service rather than Sky?
2. Responses include unprompted (Q.18a) and prompted (Q.18b).
3. Both wave 1 and wave 2 samples were asked this question.
4. Combined sample was restricted to all Virgin Media customers who were personally or jointly responsible for making the decision regarding TV services in the household.

TABLE 9 **Main reasons among Virgin Media subscribers for not considering Sky**

Reasons for not considering Sky	*%*
Just didn't think about other options	34
Didn't want a satellite dish	26
I wanted a package including phone and/or Internet	21
Too expensive	19
Already have other TV service	10
Can't get a satellite dish where I live	4
Didn't think you could get Sky Movies on Sky	3
Someone else's choice in the household	1
Didn't think you could get Sky Sports on Sky	1
Don't like Murdoch/the owner	1
Never heard of Sky	0
Other reason	15
Do not know	15
Sample base	152
Weighted population base	1,956

Source: Ofcom Omnibus Survey, October & November 2009, carried out by TNS.

Notes:
1. Question asked: Q.20a & b Why didn't you consider Sky for your TV service?
2. Only the wave 1 sample was asked this question.
3. Sample was restricted to all Sky customers who were personally or jointly responsible for making the decision regarding TV services in the household.

17. Tables 2 to 9 show that:

(a) When asked which other TV providers they considered when they chose their TV service, 72 per cent of Sky's customers (in wave 1) said that they did not consider another service at all, 14 per cent said they considered Virgin Media, 3 per cent said they considered Freeview and 2 per cent said they considered BT Vision. Similar results were obtained in wave 2 (see Table 5).

(b) When Sky customers who considered Virgin Media were asked why they picked Sky over Virgin Media, 8 per cent said that they wanted to get Sky Movies, in contrast with 21 per cent who said they wanted to get Sky Sports (see Table 6). However, it was not clear how this result should be interpreted given that Sky Movies was available on Virgin Media at this time. This result may have reflected a lack of awareness among some consumers that Sky Movies was available on Virgin Media, or it may have reflected a view that Sky Movies was more attractive when sold via Sky (either because of cost or because of access to other features).

(c) When Sky customers (from wave 1) who did not consider Virgin Media were asked why they did not consider Virgin Media or cable TV for their TV service, 3 per cent said that they did not think they could get Sky Movies on Virgin Media/ cable (compared with 5 per cent who said that they did not think they could get Sky Sports on Virgin Media). The three most popular responses were: (i) they could not get cable where they lived (36 per cent); (ii) they did not think about other options (23 per cent); and (iii) Sky seemed the obvious choice for Sky channels (18 per cent). (Table 7 shows the full results.)

(d) In contrast, 35 per cent of Virgin Media customers (in wave 1) said that they considered Sky, followed by 8 per cent who considered BT Vision, and 2 per cent who considered Freeview, before making their decision. (The figures for wave 2 were slightly lower with 27 per cent having considered Sky, 2 per cent BT Vision and 1 per cent Freeview.) Similar to the results among Sky's subscribers, a high proportion said that they did not consider any other service (46 per cent in wave 1 and 60 per cent in wave 2). (Table 5 shows the full results.)

(e) Of those customers who considered Sky but chose Virgin Media, 46 per cent did so because the service was cheaper/competitively priced, 23 per cent did so because the installation was cheaper, 19 per cent did so because they wanted the broadband and telephone service offered by Virgin Media and 18 per cent did so because of the range of services included in the offer (eg broadband and telephony). No respondents said that they wanted to get Sky Movies (although 1 per cent said they subscribed to Virgin Media because they wanted to get Sky Sports) (see Table 8).

(f) Of those Virgin Media customers who did not consider Sky at all (from wave 1), 3 per cent said that they did not think they could get Sky Movies on Sky, and 1 per cent said they did not think they could get Sky Sports on Sky. The four most popular answers were: (i) did not think about other options (34 per cent); (ii) did not want a satellite dish (26 per cent); (iii) wanted a package including phone and/or Internet (21 per cent); and (iv) Sky was too expensive (19 per cent). (Table 9 shows the full results.)

18. Overall, we found it difficult to conclude much about the role of Sky Movies in consumers' choice of pay-TV provider on the basis of this evidence, not least because Sky Movies was available from both Sky and Virgin Media when these questions were asked. The evidence did suggest that, where people suspect that Sky Movies (or at least some aspects of Sky Movies) might not be available on Virgin Media, this may influence their choice of provider but, as this conclusion was based on uninformed responses, it could be unreliable.

Ofcom's Willingness to Pay survey (2008)

19. Ofcom's Willingness to Pay survey (2008)[9] asked 391 people 'Which of the following best describes your household's reason for subscribing to Sky Movies and Sky Sports'? There were two waves of this research (with 260 respondents in the first wave and 131 in the second wave). Across both waves, 44 per cent of respondents said that they subscribed to Sky Movies because they wanted Sky Sports and Sky Movies did not cost much extra; 26 per cent said that having Sky Movies was as important as having Sky Sports; and 26 per cent said that they subscribed to Sky Sports because they wanted Sky Movies and Sky Sports did not cost much extra. This research is also mentioned in Appendix 4.11 (see, in particular, Table 1 and paragraph 15).

Ofcom's online content omnibus survey (2008)

20. Ofcom's online content omnibus survey asked subscribers to Sky's premium channels what their most likely response would be if Sky's movie channels (and other premium channels) were no longer available on the TV service to which they currently subscribed. Overall, around half said that it would not have any impact, ie they would remain with their current pay-TV provider, but 22 per cent said that they would switch to a different provider, and 20 per cent said that they would switch to FTA services. Among subscribers who took only Sky Movies, 55 per cent said that they would remain with their current pay-TV provider, 32 per cent said they would switch to FTA; and 8 per cent said they would switch to a different provider.

21. To establish the likelihood of this claimed behaviour, Ofcom asked the same respondents how likely they would be actually to undertake this action. Of those who said

[9] Second Pay TV Consultation, Annex 10, Figure 17.

that they would remain with their current pay-TV provider, 70 per cent said that they were very likely to do this (and an extra 20 per cent said they were fairly likely). Of those who said that they would switch to another provider, 60 per cent said they were very likely to do this (and an extra 28 per cent said they were fairly likely). Of those who said that they would switch to FTA services, 45 per cent said they were very likely to do this (and an extra 35 per cent said they were fairly likely).[10]

Ofcom's other surveys

22. Ofcom has commissioned several other surveys which have explored the significance of movie channels in choosing a pay-TV provider. Ofcom commissioned three quantitative surveys, conducted in 2006/07, which contained relevant questions to this issue. However, since then, there have been a number of changes in the movie services offered on TV, both in Sky's offering and the offerings of other providers, which are likely to influence the relevance of the results. We could not rule out that these changes may have influenced the significance to consumers of movie channels and, for this reason, we placed less weight on these older survey results.

23. The results from Ofcom's *Pay TV research (phase 1)* indicated that:

- Content was a 'must-have' element of a TV service for most people. Movies were the third most important genre for both pay-TV customers and FTA customers, after sports and soap operas; and movie channels were the second most important channel genre for pay-TV customers and the fourth most important channel for FTA customers, after sports, children's and history/geography.

- However, in terms of the specific channels which were important among pay-TV subscribers, just 2 per cent cited Sky Movies, compared with 12 per cent who cited Sky 1, 9 per cent who cited Sky Sports, 9 per cent who cited the Discovery channel and 5 per cent who cited the Living channel. Sky Movies had a similar response rate to National Geographic, Nickelodeon Jr, Hallmark, Sci-Fi and the Cartoon Network. Spontaneous channel mentions for the PSB channels tended to be higher, eg 18 per cent cited BBC1.

24. The results from Ofcom's *Pay TV research (phase 2)*[11] indicated that 42 per cent of Virgin Media customers who took only Sky Movies (ie no other premium channel) would switch from Virgin Media to Sky if Sky Movies and Sky Sports (ie the premium channels) were no longer available on Virgin Media. The equivalent figure for customers who took only Sky Sports was 53 per cent, and for customers who took both Sky Movies and Sky Sports the proportion who would switch was also 53 per cent. However, Ofcom suspected that these results might have been subject to stated preference bias, as respondents may have exaggerated the likelihood of switching to alternative providers following the loss of Sky's premium channels. To adjust for this possibility, when using these figures to assess the impact on Sky's profitability of withdrawing the supply of its premium channels, Ofcom reduced the number of customers stating a likelihood of switching away from Virgin Media by 10 per cent and increased the number of customers stating a likelihood of remaining with Virgin Media by a corresponding amount (and then tested this result with sensitivity analysis).

25. The results from Ofcom's *Pay TV research (phase 3)* indicated that:

---

[10] Second Pay TV Consultation, Annex 10, Figures 18 & 19.

[11] See paragraph 3.48 of Annex 8 to the Second Pay TV Consultation, and associated footnotes, for more details as to how these final switching percentages were arrived at.

- Of the respondents who subscribed to both Sky Movies and Sky Sports (regardless of whether they did so from Sky or Virgin Media), 47 per cent subscribed to Sky Movies because they wanted Sky Sports and Sky Movies did not cost much extra; 23 per cent saw both sets of content as equally important; and 23 per cent wanted Sky Movies and Sky Sports did not cost much extra.[12]

- When asked how they would react to the withdrawal of Sky Movies, 80 per cent said that they would continue subscribing to Sky Sports (which compares with 60 per cent who said they would continue subscribing to Sky Movies if Sky Sports were no longer available). Whilst respondents seemed less 'loyal' to Sky Movies than they were to Sky Sports, it is notable that the majority of subscribers would continue subscribing to Sky Movies even if they could not get Sky Sports, suggesting that Sky's movie channels did influence consumers' choice of pay-TV provider over and above the presence of Sky Sports.

26. In 2007, Ofcom also commissioned some qualitative research on the digital TV market[13] which explored, among other things, the degree to which consumers switched to Sky to access specific content. In relation to Sky Movies, it found that:

    (a) Freeview was not considered as a viable alternative to pay TV, mostly due to the lack of Sky Sports, Sky Movies or specific subscription channels, although the channel line-up, once understood, was more appealing than respondents had expected.

    (b) In addition to premium content such as Sky Sports and Sky Movies, a number of other subscription channels were mentioned spontaneously by respondents as reasons to subscribe to pay TV, including Sky 1, Living, UKTV Gold, Discovery, Animal Planet, National Geographic and the Disney Channel.

    (c) Of those who had recently switched their pay-TV provider, more had done so in order to receive specific content than had done so because of deals on bundled services (although the research did not specify the 'specific content').

27. Whilst this evidence suggested that Sky Movies was one of the types of content that influenced some consumers in their choice of pay-TV provider, because the research was qualitative, and confined to one region, we could not gain a sense of the relative significance overall and we were unable to place much weight on it.

Pay-TV retailers research

Sky consumer research

28. Sky provided us with various internal presentations which consider the ongoing subscription trends of its Sky Movies packages, consumers' satisfaction with Sky Movies, and the factors which explain consumers' decisions both to sign up for a premium movie package and to drop the package. Sky noted that there were other product differentiators that mattered in consumers' choice of getting a pay-TV service. These included offering consumers bundles of pay TV with low-cost broadband, discounted PVRs or HDTV, and offering consumers small packages of pay TV at a low cost which provided some additional choice over FTA channels.

[12] These results are similar to those obtained in the Ofcom Willingness to Pay survey (2008) and the same comments apply vis-à-vis interpretation.
[13] Summarized in Annex 15 to the First Pay TV Consultation.

29. Sky's [✂] looked at Sky's performance during the fourth quarter of its 2010 financial year using data collected by the [✂].[14] This research looked into the main reasons provided by consumers for their choice of pay-TV provider. The results showed that [✂] per cent of Sky's subscribers decided to subscribe to Sky because Sky offered them value for money. The [✂] was the ability to record programmes ([✂] per cent), while [✂] per cent said that they had picked Sky for the quality of content it offered. From this survey, we could not infer the significance of Sky's movie channels on consumers' choice of pay-TV provider as the prompted question did not have movies as an option. Nevertheless, there seemed to be a positive correlation between the presence of Sky Movies and satisfaction with Sky's services as the results suggested that consumers with Sky's movie channels were more likely to be satisfied with Sky's services. However, as there were other factors influencing consumers' satisfaction, such as having Sky+ or being younger, this research did not provide evidence on how much movies accounted for consumers' satisfaction.

30. Sky's internal documents indicated that consumers used a range of movie services to satisfy their movie needs and usage of different platforms tended to be based on both the situation and the occasion, rather than being driven by specific content. Sky submitted evidence which suggested that its movie channels [✂] among households which did not subscribe to them. Sky's research suggested that [✂] per cent of Sky's customers without Sky Movies believed that Sky Movies provided the best way to watch movies at home (although the largest category was '[✂]'). The percentage was lower, [✂] per cent, among consumers who were not Sky customers.

31. Sky's survey results also showed that Sky Movies was not regarded as an important element in consumers' choice of pay-TV provider. The results showed that, among all Sky subscribers, [✂] per cent considered Sky Movies to have been the main reason for subscribing to Sky.[15] The percentage was [✂] per cent, among those who were Sky Movies subscribers. For both categories of consumers, the fact that Sky offered the widest choice ([✂] and [✂] per cent respectively), as well as the fact that Sky offered Sky Sports ([✂] and [✂] per cent respectively), [✂] in the decision to sign up with Sky.

32. Some consumers might regard the availability of certain programmes or channels as important factors for continuing their pay-TV subscriptions. Sky's research results showed that, among Sky's subscribers, [✂] per cent continued to subscribe to Sky because of the presence on Sky's services of a specific TV channel. During the 12 months to September 2010, [✂] per cent of Sky's subscribers who said that they continued to subscribe to Sky because of specific TV channels (or groups of channels) mentioned the Sky Movies channels. [✂] (see Table 10). As [✂] of respondents said that they continued to subscribe to Sky because of specific TV channels, these figures suggested that [✂] per cent of all Sky subscribers continued to subscribe to Sky because of the availability of Sky's movies channels, compared with [✂] per cent for Sky Sports and [✂] per cent for Sky 1.

---

[14] Sky's financial year ends on 30 June.
[15] [✂]

TABLE 10 **Sky Content Tracker results**

per cent

	Respondents sub-scribing because of specific channels	*For respondents subscribing because of a specific channel: channels which most encouraged them to continue Sky subscription**		
		Sky Movies	*Sky Sports*	*Sky 1*
2009 Q4	[✂]	[✂]	[✂]	[✂]
2010 Q1	[✂]	[✂]	[✂]	[✂]
2010 Q2	[✂]	[✂]	[✂]	[✂]
2010 Q3	[✂]	[✂]	[✂]	[✂]
Average	[✂]	[✂]	[✂]	[✂]

Source: Sky.

*Respondents could choose more than one channel. Only the results for Sky Movies, Sky Sports and Sky 1 are shown.

33. Sky also pointed to additional internal presentations (based on Sky's regular surveys), which it said showed that [✂].

34. Additional research commissioned by Sky in 2007 found that Sky was the preferred pay-TV provider among some non-pay-TV customers. This research found that [✂] per cent of potential Sky customers who were terrestrial analogue[16] or Freeview customers saw the more channels offered by Sky as the main reason for considering Sky as their pay-TV provider. However, it appeared to us that the results of this research suggested only that consumers value having access to more channels, and we could not infer from it the value placed on Sky Movies by potential consumers when considering their choice of pay-TV provider.

35. Since July 2010, Sky included a question in its content tracker survey asking respondents which of a list of 19 channels or content groups were the reasons they subscribed to Sky.[17] The results for July to September 2010 suggested that [✂] per cent of respondents gave access to Sky Movies as one of the reasons for subscribing to Sky (multiple responses were allowed).

Virgin Media consumer research

36. [✂] However, it provided us with various presentations and market research which considered the main drivers for consumers' choice of pay-TV provider and some research which looked into consumers' satisfaction with their pay-TV provider.

37. [✂]

38. [✂][18,19]

39. [✂]

40. [✂]

41. [✂]

[16] Terrestrial analogue refers to those who do not have any pay-TV subscriptions or Freeview.
[17] [✂]
[18] [✂]
[19] [✂]

BT Vision consumer research

42. BT provided us with various pieces of market research which looked into the significance of content and other factors in consumers' choice of pay-TV provider.

43. BT gathered research data on the proportion of each consumer segment that considered Sky Movies to be 'essential' as part of a pay-TV proposition. From this data, BT found that [✂] per cent of all pay-TV consumers considered Sky Movies to be 'essential'.

44. BT also showed us the results of some quantitative consumer research undertaken in June and August 2010, which looked into the main factors which led customers of BT Vision to cease their subscriptions. [✂] per cent of respondents said that [✂] was one of the determining factors in cancelling their BT Vision subscription. Of these respondents, nearly [✂] per cent cited [✂]. These results suggested that [✂] was a significant factor among many former BT Vision subscribers when deciding to switch to Sky's pay-TV services.

45. During the course of our inquiry, BT provided us with the results of two pieces of consumer research which it had commissioned. As a general matter, we attach less weight to research by parties with an interest in the outcome of our inquiry which has been commissioned specifically to influence our inquiry than to research by independent organizations or to research carried out by companies in the ordinary course of business. This is particularly the case where we have not been consulted with in advance, where a comprehensive agency report has not been provided, and where the results of the research have not been published (so that other parties can comment), as with these pieces of consumer research submitted by BT.[20] (However, we

---

[20] In its response to our revised provisional findings, BT said its research had not been commissioned specifically to influence the inquiry. BT said its research was conceived and undertaken by an independent and reputable market research agency in order to provide objective empirical analysis in the course of our investigation. We noted that BT's own summaries of its research referred to bespoke pieces of consumer research commissioned in order to understand better consumer preferences for FSPTW movies and the importance of content (particularly FSPTW movies) in consumers' subscription decisions and switching behaviour. We acknowledged that BT's research was undertaken by an independent and reputable market research agency and we did not intend to imply otherwise. BT also said the briefing discussion with the agency was neutral, and the questionnaire was written in a neutral way designed to elicit balanced responses (all of which BT said was clear from the briefing documents, the wording of the questions, and full questionnaire submitted to us). BT also noted that, as stated in our best practice guidelines on the design and presentation of consumer survey evidence in merger inquiries, sound statistical research required that the specific hypotheses to be tested or the measures to be estimated should be set down before any data was collected. BT said that it was therefore unreasonable to suggest that more weight could be attached to research carried out by companies in the ordinary course of business (ie for a different research purpose testing a different hypotheses) than research undertaken with the express purpose of assessing issues relevant to our inquiry. We did not agree. In our view, research carried out in the ordinary course of business may well be testing similar hypotheses to those we wish to test and it is only when this is the case (and the results appear to be reliable) that we would attach weight to such survey evidence. The more important point is that there is no obvious reason to expect research carried out in the ordinary course of business to be biased in any particular direction. BT also said that it would be unreasonable to suggest that a lack of advance consultation with us should undermine the purpose of research that was designed to evaluate independently our hypothesis. However, in our view, advance consultation can help address any bias that may arise from the research being commissioned by a party to the inquiry. BT also said that, as a practical matter, it would have been extremely difficult for it to engage with us on its various pieces of research given the extremely short timetables afforded to BT throughout our investigation to respond to various key consultation documents. However, we observed that, even if discussion with ourselves had delayed the fieldwork by a few days, this could have been offset by reducing the time between fieldwork and submission (in the case of BT's first research, fieldwork was carried out between 26-30 November 2010 and the summary was submitted on 9 February 2011; and in the case of BT's second research, fieldwork was carried out between 11-14 February 2011 and the summary was submitted on 31 March 2011). BT also said that where it was afforded sufficient time it did, in fact, consult with us as requested. We noted that BT did consult with us about a later piece of research (carried out after our August 2011 provisional findings, which included comments similar to those in this paragraph) and we also noted that we suggested changes which were reflected in the survey questionnaire, BT also said that, as regards publication of the results, its primary concern was the fact that we appeared to wish to publish details of its proprietary methodology without publishing the details of research and research methodologies used by other respondents to our inquiry. However, where we placed weight on other parties' research which we did not publish, it was on commercially confidential research submitted in response to our information requests. BT also said that we had been selective in the weight we attached to the importance of the publication of research results, since we had not published the results from our Netflix and LOVEFiLM research (despite requests from BT to do so) yet we had attached considerable weight to this research. However, we did publish the key results from this research (see paragraphs 24–29 in Appendix 4.2 and Appendix 4.3 (albeit the extent of published results was less than usual for our surveys due to concerns

acknowledged that, after the surveys had been carried out, BT provided us with details of its methodology and results). Additionally, we noted that the results of BT's online research may be less reliable than those of face-to-face or telephone research, due to the nature of the market, and the absence of a trained intermediary who could engage the attention of the survey respondent and who could clarify or probe responses in a controlled way.[21]

(a) BT's first piece of research assessed, among other things, the extent to which BT Vision could potentially constrain Sky by attracting current Sky customers to BT Vision and was carried out over the Internet in November 2010. This research specifically looked into how important Sky Movies was for current Sky Movies subscribers when assessing whether to change their existing movie service, and the amount of compensation which would be required in order to induce them to accept an alternative pay-TV service (ie one which did not include FSPTW movie content). [✂] Other aspects of this research are referred to in paragraphs 46 and 47 below and Appendix 4.1 (paragraph 45).

(b) BT's second piece of consumer research was aimed at understanding what portion of all pay-TV subscribers considered Sky Movies channels to be important, and was carried out over the Internet in February 2011. Out of a sample of 2,023 pay-TV subscribers, among those subscribers who had either switched their pay-TV provider or signed up for a new pay-TV subscription (ie 9 per cent of all surveyed subscribers), [✂] per cent cited the fact that their new provider had all the TV channels/content that they wanted as the main reason for picking their new pay-TV provider. Of these respondents, [✂] per cent stated specifically that Sky Movies channels were important and this proportion increased to [✂] per cent among Sky Movies subscribers. Among respondents who had considered switching provider over the last two years) and who cited the fact that their current pay-TV operator had all the TV channels/content that they wanted as a key reason for not switching and staying with their current provider, [✂] per cent (and [✂] per cent of Sky Movies subscribers) cited Sky Movies as the most important content in their decision to stay. Additionally, the survey results suggested that, among those who considered switching provider and moving to BT Vision but decided not to do so as BT Vision did not have all the channels/content that the subscriber wanted, the unavailability of Sky Movies constituted a main factor in the decision not to switch for [✂] per cent of subscribers. This proportion rose to [✂] per cent among those who had a Sky Movies subscription.

46. Among matters investigated in BT's first piece of research (see paragraph 45), respondents were asked to think about the option to watch blockbuster movies and when they become available:

(a) [✂] per cent of respondents agreed/agreed strongly with the statement 'I really look forward to watching blockbuster movies on Sky Movies as soon as they come out' ([✂] per cent disagreed or disagreed strongly).

- - - - - - - - - -

about the effects of disclosing more information on the businesses of LOVEFiLM and Netflix, which are entrants to the pay-TV retail market). Moreover, this research was commissioned by ourselves rather than by a party to the inquiry. Finally, we noted that, although we attached less weight to BT's research than to the research we commissioned, we did consider it wherever relevant, including in carrying out our own analysis of responses (for example, in paragraph 5.37).

[21] In its response to our revised provisional findings, BT pointed out that our survey of Netflix and LOVEFiLM users (see Appendix 4.3) was carried out online and that we had attached weight to this research, despite the absence of a trained intermediary. However, we did not suggest that research should never be carried out online, just that online research results can in some circumstances be less reliable than those of face-to-face or telephone research. We regarded online research as appropriate to surveying Netflix and LOVEFiLM users as they had signed up for their chosen service online and most of their interactions with their service provider would be over the Internet.

(b) [✂] per cent of respondents agreed/agreed strongly with the statement 'I often read blockbuster movie reviews and plan to watch/set timer/record them to watch at the earliest time' ([✂] per cent disagreed or disagreed strongly).

(c) [✂] per cent of respondents agreed or agreed strongly with the statement 'I tend to browse for a film I want to watch, it doesn't concern me whether it's a new movie or not' ([✂] per cent disagreed or disagreed strongly).

(d) [✂] per cent of respondents agreed/agreed strongly with the statement 'I would rather have a big library of older movies than a smaller selection of new movies', whereas [✂] per cent of respondents disagreed/disagreed strongly.

(e) [✂] per cent of respondents agreed/agreed strongly with the statement 'I prefer newer movies to older movies' ([✂] per cent disagreed or disagreed strongly).

(f) [✂] per cent of respondents agreed/agreed strongly with the statement 'I would not want to wait two years to see a blockbuster movie' ([✂] per cent disagreed or disagreed strongly).

47. BT's first piece of research also investigated preferences for a subscription movies service encompassing movies from the SSPTW and library window. Respondents were reminded that their current subscription to Sky Movies allowed them to watch blockbuster movies in the period between six months and two years after they had been released in the cinema. Respondents were then asked to consider a new collection of channels which showed a much wider range of older blockbuster movies than they got on Sky Movies currently, showing movies from two years after they had been released in the cinema, but not showing any movies that were newer than this:

(a) Respondents were asked to imagine that they were going to sign up for an entirely new subscription TV service, that the price was the same for both options and that they could only choose one option: [✂] per cent said they would choose Sky Movies and [✂] per cent said they would choose the SSPTW/library movies channels.

(b) Respondents were then asked to imagine a scenario where Sky Movies was no longer available through their current TV service but in exchange they got the SSPTW/library movies channels:[22] [✂] per cent of respondents stated that in such circumstances they would consider cancelling their TV subscription service altogether, a further [✂] per cent said they would be 'unhappy' with the change and only [✂] per cent stated that they would be 'happy' with the change, no matter how cheap the subscription to the hypothetical SSPTW/library movies channels was.

(c) Respondents were then given the choice of subscribing to either Sky Movies or the hypothetical SSPTW/library movies channels, but not both—again, it was assumed that everything else about their current pay-TV subscription (including its price) remained the same: [✂] per cent of respondents stated that they would choose to continue to subscribe to Sky Movies, though [✂] per cent said they would prefer the library movies service.

(d) Respondents who stated that they would choose to continue to subscribe to Sky Movies were then asked whether they might be willing to accept a change in their subscription to remove Sky Movies but include the hypothetical SSPTW/library

[22] Everything else about their subscription (such as whether or not they took the Sky sports channels or the particular mix of entertainment packs) was assumed to remain the same, as would the price for their overall pay-TV subscription.

movies channels instead if there was a reduction in their total monthly subscription (and if so, how much of a reduction in their total monthly subscription they would need): [✂] per cent of these respondents stated that they would always want to keep Sky Movies, no matter how cheap a subscription including the hypothetical library movies channels was.

(e) The remaining [✂] per cent of respondents were asked how much of a reduction in their total monthly subscription they would need to receive to be willing to remove Sky Movies from their current subscription but include the SSPTW/library movie channels instead: [✂] per cent of these respondents would require a reduction of more than £[✂] and the average reduction required was £[✂].

Importance of FSPTW content to the appeal of Sky Movies

1. In our August 2011 provisional findings, we noted that the Sky Movies channels accounted for a modest proportion (about 16 per cent[1]) of total movie viewing but almost all viewing of FSPTW movies (to the vast majority of which Sky had exclusive rights). However, we noted that other broadcasters could and did show non-FSPTW movies.[2] Following our August 2011 provisional findings, LOVEFiLM and Netflix have gained some exclusive FSPTW content from non-major studios, which is gradually becoming available on their services. However, Sky continues to have the FSPTW content of the major studios and some from non-major studios, which together represents over [✂] per cent of all FSPTW content by box office revenue (see Appendix 4.12).

2. Table 1 shows that FSPTW movies account for [✂]. The importance of FSPTW movies varies across the Sky Movies channels but is highest for Sky Premiere, which shows the most recent movies and is the most popular of the Sky Movies channels. [✂], which indicates that Sky attaches [✂] to FSPTW movies [✂].

TABLE 1 **Total programming and viewing on Sky Movies channels, 12 months to March 2012**

	Broadcasts		*Viewing*	
	Number	*%*	*'000 views*	*%*
FSPTW movies				
US box office >$100m and/or UK box office >£10m	[✂]	[✂]	[✂]	[✂]
US box office $50m–$100m and/or UK box office £2.5m–£10m	[✂]	[✂]	[✂]	[✂]
US box office <$50m and/or UK box office <£2.5m	[✂]	[✂]	[✂]	[✂]
Straight-to-DVD titles (no UK or US box office release)	[✂]	[✂]	[✂]	[✂]
TV movies	[✂]	[✂]	[✂]	[✂]
Total FSPTW	[✂]	[✂]	[✂]	[✂]
Other content				
Library movies	[✂]	[✂]	[✂]	[✂]
Other programmes	[✂]	[✂]	[✂]	[✂]
Total	[✂]	[✂]	[✂]	[✂]

Source: Sky.

Note: The FSPTW percentage varies according to channel. It is highest for the Sky Movies Premiere channel and lowest for the Sky Movies Classics and Sky Movies Modern Greats channels. The FSPTW percentages of broadcasts and viewing for the channels included in the Sky Movies 1 pack are [✂] and [✂] per cent respectively. The FSPTW percentages of broadcasts and viewing for the channels included in the Sky Movies 2 pack are [✂] and [✂] per cent respectively.

3. In relation to Sky's activities, we noted also:

   (a) An internal Sky business plan for Sky Movies [✂] stated that [✂]. This business plan stated that [✂]. It also stated that [✂].

   (b) Sky customers can see a large number of films on TV without paying a subscription fee and yet nearly all Sky Movies customers pay at least £7 per month for the additional benefits from Sky Movies, suggesting that consumers place some value on recent content (though there are other benefits to Sky Movies, for

[1] UK Film Council data (see Section 2) shows that in 2009 subscription film channels accounted for 16 per cent of the total audience for feature films on TV (except nVoD). Sky told us that in households with Sky Movies channels, Sky Movies channels accounted for [✂] per cent of TV movie viewing.
[2] The *UK Film Council Statistical Yearbook 2010* states that there were 2,070 unique film titles shown on terrestrial channels (ie the five PSB channels) in 2009 and 3,283 on other FTA and basic pay channels (we note that there may be substantial overlap in titles between the two categories). The same source states that there were 1,606 unique film titles shown on subscription movies channels (Sky Movies and Disney Cinemagic) although again we note that there may be overlap with the titles shown on FTA and basic pay channels.

example that, for dual movies subscribers, movies can be viewed on demand at any time via Anytime+).[3]

4. Sky told us that it accepted that movies in the FSPTW were highly significant to the appeal of Sky Movies to customers.[4] However, Sky added that, if movies in the FSPTW were all that mattered to consumers, it could rely on one or two movie channels and simply fill them with movies as they entered the FSPTW. Sky pointed out that it had 12 movie channels covering a variety of genres, with HD versions of each channel, and that it constantly strived to improve the attractiveness of its channels.

5. In their responses to our August 2011 provisional findings, Paramount and [✂] said that the evidence did not support our finding that FSPTW content was highly significant to the appeal of Sky Movies to customers, pointing in particular to the survey evidence we had cited. Disney highlighted that, although FSPTW content might be significant to the appeal of the Sky Movies Premiere channel, [✂] the other Sky Movies channels included much non-FSPTW content. Universal told us that, in the USA, FSPTW movie content had become a less significant factor contributing to the success of premium pay-TV channels than original TV content,[5] which had rapidly increased in importance over the last decade. Universal observed that this trend was already apparent in the UK pay-TV market and appeared likely to accelerate further over time.

6. We agreed with Sky that there is more to the appeal of Sky Movies than the fact that it offers the majority of movies in the FSPTW (see paragraph 4). Nevertheless, in our view, FSPTW content is important to the appeal of Sky Movies. In particular, we put weight on the fact that FSPTW movies account for [✂] per cent of viewings on Sky Movies and [✂] per cent of its movie costs (see paragraph 2) and that Sky accepted that movies in the FSPTW are significant to the appeal of Sky Movies (see paragraph 4).

[3] Sky's dual movies and dual sports package costs £8 per month more than Sky's dual sports package (see Table 4.2), though most Sky subscribers benefit from a price freeze and thus pay pre-1 September 2011 prices for which the cost of a dual movies and dual sports package was £7 per month more than a dual sports package. The price difference is smaller for single movies with sports packages compared with sports-only packages but there are [✂] subscribers to these packages.
[4] Sky said that this proposition was immediately obvious and required no real analysis to be established.
[5] As an example, Universal noted that the US channel provider Showtime did not benefit from exclusive FSPTW rights from any of the major studios, but had been able to gain a significant number of subscribers largely on the strength of its original TV programming.

Illustrative adjustment of survey responses for choice of pay-TV retailer with Sky Movies

1. In paragraph 6.37 we considered responses to a survey question that asked Sky Movies subscribers what they would do if their current pay-TV provider stopped offering Sky Movies (whether or not they would remain with their current provider, and, if not, whether they would switch to another pay-TV provider with or without Sky Movies or stop subscribing to pay TV). The results implied that about 7 per cent of all traditional pay-TV subscribers would stop paying for their current pay-TV service if their provider stopped offering Sky Movies.

2. However, we noted in paragraph 6.38 that Sky and Virgin Media (and some small cable operators) were the only pay-TV retailers offering Sky Movies, and some Sky subscribers were not able to access cable and vice versa. Consequently, we noted that there may be some subscribers who said that they would continue with their current pay-TV provider but for whom the presence or absence of Sky Movies on a pay-TV platform would have induced a switch if they had had a choice of pay-TV provider with Sky Movies.

3. We illustrate in Table 1 a possible adjustment of the survey responses to take account of this point.

4. The first column of Table 1 shows all pay-TV subscribers. As shown in this column, the survey responses implied that, if Sky Movies were no longer available from their current pay-TV provider, about 4 per cent of all pay-TV subscribers would switch to another pay-TV provider with Sky Movies and 3 per cent would switch to another pay-TV provider without Sky Movies or stop subscribing to pay-TV.[1]

5. We assumed that half of respondents had a choice between pay-TV retailers with Sky Movies and the other half did not (this appeared appropriate as Virgin Media's network covers about half of homes in the country).

6. The second and third columns of Table 1 show pay-TV subscribers who respectively did and did not have a choice of pay-TV provider with Sky Movies. We assumed that all of the 4 per cent of pay-TV subscribers saying they would switch to another pay-TV provider with Sky Movies actually had a choice of pay-TV provider with Sky Movies and fell into the second column. We then made two alternative assumptions about how other subscribers who would switch away from their current TV provider if Sky Movies were no longer available (ie those who would drop Sky Movies) divided between the second and third columns:

   (a) In panel A, we assume that all subscribers who said that they would switch away from their existing pay-TV provider and who could subscribe to another pay-TV provider offering Sky Movies would switch to that other provider, rather than dropping Sky Movies. This seemed a plausible assumption for consumers for whom the availability of Sky Movies was significant in their subscription decisions. Under this assumption, the 3 per cent of subscribers who would drop Sky Movies must be those without a choice of Sky Movies provider and all of them were therefore allocated to the third column.

[1] The latter category (the 3 per cent) includes respondents who would stop subscribing to Sky Movies but did not know what they would do instead.

(b) In panel B, we assume that this is not the case. Rather, we assume that the proportion of Sky Movies respondents who would respond by dropping Sky Movies altogether is the same for those with a choice of Sky Movies provider as for those who did not have a choice of Sky Movies provider. This seemed to us a less plausible assumption than *(a)* since many of those switching away from their current pay-TV provider (because it no longer offered Sky Movies) would be likely to switch to another provider that did offer Sky Movies, if that option was available to them. Under this assumption, the 3 per cent of subscribers who would drop Sky Movies altogether were allocated pro rata to the second and third columns. Since we assumed that half of pay-TV subscribers had a choice and half did not, this meant that 1.5 per cent were allocated to each of the second and third columns.

7. The fourth column of Table 1 then shows our adjustment for the effect of some subscribers not having a choice of pay-TV provider with Sky Movies. We simply assume that, if they had a choice of pay-TV provider with Sky Movies, subscribers who did not currently have a choice of pay-TV provider would do the same as subscribers who did currently have a choice of pay-TV provider, ie that the fourth column was the same as the second column. The adjusted total of subscribers switching their pay-TV provider if their current provider stopped offering Sky Movies was then the sum of the second and fourth columns, and is shown in the fifth column of Table 1:

(a) Under the panel A assumption, the percentage of all traditional pay-TV subscribers who would switch their pay-TV provider if their current provider stopped offering Sky Movies increased from 7 to 8 per cent.

(b) Under the panel B assumption, which we regarded as less likely, the percentage increased from 7 to 11 per cent.

TABLE 1 **Illustrative adjustment of survey responses to allow for subscribers who do not currently have a choice of Sky Movies pay-TV provider**

percentage of all pay-TV subscribers

	1	*2*	*3*	*4*	*5*
	*Total**	*Subscribers with choice*	*Subscribers without choice*	*Subscribers without choice: adjusted†*	*Total: adjusted‡*
Base: all pay-TV subscribers	100	50	50	50	100
A: Assumes all respondents with a choice of provider switch to another provider with Sky Movies					
Subscribers switching to another pay-TV provider with Sky Movies	4	4	0	4	8
Other subscribers switching away from current pay-TV provider§	3	0	3	0	0
Total	7	4	3	4	8
B: Alternative assumption					
Subscribers switching to another pay-TV provider with Sky Movies	4	4		4	8
Other subscribers switching away from current pay-TV provider†	3	1.5	1.5	1.5	3
Total	7	5.5	1.5	5.5	11

Source: CC calculations.

*December 2010 survey responses from Sky Movies respondents pro-rated by one-third to adjust for pay-TV subscribers without Sky Movies. As explained in paragraph 6.37, 12 per cent of Sky Movies respondents said they would switch to another pay-TV provider with Sky Movies and another 9.5 per cent of Sky Movies respondents said they would switch away from their current pay-TV provider;—multiplying by the one third of pay-TV subscribers who are Sky Movies subscribers gives 4 per cent and 3 per cent respectively of all pay-TV subscribers.
†Adjusts responses from subscribers without choice of Sky Movies pay-TV provider to be the same as responses from subscribers with a choice of Sky Movies provider.
‡Total of subscribers with choice and subscribers without choice (adjusted).
§Includes respondents who would stop subscribing to Sky Movies but did not know what they would do instead.

8. In summary, Table 1 suggests that the availability of Sky Movies potentially affects the choice of pay-TV retailer for about 8 to 11 per cent of pay-TV subscribers, with the lower figure being the more plausible.

9. We also carried out some further analysis to assess how sensitive the above results were to different assumptions.

(a) It seemed to us that some of the households who did not have a choice between pay-TV retailers with Sky Movies might nevertheless have said they would switch to another pay-TV provider with Sky Movies, for example because they treated the question as hypothetical or because they were not aware that they were unable to receive pay-TV from another provider with Sky Movies. If we assumed that this was the case for half of the respondents who did not have a choice between pay-TV retailers with Sky Movies, the range in Table 1 would change to 7 to 9 per cent.

(b) The analysis in Table 1 excludes those answering 'don't know' to whether or not they would continue to use their existing provider if it no longer provided Sky Movies.[2] It also assumes that those who would not continue to use their existing provider but did not know what they would do instead would not switch to another provider with Sky Movies.[3] If we ignored both groups of 'don't knows' (equivalent

[2] 65 per cent said that they would stay with their existing provider; 22 per cent said they would not do so and 13 per cent said they did not know whether or not they would continue to use their existing provider. See paragraph 6.37 and Appendix 4.10, paragraphs 55–56 and Figure 28.
[3] See footnote to paragraph 4 above.

to assuming 'don't know' respondents were similar on average to other respondents), the range in Table 1 would change to 10 to 14 per cent.

(c) If we both assumed that half of the respondents who did not have a choice between pay-TV retailers with Sky Movies said they would switch to another pay-TV provider with Sky Movies (see *(a)* in this paragraph) and ignored 'don't knows' (see *(b)* in this paragraph), the range in Table 1 would remain at 8 to 11 per cent.

Further analysis of survey responses on the importance of different attributes of a TV film service to Sky Movies subscribers

1. Our December 2010 survey asked respondents, including Sky Movies subscribers, the importance they attached to various attributes of a TV film service (see paragraph 6.63).Table 6.2 (in Section 6) sets out responses from Sky Movies subscribers.

2. We recognized that these results did not relate specifically to those Sky Movies subscribers for whom the availability of Sky Movies was likely to be significant to their pay-TV subscription decisions. Therefore, we carried out a further analysis of responses to our December 2010 survey to distinguish respondents for whom Sky Movies was more likely to be significant to their pay-TV subscription decisions. We distinguished the responses of *(a)* those who would change their pay-TV subscription if Sky Movies was no longer available; and *(b)* those for whom Sky Movies was important to their pay-TV subscription decision (ie very important, or very or quite important). The results of this further analysis are shown in Table 1.

TABLE 1 **Importance of attributes of a TV film service to Sky Movies subscribers**

per cent

	1 *All Sky Movies respondents*	*2* *Respondents who would stop current TV service if Sky Movies was no longer available*	*3* *Respondents for whom Sky Movies was very important to their pay-TV decision*	*4* *Respondents for whom Sky Movies was very/ quite important to their pay-TV decision*
Percentage of relevant respondents indicating certain attributes were very important to them				
The overall cost of the service	62	67	72	63
Films being available on demand—that is you can choose to watch them at a time you like	33	30	42	39
The service being available on a subscription basis—so you only pay a fixed monthly fee with no extras no matter how many films you watch*	27	34	44	34
The total number of films available to watch	26	32	45	35
The minimum length of contract	26	22	30	31
Films being available in high definition	19	26	31	26
The number of films added each week	16	22	31	21
The length of time you have to wait after a film is shown at the cinema before you can watch it on TV	12	6	21	16
Percentage of relevant respondents indicating certain attributes were very or quite important to them				
The overall cost of the service	88	89	90	87
Films being available on demand—that is you can choose to watch them at a time you like	70	64	79	76
The service being available on a subscription basis—so you only pay a fixed monthly fee with no extras no matter how many films you watch*	67	75	79	76
The total number of films available to watch	70	77	78	74
The minimum length of contract	65	65	68	69
Films being available in HD	47	53	58	54
The number of films added each week	59	69	74	68
The length of time you have to wait after a film is shown at the cinema before you can watch it on TV	52	47	64	55
Sample size	375	84	78	197

Source: CC survey.

*A further response was 'films being available on a pay per view basis—so you pay a fixed amount for each film you watch, and do not pay for films you don't want to watch' (in effect films not being available on a subscription basis).

3. The upper panel of Table 1 shows the proportion of relevant respondents indicating that certain attributes were very important to them, and the lower panel shows the proportion of relevant respondents indicating that certain attributes were very or quite important to them:

   (a) The first column shows responses for all Sky Movies respondents (and therefore repeats the information in Table 6.2).

   (b) The second column shows responses for the small number of Sky Movies respondents who said that they would stop their current TV service if their current pay-TV provider stopped offering Sky Movies (see paragraph 6.37). These responses needed to be interpreted with caution since the sample was small (84). However, responses for this group of respondents were broadly similar to responses for all Sky Movies respondents. In particular, recency did not emerge as more important for these respondents—if anything, recency appeared less important for these respondents than for all Sky Movies respondents, though range (ie the total number of films available to watch) emerged as slightly more important.

(c) The third column shows responses for the small number of Sky Movies respondents who said that Sky Movies was very important in their decision to have a TV service from Sky or Virgin Media (see paragraph 6.42). Again, these responses needed to be interpreted with caution since the sample was small (78). However, the relative importance of different attributes was broadly similar for these respondents as for all Sky Movies respondents—a higher proportion of these respondents than of all Sky Movies respondents tended to regard each attribute (except possibly contract length) as very important.

(d) The fourth column shows responses for Sky Movies respondents who said that Sky Movies was either very or quite important in their decision to have a TV service from Sky or Virgin Media (see paragraph 6.42). This was about half of all Sky Movies respondents, and consequently the sample size was larger (197) than for the samples in *(b)* and *(c)* above (shown in the second and third columns). However, a difficulty in interpreting these responses was that, as discussed in paragraph 6.42, it was not clear that Sky Movies could be said to be significant to the subscription decisions of those who responded merely that Sky Movies was 'quite important'. Again, the relative importance of different attributes was fairly similar for these respondents as for all Sky Movies respondents—a higher proportion of these respondents than of all Sky Movies respondents tended to regard most of the attributes as very important (an exception was the overall cost of the service, which nevertheless was still considered important by more respondents than any of the other attributes).

4. In summary, this further analysis did not reveal any major differences in the relative importance of different attributes between respondents for whom Sky Movies was more likely to be significant to their choice of pay-TV retailer and all Sky Movies respondents. In particular, recency was not materially more important in relative terms.

The extent of FSPTW content necessary for a competing movie service

1. In our August 2011 provisional findings, we set out our provisional view that pay-TV products with FSPTW movie content, and Sky Movies which had the majority of this content,[1] were significant to many consumers in their choice of pay-TV retailer. This implied that it was necessary for Sky's pay-TV rivals to offer a movie service similar to Sky Movies (in terms of its FSPTW content) to be able to compete effectively with Sky in the pay-TV retail market. This appendix summarizes the evidence presented in our August 2011 provisional findings on how much movie content in the FSPTW appeared to be necessary in such circumstances. It also summarizes the responses we received to our August 2011 provisional findings on this issue.

Evidence presented in our August 2011 provisional findings

Views of parties

2. Sky told us that a new movie channel could be launched using FSPTW movies from a single major studio together with library content, SSPTW movies and/or movies from non-major studios. Sky noted that this was the model successfully adopted by EPIX in the USA. Sky also told us that focusing on entry via a new dedicated pay-TV movie channel was artificially narrow and overlooked other means of entry, such as the exploitation of FSPTW movies on a mixed-genre channel (either new or existing).

3. Paramount told us that [✄] and [✄] were two of the more prolific distributors of movies and that a new entrant should be able to achieve a critical mass of content through agreements solely with these two studios. [✄]

4. Virgin Media told us that, in order to address the volatility in output and box office success, the need for a high 'refresh' rate and the need to offer a wide choice of movies across a range of different genres, the output of no fewer than three of the major studios would be required to assemble an appealing package which could be marketed as a mid-priced alternative to Sky Movies. Virgin Media submitted that box office performance was the appropriate measure for identifying 'major' studios rather than the quantity of output.

Box office data

5. Virgin Media submitted data which it said demonstrated that, on the basis of UK box office receipts, there were only five non-major studio films in the top 50 in 2010. Virgin Media also told us that Sky only chose to enter into output deals with the major studios and apparently did not consider the non-major studios sufficiently important to merit such deals. Virgin Media said that it understood that Sky dedicated only a single movies channel to the content of non-major studios, Sky Movies Indie, which achieved the lowest viewing figures of all Sky's movie channels.

6. In our August 2011 provisional findings, we noted that content from non-major studios, acquired either through output deals (eg with [✄]) or 'slate' deals, was

---

[1] At the time of our final report, we understood that, occasionally, a small amount of FSPTW content had been available on other services (eg PictureBox).

shown on all of Sky's movie channels, with [✂] per cent of the titles shown on Sky Movies Premiere in 2009/10 having been acquired from non-major studios.

7. In our August 2011 provisional findings, we also reviewed data submitted by Virgin Media and noted that, even on the basis of only the top 50 films in 2010, which might be expected to over-represent the major studios, a potential rival could achieve a share of box office revenues of about 50 per cent by contracting with any two of Warner, Disney and Paramount and several non-major studios (see Table 1) (recognizing that this data was for one year only and box office shares fluctuated significantly from year to year). However, we also noted that customers might be willing to accept a service that offered fewer FSPTW alternatives if it was cheaper than Sky's offering.

TABLE 1 **UK box office performance by studio in 2010, top 50 films**

Studio	*Number of films in the 'Top 50'*	*Revenue in UK box office $*	*Percentage of total revenue %*
Warner Bros	7	244,709,389	21.6
Disney	5	227,185,501	20.1
Paramount	10	215,188,104	19.0
Universal	9	146,989,500	13.0
Fox	8	113,744,170	10.0
Sony Pictures	6	81,263,133	7.2
Total non-majors	5	102,985,423	9.1
Total	50	1,132,065,220	100.0

Source: Virgin Media (sourced from www.boxofficemojo.com/intl/uk/yearly/), CC analysis.

*Sum of non-major studios, which, in this case, were eOne, Lionsgate and Vertigo.

Evidence from the USA

8. We looked at the market structure in the USA (see Appendix 2.4) and noted that FSPTW rights from the six major studios were split between three different cable and satellite movie channel providers: HBO, Starz and EPIX.[2] HBO had FSPTW rights from six studios, including three major studios; Starz had FSPTW rights from two major studios (Disney and Sony Pictures); and EPIX had FSPTW rights from one major studio (Paramount), plus three non-major studios (MGM, Lionsgate and Samuel Goldwyn). In our August 2011 provisional findings we noted that there were differences between the UK and the US markets, which meant that caution was needed when making comparisons between these two markets. In particular, we noted that the scale on which entry needed to occur was likely to be significantly different between a situation where there were three or four incumbent providers, each with some movie content (as in the USA), and a situation where there was only one incumbent provider with all the FSPTW movie content from all the major studios (as in the UK).

Evidence from internal documents

9. We noted that [✂].

10. [✂]

11. [✂]

[2] A joint venture between Paramount, MGM and Lionsgate.

12. We also noted that [✂].

13. [✂]

14. [✂]

15. In our August 2011 provisional findings, on the basis of this evidence, and in light of our views at that time on the significance of FSPTW content to consumers in their choice of pay-TV movie service, we concluded that it was likely that the FSPTW content of at least two of the major studios (supplemented with FSPTW content from some non-major studios, SSPTW content and library content) would be necessary to develop a service that would enable a pay-TV rival to compete effectively with Sky.[3]

Responses to our August 2011 provisional findings and working paper 29

16. In response to our August 2011 provisional findings, Sky reiterated its point that it was not necessarily the case that a rival bidder for FSPTW rights would look to exploit those rights on a new movie channel; rather, the rival might exploit them on a mixed genre channel as had been the case in the USA.

17. Universal told us that we had failed to demonstrate that the licensing of FSPTW rights was either necessary or sufficient to enable competitors to create movie products which could compete with Sky Movies. Universal said that there was already a broad range of movie products (including home video, EST, TVOD, PPV and subscription services) which could and did compete effectively with Sky Movies and it did not accept that a rival needed to create a replica of Sky Movies in order to compete effectively. Universal said that there was no clear evidence in our August 2011 provisional findings to support our view.

18. BT told us that the proposition that the output of two major studios would be sufficient to create a competing proposition to Sky Movies was incorrect and was not supported by the evidence we had received. BT said that:

(a) We had mischaracterized Paramount's evidence in that Paramount had told us that the output of two studios would be sufficient only if it were two specific studios. BT also noted that Paramount had itself acknowledged that it did not have any wholesale or retail distribution channels for TV and that it was not a customer-facing business. BT said that a customer facing pay-TV retail business, such as BT Vision, was likely to be better placed to comment on what constituted the critical mass of FSPTW movie rights necessary to create a competing retail consumer proposition.

(b) Even if the new entrant had the output of the two largest major studios, so long as Sky licensed the FSPTW rights from the remaining four, this would be insufficient to constitute a critical mass and enable an entrant to compete effectively against Sky Movies, as the entrant's channel would be able to show far fewer recent movies than would be available on Sky Movies. BT said that the US market was only consistent with the view that it may be possible to offer a competitive movie proposition based on the FSPTW content of two major studios if no

[3] Given the theory of harm we were investigating, the appropriate test for establishing whether an alternative movie service would enable a pay-TV rival to 'compete effectively' with Sky, in circumstances where we had found FSPTW content to be significant to consumers' retail pay-TV subscription decisions, was whether it represented a sufficiently good alternative such that Sky's position with respect to FSPTW rights did not give it a material advantage in the pay-TV retail market. Even in that context, this question needed to be assessed in the round by reference to all the attributes of the relevant product, such as the range and recency of the content offered, its price, and the platforms/devices over which it was available.

other competitor in the relevant market was able to offer a materially wider range of FSPTW movie content, which Sky would be able to do if a new entrant only had exclusive FSPTW rights from two major studios.

(c) The market shares of the largest studios were not fixed and the positions of the largest studios were not immutable.

(d) The volume of a studio's output was also important and the studio with the largest box office receipts may not produce the greatest volume of movies.

(e) The ownership of Fox by News Corp, which is a 40 per cent shareholder in Sky, was relevant to the availability to Sky's rivals of FSPTW rights. BT said that, if access to Fox's FSPTW movies were critical for an entrant, Sky's common ownership with Fox may well have an adverse effect on the availability and terms of supply of Fox's movies to Sky's competitors.

19. In response to our working paper on market developments (working paper 29), BT also told us that there was no evidence that would support a conclusion that the content needed to create a product which was a substitute for Sky Movies had changed following the launch in the UK of the new services offered by OTT retailers. BT said that we should have particular regard to: *(a)* the different product characteristics of the new Netflix and LOVEFiLM services, which showed that they were not substitutes for Sky Movies; *(b)* the data from our February 2012 survey, which, while flawed, indicated that consumers were not switching from traditional pay-TV services and/or Sky Movies to the services of Netflix and LOVEFiLM; *(c)* the lack of a competitive response from traditional pay-TV retailers to the entry of Netflix and LOVEFiLM; *(d)* the public statements of Netflix's management, which confirmed that its services were a complement to, rather than a substitute for, Sky Movies; and *(e)* the evidence from other territories where Netflix and other OTT retailers had had no discernible effect on subscriptions to premium pay-TV movie services.

Position following our August 2011 provisional findings

20. Following our August 2011 provisional findings, we considered the responses we received and reappraised the evidence we had considered previously. We found that, in our August 2011 provisional findings, we had overstated the importance consumers attach to seeing recent movies and hence to FSPTW content (see Section 6). In the light of both this revised view and the market developments we observed, we found that the FSPTW content on Sky Movies was not significant to consumers' choice of traditional pay-TV retailer. Therefore, it no longer appeared to us that Sky's pay-TV rivals needed to offer a close replica of Sky Movies, in terms of its FSPTW content, in order to be able to compete effectively in the pay-TV retail market.[4] Nevertheless, in Section 7 we present our findings on some of the issues relating to the extent to which there are barriers to acquiring movie content in the FSPTW, in particular of the major studios.

[4] See footnote to paragraph 15.

Summary of evidence on negotiations to secure FSPTW rights from major studios

1. Prior to our August 2011 provisional findings, in order to understand why no party other than Sky had managed to secure FSPTW rights from any of the major studios, we asked these six studios (Warner, Fox, Paramount, Universal, Disney and Sony Pictures) to tell us about the last two occasions when they had licensed their FSPTW rights in the UK. We also asked these studios to tell us whether they were currently in negotiations to license their FSPTW rights in the UK. We were particularly interested in understanding whether any parties other than Sky had been approached by the studios or had made an approach to the studios, and whether any other party had bid, and, if so, how competitive these bids had been compared with Sky's bid. We also asked the other pay-TV retailers (ie Virgin Media, BT, TalkTalk and TUTV) to tell us about any occasion over the previous five years when they had had contact with a movie studio in relation to licensing movies for exhibition during the FSPTW, in order to understand their perspectives on negotiations over rights acquisitions.

2. We kept this issue under review throughout our inquiry and asked all parties (major studios and potential licensees) to keep us informed of any developments in this area.

History of negotiations

3. From the evidence we saw, it appeared that there had been [✂] occasions over the seven years prior to our August 2011 provisional findings in which FSPTW rights had come up for renewal and a new agreement had been reached (either because the previous agreement had come to an end or because one party had been interested in renewing early) (see Table 7.2). [1] [✂]

4. In this appendix, we summarize the evidence we reviewed relating to the [✂] completed negotiations [✂].

5. Our discussion of the completed negotiations focused upon [✂].

[✂]

[1] It was possible that during the period in question there were additional negotiations around the time of any contract extensions (rather than contract renewals) which we were not told about.

Summary of evidence on the recent negotiations for the FSPTW rights of some of the largest non-major studios

1. In this appendix, we describe some of the recent negotiations for the FSPTW rights of some of the largest non-major studios, in particular those with which Netflix or LOVEFiLM have reached output agreements.[1]

[✂]

[1] We do not discuss the FSPTW rights of other non-major studios. [✂]

Activities involved in assembling movie services

1. Acquiring content rights is not the only thing a company needs to do in order to be able to create a linear channel(s) or SVOD movie service. In this appendix, we consider the other activities involved.

2. A successful bidder seeking to develop a linear movie channel(s) would also need to:

   (a) combine and schedule this content on a given channel in such a way as to maximize its appeal to customers;[1]

   (b) decide how to package its channels;[2]

   (c) arrange the distribution of its channels (either on a retail or wholesale basis);

   (d) promote and market the channels to create customer awareness and consumer demand;[3] and

   (e) decide whether to contract with advertisers to show advertisements on the channels, and if so, make the necessary arrangements [✂].[4]

3. A successful bidder seeking to develop an SVOD movie service would not need to schedule its content or package its channels but it would need to: *(a)* ensure that its service could be easily accessed and navigated; *(b)* promote and market its service; and *(c)* consider the role of advertising on its service.

4. We could see no obvious reason why rival bidders would struggle to acquire the skills necessary to undertake these activities, and many potential rivals had some experience in doing them already.[5] However, we noted that, historically, some rival bidders might have struggled to distribute and market their channels as effectively as Sky because of Sky's position in the pay-TV retail market (see Section 7).

---

[1] Sky currently does this in a variety of ways, for example: *(a)* by scheduling programming on its channels by genre, eg Action & Adventure, Sci-Fi/Horror, Drama & Romance, Comedy, Family, Classics and Modern Greats, which helps audiences understand what type of programming to expect so that they repeatedly return to view programmes on the channel; and *(b)* by scheduling programming on channels around specific themes, eg comic book heroes, the Oscars or by bringing together movies from the same franchise on a particular channel in a specific period such as the Indiana Jones movies, all of which helps maintain interest in the channel. However, a successful bidder need not follow the same approach.

[2] See Section 2 for a description of the way in which Sky packages its channels into movie packs.

[3] Sky told us that this could be done via newspaper and online reviews, advertising campaigns, sponsoring events, publishing magazines and by creating 'appointments to view' (ie to draw audiences to specific programmes or slots). Sky provided us with several examples of movie news and review programmes broadcast on Sky Movies Premiere and available on Sky's website, including Alex Zane's *Guest List*; *35mm* and *The Movie Geek*. Sky also told us that it produced a specialist movies magazine for its Sky Movies subscribers, although we understood that this ceased publication in the summer of 2011.

[4] Sky contracts with advertisers to show advertisements on its movie channels. [✂]

[5] In our August 2011 provisional findings, we noted that *(a)* Virgin Media owned half of UKTV and used to provide several basic channels through Virgin Media TV; *(b)* many of the studios operated linear channels (eg Warner operated channels such as WarnerTV and WarnerFilms and was part of the Time Warner group which operated services such as HBO, TCM, CNN and Cartoon Network, Disney operated Disney Cinemagic and MGM operated the MGM HD channels); *(c)* the FTA broadcasters in the UK all had experience in creating linear channels; *(d)* Amazon had experience of offering a VOD service; and *(e)* many of the studios had experience of offering VOD services (eg Sony Pictures and Disney operated the FilmFlex TVOD service; Universal operated the PictureBox SVOD service; and Universal, News Corp (owner of Fox) and Disney operated the online VOD service Hulu).

Barriers faced by traditional pay-TV retailers (or aggregators wishing to distribute via traditional pay-TV rivals)

Introduction

1. In this appendix, we set out our assessment of the barriers faced by traditional pay-TV retailers (or aggregators wishing to distribute via traditional pay-TV rivals[1]), which was first set out in our August 2011 provisional findings (and largely repeated in our revised provisional findings).

2. We identified four ways in which a traditional pay-TV retailer (or an aggregator) could distribute a movie product, two of which did not involve selling on Sky's platform and two of which did, as follows:

   Distribution strategies not using Sky's platform

   (a) Distribute the content via the platforms of one or more existing non-Sky pay-TV retailer(s), ie traditional pay-TV retailers like Virgin Media or BT. If the bidder was a movie studio, or an independent broadcaster, this might involve reaching a carriage agreement with one or more traditional pay-TV retailers; if the bidder was already a traditional pay-TV retailer, it could sell its new or augmented movie product on its own platform and consider supplying its product to other traditional pay-TV retailers.

   (b) Set up as a new traditional pay-TV retailer to distribute the content, seeking to attract consumers directly to a new platform/service (possibly in combination with strategy *(a)*).

   Distribution strategies using Sky's platform

   (c) In relation to linear channels only, retail via Sky's open DTH platform (possibly in combination with strategies *(a)* and/or *(b)*).[2]

   (d) Wholesale to Sky (possibly in combination with strategies *(a)* and/or *(b)*).

3. It also seemed to us that a traditional pay-TV retailer, movie studio or independent broadcaster/aggregator could have sought to distribute a movie product on a stand-alone OTT basis (ie without the need to subscribe to other pay-TV services). However, in this regard they would have become an OTT pay-TV retailer, and we discuss the barriers faced by OTT pay-TV retailers in Section 7.

4. In this appendix, we discuss the challenges which it appeared to us that a traditional pay-TV retailer/content aggregator would have faced under each of the strategies *(a)* to *(d)* above.

5. However, before turning to address each of these strategies, it should be observed that in our assessment we distinguished between linear and SVOD services where appropriate. At the time of our report, it was generally the case that, where FSPTW content was available on a linear basis, the same content was only available in the

[1] Including, possibly, a movie studio.
[2] A potential rival could not offer an SVOD product via Regulated Conditional Access since this only provides for linear channels to be broadcast over Sky's DTH platform.

same window on an SVOD basis on the same service.[3] Further, in relation to SVOD services, it was also generally the case that FSPTW rights had been granted exclusively, [✂] Several parties told us that linear and SVOD services were close substitutes and that licensing linear and SVOD rights to the same movie in the same window would constitute non-exclusivity. We noted that [✂].

6. Therefore, it appeared to us that, in order for a rival bid to be successful, either:

   (a) one bidder seeking to acquire linear and/or SVOD rights exclusively would have to outbid Sky for a package of linear/SVOD rights; or

   (b) one or more bidders seeking to acquire linear and/or SVOD rights non-exclusively would have to offer a sum sufficient to induce the studio to license non-exclusively with Sky (or, in the event that Sky were to place little value on non-exclusive rights, the bidder(s) would have to compensate the studio for the loss of Sky as a licensee altogether (ie in effect match Sky's exclusive offer)).

Distribution strategies not using Sky's platform

7. A traditional pay-TV retailer/content aggregator could exhibit the major studio FSPTW content it obtained on a new or augmented linear channel(s) or SVOD service, or a combination of the two.[4] This service could be distributed to consumers via one or more of the existing non-Sky traditional pay-TV retailer(s) (strategy *(a)* in paragraph 2), or by setting up a new traditional pay-TV retailing service (strategy *(b)* in paragraph 2), possibly in combination with strategy *(a)*.

8. We noted that a rival bidder seeking to offer a movie service without wholesaling or retailing via Sky was likely to suffer from the fact that existing non-Sky traditional pay-TV retailers had far fewer movies subscribers than Sky[5] and, therefore, they would initially have far fewer subscribers over which to monetize the content compared with Sky. In other words, the incremental value a rival bidder could generate from the subscriber base it could achieve if it relied solely on migrating subscribers from Sky Movies (in the case of the Virgin Media and TalkTalk platforms) and/or if it relied solely on generating incremental value from existing movies service subscribers (in the case of Vision Film or PictureBox), would likely be smaller than the incremental value Sky would retain from continuing to offer content from all six major movie studios.

9. Whether rival bidders would be able to overcome this disadvantage so as to bid competitively against Sky would depend on the degree to which they could be expected, over the lifetime of the agreement, to generate additional value from the following sources, by:

   (a) encouraging subscribers who were not subscribing to a movie service on the platforms on which the new service would be distributed to take up the channel/service; and/or

[3] A channel broadcaster may wish to offer catch-up services alongside its linear broadcasts or a distributor of an SVOD service may wish to offer a linear channel to stimulate demand.

[4] [✂]

[5] As shown in Table 6.1, in May 2012 Sky had [✂] Sky Movies subscribers (representing [✂] per cent of its UK subscribers) and Virgin Media had [✂] Sky Movies subscribers (representing [✂] per cent of its UK subscribers). There were also [✂] of Sky by Wire subscribers to Sky Movies on the TalkTalk platform. There were about [✂] subscribers to BT's Vision Film (though [✂] paid an incremental price for Vision Film (ie [✂] took Vision Film as part of a pack which included other pay-TV content, for example BT Vision's current 'unlimited' pack includes other TV content and the ESPN sports channel as well as Vision Film)).

(b) encouraging subscribers to pay-TV platforms on which the service was not distributed to switch; and/or

(c) generating new consumption from customers who were not currently pay-TV subscribers; and/or

(d) seeking to extract a higher margin on their movie service than Sky was able to, or on products which were sold alongside the movies service.

10. However, it appeared to us that there would be significant uncertainty and risk associated with all these strategies. In relation to *(a)*, we noted that the total number of pay-TV subscribers across all the non-Sky traditional pay-TV platforms [✂] the number of subscribers to Sky Movies [✂] so, even if a rival bidder could persuade a high proportion of subscribers on these other platforms to take up the service as a result of offering this content, it would likely still struggle to outbid Sky.

11. In relation to *(b)* and *(c)*, given the disparity between the number of existing subscribers to Sky Movies on Sky (some of whom might drop Sky Movies if the content proposition became worse) and the number of movies subscribers on the platforms of the other traditional pay-TV retailers, a rival bidder would need to access many more subscribers in order to close the gap. Our analysis of competition in the pay-TV retail market (see Section 5) found that there were low levels of switching between traditional pay-TV retailers, and from non-pay TV to traditional pay TV, which would make this difficult. One further factor which would limit a rival's ability to build a subscriber base was that some pay-TV customers are subject to a contract with their existing provider which would not permit termination without penalty for a period of up to 12 months. In addition, we noted that Virgin Media's cable services were available only to approximately 50 per cent of UK households. Moreover, we noted that, in relation to linear channels, BT had been reliant on capacity-constrained DTT to distribute linear channels to its subscribers, which had limited the number of channels it had been able to offer.

12. In relation to *(d)*, BT told us that broadband and telephony markets were very competitive at the retail level and effectively regulated (competitors having access to regulated wholesale products at sustainable wholesale prices) so it could not earn high margins on broadband and telephony products to justify high bids for pay-TV content. Virgin Media also told us that seeking to support its pay-TV business with margins from broadband or telephony would not be a sustainable strategy due to the competitiveness and regulated nature of those markets and, in addition, it would, among other things, be likely to reduce investment and innovation in those markets, putting its competitive position at risk. On the basis of this evidence, we thought it was unlikely that rival bidders would be able to increase significantly the amounts they could bid for FSPTW rights in the expectation of earning higher margins on their movies service or margins from other products sold alongside their movies service.

13. We also noted in our August 2011 provisional findings that:

(a) Having significantly fewer subscribers than Sky was likely to affect the structure of the bids which rival bidders were likely to make. We noted that [✂].

(b) However, a new entrant, creating a new movie service at that time, would have been likely to begin with no subscribers and its prospects of gaining subscribers would be uncertain. The difference between Sky's position in bidding, with a large installed base of movie subscribers (and a large installed base of pay-TV subscribers from which to seek to attract new movie subscribers), and a new entrant's position in bidding, with no or few subscribers to a non-Sky movie

product with FSPTW content and far fewer (if any) pay-TV subscribers, might have meant that the structure of their bids would have had to have been different in order to address the studios' concerns of balancing value with risk, for example by including minimum guarantees.[6]

(c) [✂] Any requirement for a rival bidder to offer a larger fixed element in its price than Sky would increase the bidder's level of risk compared with that of Sky.

14. Sky told us that:

(a) Rivals did not need to have significant subscriber bases or indeed any subscribers at the retail level, in order to compete effectively with Sky for FSPTW rights.

(b) Most broadcasters of pay-TV channels were not pay-TV retailers and, in the USA, none of the three broadcasters which offered movie products with FSPTW content had a single retail pay-TV subscriber via a standard pay-TV platform.

(c) To the extent that it had advantages compared with rival bidders, these stemmed from its assets, experience and expertise as a broadcaster. Sky said that these assets included its subscriber base at the wholesale level, but not at the retail level.

15. We accepted in our August 2011 provisional findings that a rival bidder did not necessarily need its own subscriber base in order to compete effectively with Sky for FSPTW rights. However, a rival bidder which was not a pay-TV retailer (eg an aggregator) would need to be able to form an expectation that it could sign a carriage agreement with a pay-TV retailer(s) on economically acceptable terms in order to provide an attractive route(s) to market. It appeared to us that traditional pay-TV retailers (or content aggregators seeking to distribute via traditional pay-TV retailers) would have struggled to obtain an attractive route to market without being able to access Sky's subscriber base in some way. In contrast, Sky could have some degree of confidence in the continued revenues of its existing Sky Movies subscriber base if it continued to offer a similar content proposition which would significantly reduce its risk when bidding for rights.

16. As part of its response to our August 2011 provisional findings, Sky submitted a paper by Damien Neven and Gregor Langus which contained modelling showing that, at least in the context of a simple framework, there was no strong presumption that a large subscriber base downstream would necessarily lead to a concentration of rights with a single broadcaster and that such a concentration of rights could arise naturally in the absence of any asymmetry in the downstream market.

17. We considered this model but it appeared to us that it was based on a number of assumptions which were unlikely to apply in practice. In particular, the model assumed a form of frictionless bargaining at the wholesale level which meant that each bidder anticipated being able to resell its channel to the other platform. In practice, it appeared to us that there were dynamic considerations which, at least in the past, meant it was unlikely that Sky would have been willing to wholesale a traditional pay-TV rival's movie service on attractive commercial terms (at least unless the rival was of sufficient scale to render further dynamic benefits negligible).

[6] Another option may be to contract on the basis of fixed payments per movie licensed.

18. In Section 5, we set out our assessment that competition between traditional pay-TV retailers did not appear to be effective, in part due to Sky's large, incumbent position, the low level of switching between suppliers and the difficulty of large-scale entry and expansion. In our August 2011 provisional findings we said that it was precisely the factors which prevented competition from being fully effective at the retail level, which had enabled Sky historically to exploit FSPTW rights more effectively than its traditional pay-TV rivals. We concluded that the only way in which traditional pay-TV rivals (or content aggregators seeking to distribute via traditional pay-TV retailers) could circumvent these disadvantages to create a movies service which could compete effectively with Sky Movies was to gain access to Sky's subscriber base, either via securing a carriage agreement with Sky or by self-retailing on the basis of Regulated Conditional Access (and we noted that the latter would only be an option for distributing a linear movies channel).

Distribution strategies using Sky's platform

19. A rival with FSPTW content could distribute the linear element of its offer by self-retailing on Sky's platform or it could wholesale its service (linear, SVOD or both) to Sky (strategies *(c)* and *(d)* in paragraph 2). We discuss each in turn.

Self-retailing on Sky's DTH platform

20. In our August 2011 provisional findings we noted that:

(a) Subject to making the appropriate payments to Sky, third-party retailers of channels could obtain conditional access[7] for a linear channel from Sky and a listing on Sky's EPG, and our understanding was that there was no technical difficulty in obtaining access to the elements required to distribute a channel on Sky's DTH platform in this way (see Appendix 5.2 for more information on conditional access).[8]

(b) Notwithstanding the lack of technical difficulty, it appeared to us that this strategy on its own was not likely to be a very effective way of exploiting movies content. Under this strategy, whilst the new or augmented movie channel would appear on Sky's EPG, it would not be bundled with Sky's other channels and sold as part of a bundled pay-TV product (like the Sky Movies products), or bundled with other products and services (eg other pay-TV products, broadband and telephony). As a result, the new movie channel provider would not obtain any of the pricing and marketing benefits associated with bundling. Therefore, it seemed likely that the new entrant would have to incur high marketing and selling costs in order to reach Sky's subscribers.

(c) There was relatively little self-retail activity on Sky's DTH platform, and that those third parties which did retail via Sky's platform tended to have [✂] subscriber numbers. It appeared to us from our analysis of regulated conditional access (see Appendix 5.2) that there were a small number of pay-TV channels retailed by third parties on Sky's platform (42 out of 306 pay-TV channels), but none of these channels reached more than [✂] per cent of consumers with a Sky STB.

[7] Conditional access means that only certain STBs display the content. This is essential for a pay-TV channel since it needs to exclude STBs for which the appropriate payments have not been made. Conditional access is effected in part through cards which are inserted in the STB. These cards comprise one component within the overall conditional access system and there are other equally important components.
[8] The four critical elements are: *(a)* usage of uplink earth stations and the necessary skills, which can be readily purchased; *(b)* satellite capacity, which is available; *(c)* access to Sky's EPG, which is regulated; and *(d)* conditional access services.

21. Prior to our August 2011 provisional findings, Sky had told us that:

(a) Having a large retail subscriber base did not confer upon it any material advantage in bidding for rights because, in principle, any new broadcaster which successfully challenged Sky for rights could reach Sky's retail subscriber base by obtaining regulated conditional access services and self-retailing to them.

(b) Whilst a self-retailed service could not be bundled with Sky's packages, it could be bundled with products and services offered by others.[9] Sky submitted that there was nothing to stop a rival bidder from bundling a subscription to a new TV channel delivered via Sky's DTH platform with its existing services.

(c) Third-party retailers on Sky's DTH satellite platform currently had small subscriber bases compared with the total number of subscribers to Sky because of their niche offerings. However, Sky said that it would be wrong to extrapolate from this that a third party with a service with a wide appeal would be unable to establish a significant subscriber base on Sky's platform. Sky noted that Setanta built a significant subscriber base to its UK sports channel through self-retailing on Sky's platform.

22. However, we observed that:

(a) In relation to point *(b)* above, the drawback of self-retail on Sky's DTH platform was not an inability to be bundled per se, but an inability to be bundled with Sky's pay-TV products to which Sky's customers (ie the consumers the new entrant would be seeking to reach) subscribe. It appeared to us that the take-up of a channel which was available on Sky's platform but which was bundled and marketed alongside services available via another non-Sky service would not be anywhere near as great as if the channel were bundled and marketed alongside channels available on Sky. We also noted that some subscribers might be reluctant to take up a self-retailed channel(s) if it meant having to enter into two separate retail agreements, depending upon the nature of those agreements.[10]

(b) In relation to point *(c)* above, although Setanta had about 1.2 million customers, press reports at the time suggested that this was below the number required for it to break even and Setanta's UK business eventually went into administration.[11] [✂][12] Disney told us that the self-retail ('à la carte') market was always small, which was why it made sense for it to wholesale Disney Cinemagic to pay-TV platforms, thereby benefiting from such platforms' marketing and the ability to be bundled with other pay-TV products (although Disney said that YouView might change this in the future). We also noted that, as well as Disney, other companies with strong brands, such as Manchester United Football Club,[13] had chosen to wholesale their channels to Sky rather than retail them directly to Sky's subscribers.

---

[9] Sky cited the experience of DirectTV in the USA, which partners with telecommunications providers in order to be able to offer subscribers triple-play packages.

[10] We noted that this would arise if taking up or maintaining a second retail subscription were cumbersome (for example, because it involved contacting a call centre or regularly paying a second bill) or if it required the customer to enter into a second fixed-term contract, but it would not tend to arise if entering into, or exiting from, the second contract was straightforward.

[11] Press reports at the time (June 2009) indicated that Setanta would have required around 1.9 million customers to break even.

[12] Sky said it considered that there were a number of critical factors in Setanta's demise including: *(a)* paying excessive amounts for a series of sports rights, in particular the PGA Tour, Scottish Premier League and FA rights; *(b)* its failure to retain two packs of FAPL rights in the 2009 auction; and *(c)* the credit crunch causing its funding to dry up at a critical stage. It seemed to us that the first two of these factors were closely related to having an insufficiently large customer base to support its bidding activities.

[13] MUTV channel, broadcast in the UK, is operated by MUTV Limited, a subsidiary of Manchester United Limited. MUTV Limited has arrangements with Virgin Media and Sky whereby the MUTV channel is distributed and retailed in the UK.

23. Further, Sky had recognized that, in practice, in order to maximize its prospects of success, a linear pay-TV channel with FSPTW movie content would probably seek to be retailed by Sky. Sky said that entering into a wholesale arrangement (ie securing a carriage agreement with Sky) was likely to be the more attractive option to a rival bidder for FSPTW rights because, although self-retail was straightforward, most broadcasters generally had no inclination to become pay-TV retailers and lacked the necessary skills and experience to do so.

24. On the basis of this evidence, it appeared to us that it was unlikely that a traditional pay-TV retailer (or aggregator wishing to distribute via a traditional pay-TV retailer) would seek to distribute its movies channel by self-retailing on Sky's platform because it would not provide it with an effective way of attracting a large number of subscribers. It appeared to us that it was more likely that the rival pay-TV retailer would seek to access Sky's subscriber base by agreeing a carriage agreement with Sky (ie wholesaling to Sky), which we discuss next.

Wholesaling to Sky

25. In our August 2011 provisional findings, we noted that, at the time of bidding, it was unlikely that a rival bidder for FSPTW rights would have been able to secure a carriage agreement with Sky because:

(a) Without knowing what movie content the rival was going to be able to obtain, the nature of the movie channel to be carried would be very uncertain, so agreeing terms of carriage would be difficult.

(b) We could see no reason why Sky would wish to give its rival bidder this certainty of carriage.[14]

(c) BT and Virgin Media both told us that seeking to secure a carriage agreement for a premium movies channel with Sky prior to bidding for FSPTW movie rights would be highly unattractive from a commercial perspective because, among other things, it would involve disclosing to Sky the nature and quantity of the rights for which it wished to bid, which could help Sky in its competing bidding strategy.

26. For these reasons, it appeared to us likely that, at the time of bidding, the rival bidder would not know whether or not it would be able to reach a commercially attractive wholesale arrangement with Sky. In contrast, Sky, with its large incumbent Sky Movies subscriber base, would know that, if it retained FSPTW rights from all six of the studios, it could continue to offer its resulting movies service to a very large number of subscribers.

27. Prior to our August 2011 provisional findings, Sky had told us that:

(a) It had a strong incentive to offer to its subscribers as wide a range of content as possible. It said that the fact that it had agreed with over 40 broadcasters to retail over 100 basic pay-TV channels, including a range of dedicated pay-TV movie channels (such as TCM, Movies 24[15] and MGM HD) demonstrated this incentive. Sky asserted that there was no basis for believing that the situation would be different in relation to a rival premium movies channel. It noted that it retailed

---

[14] We noted that, [✂].
[15] TCM and TCM 2 are basic channels included in Sky's Style and Culture Pack. Movies 24 and Movies 24+ are basic channels included in Sky's Variety Pack.

Disney Cinemagic to its subscribers and used to retail FilmFour when it was a pay-TV channel.[16]

(b) The fact that it retailed other movie channels (eg FilmFour and basic pay-TV movie channels) was also relevant because these services provided a good basis on which rivals might expand to acquire FSPTW rights.

28. In our August 2011 provisional findings, we said that, in our view, Sky's incentives with regard to the channels which it wholesaled, which included limited (if any) FSPTW content, were likely to be very different from the incentives it would have if it were faced with the prospect of a competing movie service showing FSPTW content. In addition, we noted that, of the three non-basic movie channels which Sky has wholesaled, one channel (FilmFour, when it was a pay-TV channel) was offered to consumers on an à la carte basis; and two of the other channels (Disney Cinemagic and MGM HD) were created by movie studios,[17] allowing the negotiation of their carriage with Sky to be considered in parallel with the licensing of these studios' movie rights.

29. We also noted that [✂]. Moreover, to the extent that any of these channels began to rival Sky Movies more closely, Sky would have had scope to respond by reviewing its approach to how it carried them and offered them to its customers.

30. We also asked Sky to substantiate further its submission that it had strong incentives[18] to enter into a wholesale agreement to carry a competing product with FSPTW movie content by modelling the financial impact on Sky of doing so.

31. In response, Sky told us that it was not feasible to develop a model of the financial impact of agreeing to wholesale a rival broadcaster's linear movie channel because there were too many uncertainties.[19] However, Sky reaffirmed that, as a pay-TV retailer, [✂]. Sky submitted that:

(a) whilst it was not possible to determine what the outcome of any specific commercial negotiation might be, it was confident that a reasonable commercial deal which benefited both parties could be done;[20] and

(b) as a broadcaster in the position of having lost some of its FSPTW movie rights to a rival, its main considerations would be: *(a)* how its savings in costs (not having to pay for rights) should be deployed; and *(b)* how it should alter its Sky Movies services.

32. It appeared to us that Sky's response did not adequately reflect the fact that Sky's pay-TV retail and broadcasting businesses are two parts of the same company.

[16] MGM HD and the Disney Cinemagic channels are available in the dual movies pack and on an à la carte basis (an HD subscription is required for MGM HD and Disney Cinemagic HD).
[17] In addition, we noted that TCM is owned by Time Warner, the parent company of Warner; and Movies 24 is owned by NBC Universal, the parent company of Universal.
[18] Understanding Sky's incentives was important because the rival bidder's perception of Sky's incentives would determine the level of risk that it would assign to securing a commercially attractive wholesale agreement, which in turn would influence how much it would be willing to bid for rights. The other factor which would influence whether an agreement was reached and the terms of such an agreement was the balance of incentives for the rival bidder. This balance would be determined by the benefit the rival could obtain from signing an agreement with Sky in comparison with what it could achieve by pursuing its 'outside option', which in this case would be either to sign an exclusive wholesale agreement with another pay-TV retailer or to sign non-exclusive wholesale agreements with as many other pay-TV retailers as possible and to self-retail on Sky's platform.
[19] Including: *(a)* the terms of any wholesale agreement, which would be subject to negotiation, *(b)* the value of the channel under consideration, which would itself depend on many factors, including the quality of its content; and *(c)* values for key assumptions in the modelling, including how many subscribers Sky might lose if it did not carry the channel and how many existing Sky subscribers might subscribe to it.
[20] Sky noted that [✂].

Rather, because of Sky's vertical integration, we would expect Sky's behaviour as a pay-TV retailer, when deciding whether to sign a wholesale agreement, to be influenced by its position as a broadcaster, as well as by its desire to protect its position in the retail market.

33. We agreed with Sky that the uncertainty around how subscribers might react to a new channel with FSPTW movie content made it difficult to quantify how Sky would respond were the broadcaster of such a new channel to seek a carriage agreement with Sky. If Sky carried the rival channel, it would be likely to result in some reduction in the number of subscribers on Sky's platform to Sky Movies as some consumers would switch to the new channel, although this effect could be small if the channel was at an early stage of development or if it was viewed as complementary to Sky Movies; however, if Sky did not carry the channel (or carried it on unfavourable terms), other pay-TV retailers offering the channel would have a point of differentiation which could enable them to attract some subscribers that might otherwise have chosen (or stayed with) Sky's platform.

34. In addition to these considerations, though, Sky might take into account any strategic effects of carrying the rival's product, in relation to its impact on the market for the acquisition of FSPTW rights (the upstream market) and, if relevant, to its position in the pay-TV retail market (the downstream market).

35. We asked Sky to consider in its modelling the impact on the competition for FSPTW rights in the future from entering into a wholesale agreement with a rival broadcaster. In particular, we asked Sky to consider the price which Sky would need to pay to acquire rights in the future. It told us that these considerations would not influence its negotiations with a rival broadcaster. It said that, if the rival broadcaster was seeking to sell its movie product to Sky, Sky would have already lost the movie rights and, at that point in time, [✄]. However, it seemed to us unlikely that Sky would not consider such dynamic effects.

36. It seemed to us that, if Sky had agreed to carry a rival broadcaster's movie product in such circumstances (on terms acceptable to the rival), this would have been likely to:

(a) enhance the rival's expectations of demand for the product and increase the rival's willingness to bid for rights in the future, increasing competition in the upstream rights market; and

(b) assist in establishing an alternative movie product which was not branded or controlled by 'Sky', which at that time may have increased the ability of Sky's pay-TV rivals to compete with Sky in the downstream pay-TV retail market (though this would have depended on the significance of FSPTW movie products to competition in the pay-TV retailer market, which we discuss in section 6).[21]

37. It appeared to us that, for these two reasons, together with the risk of the new service cannibalizing subscriptions to Sky Movies on Sky's platform, there was a significant possibility that, despite the risks to Sky of rival pay-TV retailers attracting some of its subscribers on the basis of offering the rival channel, Sky might prefer not to offer it (or only to offer it on the basis of carriage terms which were unfavourable to its rival).

38. We also considered a number of other factors which might influence Sky's decision to carry a rival's movie channel, which were: *(a)* the number of studios' FSPTW rights

[21] We found that there appeared to have been a decline in the significance of FSPTW movies to consumers' pay-TV subscription decisions (see paragraph 6.96).

which the rival had gained; *(b)* Sky's past experience in wholesaling other channels; and *(c)* the strategic concerns of rival bidders for FSPTW rights.

Number of studios

39. We considered whether Sky's decision to carry a rival's movie channel was likely to be influenced to some extent by the number of studios' FSPTW rights which the rival had gained (and which Sky, by that time, would have lost). Given that there are many studios and many sets of rights, which become available at different times, it appeared to us that whether or not Sky carried a rival's movie product which was based on an initial set (or sets) of rights would give rise to significant strategic effects. In particular, if the rival were to gain a large proportion of major studio FSPTW rights, Sky might have fewer strategic incentives not to carry the rival's product as, at that stage, it would be unable to prevent the emergence of competition.

40. On this reasoning, it appeared to us that a competing bidder could mitigate the risk of its product not being carried by Sky by entering on a large scale (ie winning several sets of rights). However, we noted that the threshold above which the rival bidder could be confident of Sky's incentives to carry its product was uncertain, and large-scale entry would have its own significant costs and risks.

41. We noted that the risks associated with large-scale entry might be greater as a result of the staggered availability of rights. It appeared to us that under a non-large-scale entry strategy the staggered availability of rights would not represent a significant impediment as, in practice, rights have come up for renewal in clusters (ie the gaps between individual studios licensing their FSPTW rights have not always been very large), and occasions have arisen when a rival bidder has had the opportunity to negotiate simultaneously with more than one major studio.[22] We noted that similar clusters were likely to arise in the foreseeable future (see Table 7.1). Furthermore, whilst it might be the case that the content of a second studio only becomes available a few months after a service has been launched with the content of one studio, in our view the costs of this delay were unlikely to be sufficiently large so as to undermine the overall attractiveness of entry. However, we judged that if an entrant were looking to enter on a large scale, the staggered availability of rights could be more problematic. We noted that, unless the rival bidder were able to gain certainty with multiple studios at a single point in time, there would be an opportunity for Sky to react to the loss of one or more studios by increasing its bids for the rights of others. For this reason, it appeared to us that, although entering on a large scale diminished the risks associated with reaching an attractive wholesale agreement with Sky, it would be significantly harder (and more risky) to achieve, in particular due to the possibility of a competitive response from Sky.[23] (We set out our views on the role of complementarities between studio content in Section 7.)

Sky's experiences in wholesaling other channels

42. [✂] Therefore, we reviewed how Sky acquired and retailed these channels, to see if it was informative about how Sky might seek to acquire and retail a significant competing movie channel.

43. [✂]

44. We noted that, [✂].

---

[22] [✂]
[23] [✂]

45. We noted that, when retailing ESPN's channels, Sky bundled them with its own sports channels, ie it offered a discount on the incremental price of ESPN to subscribers who already took Sky Sports.[24] However, we also noted that the incremental prices which Sky charged to the majority of its subscribers were higher for ESPN than they were for dual sports.[25] We also observed that ESPN's penetration rate of Sky's pay-TV subscriber base was approximately [✂] per cent, in contrast with approximately [✂] per cent of Virgin Media's pay-TV subscriber base, where the channel was bundled into the XL package and hence was not subject to an incremental price for most subscribers.[26] Whilst this was only one measure of the degree to which ESPN was able to monetize its rights, we found [✂].

46. Sky told us that the terms and structure of any carriage agreement would reflect the interests of the broadcaster and pay-TV retailer concerned, and different pay-TV retailers may choose to position particular channels differently. Sky said that it was impossible to make any reasonable inference about Sky's motivations when retailing ESPN's channels solely from the fact that it and Virgin Media adopted different approaches to retailing those channels.

47. Sky said that it had negotiated [✂], whereas Virgin Media chose to include ESPN's channels within its largest basic package. Sky said that, [✂]. Sky also said that focusing on penetration as a metric of the value to ESPN derived from a particular wholesale arrangement was misplaced.[27] [✂]

48. Sky told us that it had done an effective job in selling ESPN's channels to its subscribers, delivering ESPN £[✂] revenue in 2010/11. Sky said that it understood ESPN to be pleased with the way that Sky had marketed and sold its channels, and that, since launching, ESPN had also improved and expanded its range of content through the acquisition of other significant rights, including rights to FA Cup matches, English Premiership Rugby, World Indoor Athletics and Euro2012 tournament qualifier matches.

49. Notwithstanding Sky's submissions, we noted that, [✂][28] considering the disparity in the number of subscribers to whom Sky and Virgin Media could market ESPN's products. ESPN told us that its agreement with Sky included [✂]. ESPN told us that, [✂], its agreement with Virgin Media specified [✂].

50. BT told us that it understood that ITV Digital encountered difficulties in negotiating carriage with Sky. According to BT, in around 2000, ITV Digital (a direct pay-TV retail competitor to Sky) acquired rights to both the Champions League and the Football League and formed a new channel called ITV Sport. Despite the attractiveness of the rights held by ITV Digital, BT understood that ITV Digital's negotiations with Sky

---

[24] At the time of our August 2011 Provisional Findings, Sky retailed ESPN on a stand-alone basis for £16 a month, to Sky subscribers without Sky Sports for £12 a month, and to Sky subscribers with Sky Sports for £9 a month.
[25] At the time of our August 2011 Provisional Findings, a dual movies subscriber seeking to take up a sports package would have to pay an incremental £12 per month to take ESPN and only £11 for dual sports (which offers more channels than ESPN). This was likely to matter to a significant proportion of subscribers; [✂] per cent of Sky's subscribers take dual movies/dual sports and consumer research indicated that a quarter of these would have taken movies and considered the incremental price of Sky Sports, whilst another quarter thought about both (see Appendix 6.1).
[26] For both parties, due to lack of data, we used as a base the level of pay-TV subscribers provided as of September 2010, while the number of ESPN subscribers was provided for December 2010. For Sky, there were [✂] ESPN subscribers as of December 2010, representing [✂] per cent of its total pay-TV subscriber base of [✂] million. For Virgin Media (which includes ESPN in its XL package), there were [✂] ESPN subscribers, representing [✂] per cent of its total pay-TV subscriber base of [✂] million. Virgin Media told us that, in 2011, [✂] per cent of its pay-TV customers subscribed to ESPN, which would suggest that the difference in the penetration of ESPN among its subscriber base and Sky's subscriber base was even greater than shown by our estimates.
[27] Sky said that, [✂].
[28] Sky paid ESPN £[✂] for ESPN UK, ESPN America, ESPN HD and ESPN Mobile for the period August 2009 to July 2010, plus £[✂] for ESPN Classic for the period April 2009 to March 2010. Virgin Media paid ESPN £[✂] for ESPN UK, ESPN America, ESPN Classic and ESPN for the period August 2009 to July 2010.

ultimately foundered on price because Sky was not willing to provide a minimum guarantee which was acceptable to ITV Digital. BT told us that its understanding was that, in the absence of a suitable minimum guarantee, ITV Digital faced the risk that Sky might not actively retail the channel to its subscriber base.

Evidence from prospective bidders for FSPTW rights

51. Given that, in the past, there has been some interest in bidding against Sky for FSPTW rights, we considered what the strategy documents of these bidders indicated about their perceptions of whether Sky would carry their potential movie channel(s). [✂]:

(a) In [✂].[29] This contrasts with a penetration rate of Sky Movies among Sky's pay-TV subscriber base of [✂] per cent.

(b) In [✂].

52. Overall, it appeared to us from this evidence that [✂].

Assessment of risks for a rival bidder seeking to wholesale to Sky

53. In our August 2011 provisional findings, we concluded that, on the basis of all the evidence, it appeared to us that, even if a potential bidder for FSPTW movie rights could be confident of reaching some form of wholesale agreement with Sky, it could not be confident that this agreement would enable it to reach enough subscribers to generate sufficient value from the rights in order to justify bidding as much for the rights as Sky. Furthermore, the process of negotiating carriage would depend to a great extent on Sky. Therefore, any rival bidder would face the prospect of being forced to delay the launch of its channel due to protracted negotiations with Sky, which in itself could be sufficient to undermine the value that a rival bidder would be willing to bid.

Considerations for a movie studio moving downstream

54. In our August 2011 provisional findings, we considered whether the challenges faced by a movie studio seeking to launch a movie service via a traditional pay-TV retailer in competition with Sky Movies would have been different from those facing other new entrants. We noted that a studio would not need to 'win' the auction process in order to exploit its own rights but it would need to make arrangements with other studios in order to aggregate their content with its own. Moreover, it would still need to be confident of being able to access consumers. We asked the studios whether this was a distribution strategy they had considered. We received the following responses:

(a) [✂]

(b) [✂]

(c) Universal told us that, as far as it could recall, it had not considered operating its own linear FSPTW movies channel in the UK. It said that this was not part of its core focus or strategy and that it would have to somehow replicate the revenue it received from the licensing of its FSPTW rights to Sky. Universal said that, under

[29] [✂]

this proposition, it might also need to make significant investments to obtain other FSPTW rights (in order to develop an offering with sufficient content to be attractive to consumers).

(d) Paramount told us simply that, in general, it was not a consumer-facing business.

55. We also noted that none of the movie studios which had created pay-TV channels in the UK had sought to exploit their FSPTW rights through these channels, [✂].

Conclusion on distribution strategies using Sky's platform

56. In our August 2011 provisional findings, we concluded that, overall, whilst a traditional pay-TV rival could seek to access Sky's subscribers either by self-retailing on Sky's platform or by wholesaling to Sky, there would be significant risks associated with both strategies. It appeared to us that any traditional pay-TV retailer relying on these distribution strategies was likely to be at a material disadvantage to Sky when bidding for FSPTW rights.

Conclusion on barriers relating to traditional pay-TV retailers

57. In our August 2011 provisional findings, we said that there were significant problems associated with all the ways in which a traditional pay-TV retailer (or content aggregator seeking to distribute via a traditional pay-TV retailer), might seek to distribute a new movie service. We said that the key problem was being sufficiently confident of being able to reach enough subscribers with the new channel to be able to justify a bid greater than Sky's.

58. We considered this analysis further in the light both of responses we received to our August 2011 provisional findings and of the market developments since that time. In our view, in the past, traditional pay-TV retailers faced barriers which prevented them from being able to outbid Sky for FSPTW rights. However, in the light of our current findings on the barriers to the acquisition of FSPTW rights more generally (see section 7), which focus on the emergence of OTT pay-TV retailers offering services with movie content, we did not consider it necessary to reach a firm conclusion on whether traditional pay-TV retailers continued to face these barriers.[30]

[30] If one or more OTT pay-TV retailers were capable of acquiring FSPTW rights from a major studio, then this would increase the degree to which the services they offered were a substitute for Sky Movies, and further reduce the proportion of consumers for whom Sky Movies was significant in their choice of traditional pay-TV retailer.

Analysis of Sky's prices

Introduction

1. This appendix discusses Sky's retail and wholesale prices. The context for this analysis is set out in Section 8.[1] In light of our findings on the significance of FSPTW content on Sky Movies to consumers' pay-TV subscription decisions, the main purpose of our analysis was to assess whether the evidence before us in relation to the price terms of Sky's wholesale supply of Sky Movies was such as to cast doubt on our views on the significance of FSPTW content (and Sky Movies) based on other evidence (see Section 6). However, we also considered whether, having regard to representations received in the course of our inquiry and taking into account recent developments where relevant, Sky's rivals were at the time of our report at a material disadvantage in relation to price when retailing Sky Movies.

2. Paragraphs 4 to 9 set out Sky's retail prices to its satellite subscribers, showing its charges for taking a basic pay-TV package with one entertainment pack and its incremental charges for subscribing to additional packs and à la carte channels (incremental retail prices).

3. Paragraphs 10 to 42 cover an assessment of whether Sky's wholesale prices for Sky Movies products could give it a material advantage over other equally efficient retailers in retailing those products. Paragraphs 43 to 74 then consider a number of points made by Sky in response to both our working papers and our August 2011 provisional findings. Paragraphs 75 to 80 provide a summary and our overall assessment of this issue.

Sky's retail prices

4. Sky's retail prices for pay TV to its satellite subscribers include one-off charges, monthly charges and usage-related charges:[2]

   (a) Sky may charge one-off equipment, installation and set-up fees, though in order to acquire or retain customers, these are often partially or fully waived or offset by other offers (eg in April 2011 Sky offered new customers joining online a £25 Marks and Spencer voucher).

   (b) Sky's monthly charge for pay TV has three main components:

      (i) A charge for entertainment, comprising either Sky's 'Entertainment' pack (which includes 44 pay-TV channels) or its 'Entertainment Extra' pack (which includes a further 52 pay-TV channels). Sky provides new subscribers with a free PVR (Sky+ box, although, in some cases, subject to a set-up charge). A subscriber with Sky line rental in Sky's network area also has an option to

[1] While the level of detail required in terms of our assessment of this issue might have varied depending on our views on the significance of FSPTW content to consumers' pay-TV subscription decisions, this issue did not become wholly irrelevant when we found that FSPTW content was not significant. Further, we continued to assess and reconsider our findings on significance throughout the inquiry, including in the light of responses to our revised provisional findings. Therefore we set out and report on our detailed appraisal notwithstanding our findings on significance.

[2] The prices referred to in this paragraph are the retail prices that Sky charges for pay-TV packages provided via satellite technology supplemented, since the launch of Sky Anytime+ in November 2010, by IPTV technology. We describe these as retail prices to Sky's satellite subscribers in order to distinguish these prices from those to OTT subscribers (via Now TV or the Sky Go monthly ticket).

take free 'lite' broadband, and unlimited evening and weekend calls to UK landlines.[3]

(ii) Charges for additional products.[4] Customers may augment their entertainment pack with Sky's premium products (Sky Movies and Sky Sports), and also with 'à la carte' channels (such as ESPN), which can be purchased separately. Since July 2012, Sky Movies has also been available unbundled on Now TV.

(iii) Charges for having Sky in additional rooms (multiroom) and for HD. The amount paid for HD depends on the number of Sky boxes in the home rather than on the products taken.

We describe the charges relating to additional products or additional functionality (multiroom and HD) as incremental prices because they are incremental to the charge which is paid by all customers.

(c) Sky also has usage-related charges for content which is available on a pay-per-view or TVOD basis (including both movies and sports).

A large number of FTA channels, many of which are not available on Freeview, can be viewed by anyone with a Sky STB.[5] In addition to pay-TV revenue as set out above, Sky also obtains retail revenue from broadband (when customers take the unlimited use broadband option) and telephony[6] and from other services such as betting. Sky said that [✂].

5. Sky's monthly retail prices (see *(b)* in the previous paragraph) accounted for most of Sky's retail pay-TV revenue. Table 1 summarizes the prices which applied from September 2011. The total monthly charge paid by a customer was the total of the amounts shown in Table 1 applicable to that customer.

---

[3] Sky's 'lite' broadband option has a monthly usage cap of 2GB. Sky's 'broadband unlimited' option is available to pay-TV subscribers for £7.50 per month if they also take Sky Talk Freetime.
[4] We have referred here to channels but in principle Sky could also make monthly charges for SVOD products to its satellite subscribers. Sky does not offer any stand-alone SVOD products to its satellite subscribers (though it does offer VOD via Sky Anytime+ where the available content depends upon what package the subscriber has, for example customers can only access the Sky Movies Anytime+ VOD content if they are a dual movies subscriber).
[5] An alternative way of viewing FTA channels broadcast by satellite is to purchase 'Freesat from Sky' for a one-off payment of £175. Alternatively, consumers can arrange the installation of a satellite dish and purchase a 'Freesat' STB ('Freesat' is a joint venture between the BBC and ITV) or a TV with an integrated satellite tuner. Sky's retail customers retain access to FTA channels on satellite even if they stop subscribing to Sky because Sky customers own their STBs. Sky customers who stop subscribing but wish to retain the PVR functionality of their STBs are required to pay Sky £10.25 per month. Some existing Sky subscribers still have STBs without PVR functionality (ie a Sky box rather than Sky+ box).
[6] Sky charges its telephony customers for calls longer than 1 hour and for all calls to numbers other than 01, 02, 03 and 0870 numbers. Sky also charges for daytime calls to 01, 02, 03 and 0870 numbers by customers taking the 'lite' broadband option.

TABLE 1 **Sky's retail pricing structure, 1 September 2011 to 31 August 2012**

	*Retail price or incremental retail price** £	*Take-up†* %
Sky Entertainment	20.00	
Sky Entertainment Extra	25.00	
Premium products (no of channels‡)		
Single movies (5)	8.00	[✂]
Single sports (1)	12.50	[✂]
Dual movies (12)	16.00	[✂]
Dual sports (6)	20.00	[✂]
Single movies/single sports (6)	18.75	[✂]
Dual movies/single sports (13)	24.00	[✂]
Single movies/dual sports (11)	24.00	[✂]
Dual movies/dual sports (18)	28.00	[✂]
Channels purchased separately		
ESPN	9.00§	[✂]
MUTV	6.00	[✂]
Chelsea TV	6.00	[✂]
Other charges		
Multiroom¶	10.25	[✂]
HD pack#	10.25	[✂]

Source: CC calculations based on Sky data.

*Prices are for new customers at September 2011 and include VAT. Existing Sky customers benefited from a price freeze applied at the end of August 2011 [✂] (prior to September 2011 customers were able to choose between six entertainment packs and paid a price that depended on the number of packs taken). [✂]
†Percentage of Sky's subscribers taking each product. Take-up of movies and sports packs is for UK customers at October 2011; take-up of channels purchased separately is across all customers in the British Isles (including the Republic of Ireland) at December 2010.
‡Figures in parentheses show number of SD channels in each pack (excluding timeshift, bonus and HD channels) after the launch of Sky Sports F1 channel in March 2012 (prior to this, packs including dual sports had one fewer channel).
§£12 for customers not taking a Sky Sports pack.
¶Charge for each additional Sky box.
#Additional charge for HD (one HD charge covers the whole home, regardless of the number of Sky boxes covered by a Multiroom subscription).

6. We noted two initial points from Table 1:

   (a) Most pay-TV channels are grouped into entertainment packs or Sky's premium movies and sports packs, a practice sometimes described as pure bundling. Pure bundling is a common practice among pay-TV retailers, both in the UK and other countries. In principle, channel providers have a choice between selling the channel to Sky for inclusion as part of a bundle, selling the channel to Sky on a stand-alone 'à la carte' basis, or retailing the channel themselves over Sky's platform. It is evident that selling to Sky for inclusion as part of a bundle was by far the most common of these arrangements.[7]

   (b) Sky's premium products are priced such that the incremental price of the product is less than the aggregate incremental price of its constituent parts. For example, the incremental price of Sky's dual movies/dual sports product (£27) is less than the aggregate of the cost of these products if purchased separately (£16 for dual movies and £20 for dual sports). This type of pricing is often described as mixed bundling.

7. The practice of mixed bundling can enable a supplier to price discriminate between its customer groups according to their price elasticities. Customers taking the bundled product in effect pay a lower price than customers taking one of the separate

[7] [✂]

products, and hence mixed bundling may enable a firm to distinguish (discriminate) between more and less price-elastic customers. Pure bundling may also be regarded as similar to price discrimination since customers wanting all the products in the bundle in effect pay a lower price than customers only wanting one of the products in the bundle. Price discrimination, including bundling, may enable fixed costs to be spread more efficiently between customers and may also reduce inefficiencies associated with market power.[8] However, price discrimination, including bundling, may also enhance market power.[9] Bundling of pay-TV channels is an important aspect of the retail supply of pay TV which is practised by many pay-TV suppliers both in the UK and overseas.[10] Bundling, including Sky's bundling, was relevant to a number of elements of our inquiry, including market definition (see Section 4). However, the evidence we saw did not suggest that Sky's bundling practice in itself was a matter of separate concern because bundling was practised by many pay-TV retailers, not just Sky, and because Sky made its bundled movie products available on a wholesale basis to other retailers (as discussed in this appendix).[11]

Sky's incremental retail margins

8. Sky is both a broadcaster of pay-TV channels and a retailer of the pay-TV retail products shown in Table 1. Sky also supplies the pay-TV channels it broadcasts to other pay-TV retailers (we refer to Sky's supply of its pay-TV channels to other retailers as wholesaling). We use the following nomenclature to discuss Sky's margins on its pay-TV products:

   (a) Sky's incremental retail margin for a retail product is the difference between its incremental retail price and its notional retail cost, where the notional retail cost is the aggregate wholesale price of the retail product plus any retail costs (costs associated specifically with retailing the relevant product).

   (b) Sky's wholesale margin on a wholesale product is the difference between the product's wholesale price and its wholesale cost (ie not including any retail costs).

   (c) Sky's integrated margin (or just 'margin') on a retail product is the difference between the product's incremental retail price and its cost (total retail and wholesale cost).[12]

---

[8] Price discrimination may improve allocative efficiency because customers with the highest willingness to pay make the highest contribution to fixed costs (and/or profits associated with market power), and hence it becomes profitable to supply some customers with lower willingness to pay (who would not be supplied in the absence of price discrimination). Sky drew our attention to what it described as a seminal article—W Adam and J Yellen, 'Commodity bundling and the burden of monopoly', *Quarterly Journal of Economics*, 90, pp475–498. In our view, this article showed that mixed bundling could reduce inefficiencies associated with monopoly.

[9] For example, Nalebuff states that although price discrimination reduces the inefficiency associated with monopoly, 'we want to reward firms for making better products, and not for becoming better monopolists … To the extent that the firm engages in price discrimination it becomes a more powerful monopoly … It seems clear that price discrimination is an enhancement of a firm's market power, B Nalebuff, 'Price Discrimination and Welfare', *CPI Journal*, Vol 5, No 2, Autumn 2009.

[10] The merits of bundling relative to à la carte pricing have been discussed extensively in the USA. A recent paper attempting to quantify the effects of bundling in the USA is G S Crawford and A Yurukoglu, 'The Welfare Effects of Bundling in Multichannel Television Markets', University of Warwick, forthcoming, *American Economic Review*.

[11] Virgin Media told us that Sky's bundling strategy: *(a)* made it difficult for rival pay-TV retailers offering a smaller bundle which excluded premium movies to compete with an incumbent offering a larger bundle including premium movies; *(b)* placed Sky in a stronger position than rivals when bidding for content rights, because Sky could monetize its investment more effectively; and *(c)* increased the risks facing a rival bidder in seeking to monetize its investment by retailing directly to Sky's satellite subscribers. We regarded *(a)* as a point either about market definition (which we discuss further in Section 4) or the terms on which Sky wholesales its movie products (which we discuss in this appendix). We regarded *(b)* and *(c)* as points about barriers to the acquisition of FSPTW rights (which we discuss in Section 7).

[12] In this appendix, prices and costs are measured in £ per subscriber. Retail prices are defined in £ per subscriber. In relation to wholesale prices: for channels and associated VOD content provided by Sky, we take the wholesale price per subscriber to be the average amount paid for the relevant channel by a large wholesale customer, eg Virgin Media, divided by the number of

9. In our August 2011 provisional findings,[13] we analysed Sky's incremental retail margins at the end of 2010, observing [✂]. Following our provisional findings, Sky made a number of changes to its packaging and prices, including (as discussed further below) reducing the wholesale price of certain of its products which incorporate Sky Movies [✂], which could be regarded as another example of price discrimination. As noted above, price discrimination is a practice that may enable fixed costs to be spread more efficiently across customers and reduce inefficiencies associated with the exploitation of market power, but it may also enhance market power. For the purposes of the analysis in this appendix, our concern is with the pricing of Sky's movie products (shown in bold in Table 1) and not with variations of incremental retail margins between movie and other products.

Do Sky's prices for Sky Movies products give it a material advantage over equally efficient retail competitors?

10. As discussed in Section 8, in our August 2011 provisional findings we were concerned essentially with whether Sky's wholesale supply of its Sky Movies products gave it a material advantage over equally efficient retail competitors in retailing those products such that these retailers would be unable to compete effectively in the pay-TV retail market. We were concerned with equally efficient retail competitors, rather than inefficient retail competitors, because it is a normal function of competition for inefficient competitors to be disadvantaged and efficient competitors to be advantaged. We considered both the level of wholesale prices that Sky charged other retailers (its cable rate-card prices) and the success of other pay-TV retailers relative to Sky in selling Sky Movies products.

11. Following our August 2011 provisional findings, in the light both of market developments and further evidence we received, we revised our findings in a number of areas. We present here the analysis in our August 2011 provisional findings of Sky's wholesale prices, and have then updated this analysis to reflect both the responses we received to our provisional findings and changes in the market.

Sky's cable rate-card prices

12. We noted that, where Sky supplied or offered to supply its products to other pay-TV retailers, it generally did so on cable rate-card terms. Sky Movies products were purchased by Virgin Media and some small cable retailers, although Sky had also discussed the supply of Sky Movies products with other retailers, including BT and TalkTalk.[14] In our analysis in this appendix, we took Sky's cable rate-card prices to be relevant to any supply by Sky of Sky Movies products to other retailers, including non-cable retailers.

13. The Sky Movies products set out in the cable rate card were the same as those that Sky retailed (see Table 1), except that Sky's dual movies retail product included the Disney Cinemagic channel, which was not a Sky channel and which other retailers purchased directly from Disney.[15] [✂][16]

- - - - - - - - - -

that customer's relevant subscribers. [✂] In relation to costs: for the purpose of comparing with price, we measured cost per subscriber as the total of relevant costs incurred divided by the number of relevant subscribers.

[13] See paragraphs 11–13 in Appendix 9.1 of our August 2011 provisional findings at: www.competition-commission.org.uk/inquiries/ref2010/movies_on_pay_tv/pdf/mpt_appendices_and_glossary.pdf.

[14] In July 2012, Sky told us that it had reached agreement with TalkTalk for the wholesale carriage of all the Sky Movies channels in SD for delivery over TalkTalk's broadband network to YouView-compatible STBs.

[15] Sky's dual movies retail subscribers with HD also receive the MGM HD channel, to which similar considerations apply.

[16] [✂]

14. This being the case, it was possible to compare the incremental retail prices that Sky charged its retail subscribers for Sky Movies products with the cable rate-card prices per subscriber that it charged to other retailers. However, the interpretation of such a comparison in terms of the disadvantage to other retailers was not straightforward because a number of factors affected the relationship between incremental retail price and cost. These included:

(a) Sky's incremental retail price of Sky Movies products could have been below its cable rate-card price due to Sky setting incremental retail prices at a low level in order to bring in additional subscribers who then spent on other products on which Sky earned a margin. A lower incremental retail price of Sky Movies products may have induced some consumers to subscribe to Sky who would not otherwise have chosen to do so and, for those consumers, Sky would have gained revenue from additional payments, eg from a subscription to an entertainment pack and any additional payments, eg for HD.[17]

(b) Sky's incremental retail price may have exceeded its cable rate-card price due to Sky seeking to earn an incremental retail margin from its retailing of Sky Movies products. The analysis in our August 2011 provisional findings of Sky's incremental retail margins (see paragraph 9) suggested they were positive for entertainment packs (with the exception of what, at that time, was called the variety pack, the contents of which have mostly now been included in Sky's basic price for Sky Entertainment) and à la carte channels. Intuitively, these points suggested that Sky might have sought to earn a positive incremental retail margin on its premium products including Sky Movies (though the precise incremental retail margin would have depended on how the cable rate-card price related to incremental cost and to the elasticity of demand for Sky Movies products).

15. Our concern was with whether Sky's cable rate-card prices gave it a material advantage over other equally efficient retailers in retailing those products. Therefore, we proceeded as follows:

(a) We considered whether the balance of effects discussed in the previous paragraph was such that, if Sky paid the cable rate-card price, it would set an incremental retail price above the cable rate-card price. If so, the difference between Sky's cable rate-card prices and its incremental retail prices would give a minimum estimate of the relative disadvantage experienced by an equally efficient competitor retailing Sky Movies products,[18] and we could go on to consider this comparison. If not (ie if Sky would set an incremental retail price equal to or below its cable rate-card price if it paid cable rate-card prices), we did not think a comparison of cable rate-card and incremental retail prices would be useful.[19]

(b) Depending on the results of *(a)*, we would then consider a comparison of the cable rate-card price with Sky's incremental retail price.

(c) We also considered an alternative approach to assessing the relative position of an equally efficient competitor retailing Sky Movies products. This was to compare Sky's cable rate-card prices with Sky's average cost per subscriber for Sky Movies products. The logic underlying this approach was that if cable rate-card

[17] This factor is related to the significance of FSPTW content on Sky Movies to consumers' choice of traditional pay-TV provider. As set out in Section 6, it appeared to us that only a very small minority of all pay-TV subscribers were likely to regard the availability of the FSPTW content on Sky Movies as significant to their choice of traditional pay-TV provider.
[18] The disadvantage would be greater to the extent that, if Sky paid the cable rate-card price, it would set an incremental retail price above the cable rate-card price.
[19] In our view, the evidence on the level of incremental retail price Sky would set if it paid the cable rate-card price was such that we could only reach a broad judgement on whether this would be above or below the cable rate-card price.

prices were equal to Sky's costs, the cost incurred by other equally efficient retailers purchasing from Sky would be no greater than the cost incurred by Sky; and, hence, they would be at no disadvantage in retailing Sky Movies products compared with Sky. On the other hand, if cable rate-card prices exceeded Sky's costs, the cost incurred by other equally efficient retailers purchasing from Sky would be greater than the cost incurred by Sky and hence they might experience disadvantage (although whether they did so would also depend on Sky's own incremental retail prices, as described above).

(d) Finally, we drew together the results of the above analysis and considered some issues connected with Sky's cable rate-card prices being charged on a simple per subscriber basis.

16. We therefore had two approaches to assessing the relative disadvantage experienced by equally efficient retailers. The first, given by *(a)* and *(b)* in the previous paragraph, in effect compared an estimate of what Sky's incremental prices would be if Sky was in the same position as other retailers (ie if it paid cable rate-card prices for Sky Movies products) with Sky's actual incremental retail prices. The second, given by *(c)* in the previous paragraph, compared other retailers' actual costs for Sky Movies products (cable rate-card prices) with what their costs would be if they paid the same as Sky (ie Sky's costs). These two comparisons are summarized in Table 2 below. Annex A gives an illustration of how these two approaches can be used to assess the relative disadvantage experienced by an equally efficient retail competitor compared with Sky.

TABLE 2 **Summary of our two methods of assessing Sky's cable rate-card prices**

	Comparison with incremental retail prices (IRP)—paragraph 15(b)	*Comparison with costs—paragraph 15(c)*
Other retailers	Cable rate card*	Cable rate card†
Sky	Sky's IRP	Sky's cost
Measure of other retailers' relative disadvantage	Cable rate card/Sky IRP–1	Cable rate card/Sky cost–1

Source: CC.

Subject to the outcome of the assessment in paragraph 15(a)*, this was the lowest incremental retail price that retailers paying the cable rate card would set.
†This is what other retailers pay.

17. Subsequent to our August 2011 provisional findings, Sky reduced its cable rate-card prices for certain of its products which incorporate Sky Movies [✂]. We present first our analysis of Sky's cable rate-card prices for the 12 months ending 30 June 2010 (2009/10)[20] and then discuss the recent changes.

Analysis of Sky's incremental retail prices for Sky Movies products if it paid cable rate-card prices

18. As explained above, we conducted this analysis to assess whether it was useful to compare Sky's cable rate-card prices with its incremental retail prices.

19. For the purpose of this analysis, we assumed that Sky was in a similar position to other retailers and paid cable rate-card prices for Sky Movies products. Under this assumption, the marginal cost to Sky of an additional subscriber to a Sky Movies

[20] We did not carry out a further analysis for 2010/11 as the relevant changes to Sky's cable rate-card prices did not occur until after the end of 2010/11 and we did not believe that an analysis for 2010/11 would add much to the analysis we carried out for 2009/10.

product would be equal to the cable rate-card price for that product (plus any marginal retailing costs[21]). On the basis of the reasonable assumption that Sky maximizes profits, Sky will set incremental prices such that marginal revenue is equal to marginal cost. In order to shed light on what Sky would do if it paid the cable rate-card price, we considered a comparison of Sky's actual incremental retail price with its actual marginal revenue.

20. As discussed in more detail in Annex B, the relationship between Sky's incremental retail price and its marginal revenue from a change in the number of subscribers is determined by two main effects:

(a) Marginal revenue may be greater than incremental retail price because some marginal subscribers might not otherwise subscribe to Sky at all (see paragraphs 14*(a)* and 51*(b)*).

(b) Marginal revenue may be less than incremental retail price because Sky faces a downward sloping demand curve for Sky Movies—other things being equal, obtaining additional subscribers to Sky Movies requires a reduction in Sky's incremental retail price, which reduces Sky's revenue from all subscribers to Sky Movies.

21. In Annex B, we review the evidence on these two effects. Based on that evidence, our view was that the first effect was smaller than the second, and consequently Sky's incremental retail price was greater than its marginal revenue, and hence marginal cost, per subscriber. If Sky paid the cable rate-card prices that other retailers paid, its marginal cost per subscriber would be equal to the cable rate-card price and we inferred that it would have set incremental retail prices above cable rate-card prices. Of course, if Sky itself paid the cable rate-card price many other things might also be different, so we could not say with certainty what Sky would do under the hypothetical circumstance that it paid the cable rate-card price. Nevertheless, the evidence from Annex B gave no support to the idea that demand conditions were such as to lead Sky to set an incremental retail price below marginal cost.

22. We also considered what other evidence might be relevant to the question of how Sky would set incremental retail prices if it paid the cable rate-card price. The main other retailer supplying Sky Movies products was Virgin Media and its actual incremental retail prices are shown below (see Table 6), but these were not useful for our purpose in this analysis as Virgin Media may at the time have been at a disadvantage in retailing Sky Movies products. We noted that, following Ofcom's WMO remedy decision relating to Sky Sports, the incremental price for acquiring Sky Sports from BT Vision when taken with other BT services (such as broadband and telephony) was below Ofcom's regulated wholesale price.[22] This indicated that it was not just a theoretical possibility that retailers set incremental retail prices below the wholesale price at which they bought the product. However, we thought that BT Vision's pricing strategy with regard to Sky Sports was of limited relevance to our analysis: first, because BT Vision had a small share of pay TV, and was trying to expand its customer base,[23] whereas we were concerned with whether incremental retail prices could be below wholesale prices on a continuing basis; and second, because Sky Movies was not necessarily comparable with Sky Sports (for instance,

[21] For simplicity, the subsequent discussion ignores marginal retailing costs. However, we did take them into account in our calculations by adjusting incremental retail prices—see Tables 5 & 6.
[22] BT explained that its overall retail prices for the bundle of services were comparable to Sky's, on a like-for-like basis.
[23] BT said that it agreed with this assessment: as a new entrant, BT needed to have a high-impact launch [✄]. BT said that its launch proposition [✄], which BT used as a key part of its marketing strategy. [✄]

survey results indicated that Sky Movies was less important in driving new subscriptions (see Section 6)).[24]

23. For these reasons, it appeared to us reasonable to go on to compare Sky's cable rate-card prices with its incremental retail prices.

Comparison of cable rate card with incremental retail prices

24. Table 3 sets out our comparison of Sky's incremental retail prices and its cable rate-card prices for 2009/10. In order to facilitate the comparison, we calculated an adjusted incremental retail price that deducted discounts and specific costs associated with retailing and wholesaling Sky Movies (with regard to retailing, we only took into account costs that varied with the number of subscribers to the Sky Movies product).[25] Table 3 shows that in 2009/10 [✂].

TABLE 3 **Sky's incremental retail price and cable rate-card price per subscriber for Sky Movies products for year to 30 June 2010**

£ per subscriber per month excluding VAT

	Incremental retail price	*Disney Cinemagic*	*Discounts* and specific costs†*	*Adjusted incremental retail price‡*	*Cable rate-card price§*	*Excess of cable rate card over adjusted incremental retail price# %*
Single movies	6.96		[✂]	[✂]	[✂]	[✂]
Dual movies	13.79	[✂]	[✂]	[✂]	[✂]	[✂]
Single movies/single sports	14.67		[✂]	[✂]	[✂]	[✂]
Dual movies/single sports	18.96	[✂]	[✂]	[✂]	[✂]	[✂]
Single movies/dual sports	18.96		[✂]	[✂]	[✂]	[✂]
Dual movies/dual sports	21.65	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC calculations based on Sky data.

*Discounts for Sky Movies package less estimated discounts for basic-only packages.
†Estimated specific retail variable costs of Sky Movies products less estimated cost to Sky of selling Sky Movies channels to wholesale customers. We estimated specific retail variable costs by allocating estimated incremental call centre costs of £[✂] across the number of existing Sky subscribers taking out each Sky Movies product in 2009/10. We estimated the cost to Sky of selling Sky Movies channels to wholesale customers at £[✂] per subscriber per month based on [✂] and Sky's statement that the administrative costs associated with wholesaling Sky's channels would be unlikely to exceed £[✂].
‡List price less cost of Disney Cinemagic, discounts and specific costs.
§Cable rate-card price for products including dual sports included supplementary charge for Sky Sports 4.
#Cable rate-card price less adjusted incremental retail price divided by adjusted incremental retail price times 100.
Note: All figures were annual averages for the 12 months ended 30 June 2010 and excluded VAT.

25. Figure 1 shows the excess of Sky's cable rate-card prices over its unadjusted incremental retail prices for its main Sky Movies products since July 2006. The excess of cable rate card over incremental retail price for Sky's single movies product [✂]. The excess for the more important dual movies and dual movies/dual sports products was around or just over [✂] per cent until [✂]. Since [✂], Sky has [✂] reduced its cable rate-card price [✂].[26] Sky told us that it had made these changes as it wished to increase the wholesale distribution of Sky Movies on new and existing platforms and hoped that by reducing wholesale prices this would further incentivize existing platforms to increase their efforts to sell Sky Movies. Sky said that it could not be certain that such reductions would have the desired effect, but took the view that further reductions in wholesale prices were required. Sky also said that this was one

[24] BT highlighted that it was appealing against the level of regulated wholesale prices which Ofcom had determined.
[25] In relation to wholesaling cost, we [✂].
[26] The excess in Figure 1 reflected unadjusted rather than adjusted incremental retail prices, but this was unlikely to affect the finding that the dual movies cable rate-card price was [✂].

aspect of its continuing response to competition, including from OTT services such as Netflix and LOVEFiLM.[27]

FIGURE 1

[✂]

Source: CC.
Note: [✂]

26. In the period following our August 2011 provisional findings, [✂]. We considered how far [✂] for these products was due to Sky's movies pricing and how far to its sports pricing, and noted that the subscribers to combined movies and sports products for whom Sky Movies mattered could be divided into two groups: *(a)* those for whom Sky Sports was not relevant (ie who took Sky Sports because they wanted Sky Movies and the additional cost of Sky Sports was not too great); and *(b)* those for whom both Sky Movies and Sky Sports were relevant:[28]

(a) With regard to the first group, it was the comparison of cable rate card with incremental retail price for the Sky Movies product that was important. As stated in the previous paragraph, following the wholesale price changes, [✂].

(b) With regard to the second group, it was the overall comparison of prices for the combined product that was more relevant. However, since our inquiry was concerned with movies rather than sports products, we still needed to consider whether [✂]. Table 4 shows [✂].

[27] [✂] (see paragraph 62). [✂]
[28] A third group consisted of subscribers who took Sky Movies because they wanted Sky Sports and the additional cost of Sky Movies was not too great. in the present analysis, we were not concerned with such subscribers because Sky Movies did not matter to their choice of pay-TV retailer.

TABLE 4 **Prices of combined movies and sports products from 1 March 2012 (excluding VAT)**

	Single movies/single sports	*Single movies/max sports**	*Dual movies/single sports*	*Dual movies/max sports*
Prices of sports-only product				
Cable rate card	[✂]	[✂]	[✂]	[✂]
Incremental retail price†	[✂]	[✂]	[✂]	[✂]
Excess	[✂]	[✂]	[✂]	[✂]
Prices of movies and sports product				
Cable rate card	[✂]	[✂]	[✂]	[✂]
Incremental retail price†	[✂]	[✂]	[✂]	[✂]
Excess	[✂]	[✂]	[✂]	[✂]
Implied incremental price for movies content‡				
Cable rate card	[✂]	[✂]	[✂]	[✂]
Incremental retail price†	[✂]	[✂]	[✂]	[✂]
Excess	[✂]	[✂]	[✂]	[✂]
Excess of cable rate-card price over incremental retail price				
Sports-only product (%)	[✂]	[✂]	[✂]	[✂]
Movies and sports product (%)	[✂]	[✂]	[✂]	[✂]
Incremental for movies content (%)	[✂]	[✂]	[✂]	[✂]

Source: CC calculations.

*Sky's wholesale max sports pack includes Sky Sports 3 and 4 and Sky Sports F1. We understood that these channels were included in Sky's retail dual sports package.
†Unadjusted incremental retail price.
‡Price of movies and sports product less price of sports-only product.

27. In summary, at the time of our report, as a result of Sky's changes to its cable rate-card prices: *(a)* the cable rate-card price [✂] its incremental retail price; *(b)* [✂], the cable rate-card price [✂] its incremental retail price [✂]; and *(c)* while the cable rate-card price [✂] of incremental retail price [✂].

Comparison with average cost per subscriber

28. Our calculation of Sky's total costs per subscriber (including an estimated cost of capital) for its movie products in 2009/10 is set out in Annex C. Table 5 compares our estimates of Sky's fully allocated cost per subscriber in 2009/10 with its incremental retail prices and its cable rate-card prices. Table 5 suggests that, in 2009/10, wholesale prices were above average cost per subscriber by between [✂] per cent (for Sky's [✂] product) and [✂] per cent (for its [✂] product).

TABLE 5 **Sky's fully allocated cost average per subscriber and cable rate-card price for Sky Movies products for year to 30 June 2010**

£ per subscriber per month excluding VAT

	*Adjusted incremental retail price**	*Fully allocated cost*	*Cable rate-card price*	*Excess of rate-card price over cost†* %
Single movies	[✄]	[✄]	[✄]	[✄]
Dual movies	[✄]	[✄]	[✄]	[✄]
Single movies/single sports	[✄]	[✄]	[✄]	[✄]
Dual movies/single sports	[✄]	[✄]	[✄]	[✄]
Single movies/dual sports	[✄]	[✄]	[✄]	[✄]
Dual movies/dual sports	[✄]	[✄]	[✄]	[✄]

Source: CC calculations based on Sky data.

*List price less cost of Disney Cinemagic, discounts and specific costs (see Table 3).
†Cable rate-card price less fully allocated cost divided by fully allocated cost times 100.
Note: All figures are annual averages for the 12 months ended 30 June 2010 and exclude VAT.

29. In our view, for the following reasons caution was needed in interpreting a comparison of cable rate-card prices with average cost per subscriber:

(a) It was necessary to allocate costs between different business segments of Sky. [✄] Our view, therefore, was that, while the resulting cost figures were subject to a range of uncertainty, they were useful for the purposes of this analysis.

(b) We allocated the same cost per subscriber to each Sky Movies product (except that we allocated half the cost to single movies compared with dual movies, and similarly for single and dual sports). An alternative approach would have been to allocate costs that were not driven by the number of subscribers (fixed costs) according to a measure of revenue or margin. As illustrated in Annex C, Table 3, the effect of this was that products (eg single and dual movies) with higher prices relative to costs bore a higher proportion of costs and had a lower rate-card price to cost ratio; while products (eg dual movies/dual sports) with lower prices relative to costs bore a lower proportion of costs and had a higher rate-card price to cost ratio.

(c) It could be argued that the calculation should have allowed for a profit above that implied by the cost of capital employed in supplying the Sky Movies products. This would have been appropriate if Sky had low costs due to exceptional efficiency and/or if significantly more intangible assets were used in supplying the Sky Movies products than included in our estimates.[29] It might also have been appropriate if Sky benefited from significant monopsony power in purchasing FSPTW movies (though we did not see evidence that Sky's purchase prices for FSPTW movies were particularly low relative to international comparators (see Section 9)).[30]

(d) On the other hand, our estimated cost per subscriber may have been high because we compared total costs per subscriber (including HD costs) with the cable rate-card price which was for the supply of SD only (see Annex C).

[29] The impact of more intangibles on cost was not necessarily straightforward since recognizing that an activity such as advertising gives rise to an intangible asset would increase the capital base to which the cost of capital is applied, but also reduce operating expenditure.
[30] Sky told us that there was clear evidence in our working papers of an absence of monopsony power on the part of Sky.

30. Despite the need for caution, it appeared to us that the data in Table 5 suggested that the excess of Sky's cable rate-card price over its cost per subscriber in 2009/10 was [✂]. The subsequent changes in Sky's cable rate-card price [✂].[31]

31. The data considered so far was all for average price and cost per subscriber. However, we note in Annex C that some of the costs of the Sky Movies products did not vary with the number of subscribers. Since both suppliers and, potentially, consumers benefited from spreading fixed costs over a larger number of subscribers, we would have expected there to be a 'non-linear' pricing structure that rewards retailers for increasing the number of subscribers. For example, we understood that [✂] provided for prices that were non-linear in this sense.[32] If Sky's cable rate-card prices were non-linear in this way, the cable rate-card price actually paid by a retailer would reflect that retailer's success in selling Sky Movies products, and there could then be a difficulty in interpreting a high actual cable rate-card price since this could result from a lack of success in selling Sky Movies products rather than from any disadvantage.[33] However, Sky's cable rate-card price for each product was a simple linear price per subscriber, and consequently this possibility did not arise.

32. Sky said that it would have liked to mitigate what it regarded as cable retailers' insufficient incentive to market its products by seeking to link the wholesale price to the penetration of Sky's premium channels among the cable retailers' subscribers. However, altering the pricing structure in this way had not happened.[34] Sky said that this was in large part because of the regulators' equivocal responses to enquiries from Sky. Sky said that sometimes regulatory authorities regarded the proposed levels of discounts as insufficient; on other occasions, the regulators disclosed nervousness at the risk that Sky would, by incentivizing retailers to sell Sky's movie services, risk foreclosing other competing services.[35] Virgin Media disputed the suggestion that proposals to link the wholesale price to retail penetration arose from proactive initiatives by Sky. Virgin Media said that such discussions had resulted from persistent attempts by Virgin Media's predecessors, ntl and Telewest, to obtain a wholesale price that incentivized them to increase penetration of Sky's premium channels on their platforms and, subsequent to the ntl/Telewest merger, Virgin Media had continued the efforts of its predecessors to secure access to Sky's premium channels on terms that would incentivize it to market and promote those channels. Virgin Media said that, [✂].[36] In our analysis of the price terms of Sky's wholesale supply, we were concerned with assessing any disadvantage experienced by other equally efficient retailers relative to Sky in retailing Sky Movies products. Therefore, in our view, it was sufficient for our purposes to note that the cable rate card remained on a per-subscriber basis and we did not need to explore why non-linear prices had not been implemented.

Effect on other retailers

33. At the time of our August 2011 provisional findings (and at the time of our report),[37] Sky's movie channels were purchased only by Virgin Media and some small cable

[31] Allowing for costs to increase by about 10 per cent (roughly in line with RPI) we estimated that the excess would have reduced to about [✂] per cent for single movies and [✂] per cent for dual movies. On a similar basis, we estimated that the excess for the combined movies and sports products [✂].
[32] Additionally, where prices are negotiated regularly (eg annually), the negotiations themselves may link prices to success in selling the product even if the agreed price is expressed as a simple price per subscriber.
[33] However, a retailer paying a high actual cable rate-card price due to a lack of success in selling Sky Movies could not be said to be equally efficient.
[34] [✂]
[35] Sky added that [✂].
[36] [✂]
[37] Other than Sky's new agreement with TalkTalk [✂].

retailers. Therefore, in our August 2011 provisional findings, we examined the take-up of Sky Movies products by Virgin Media subscribers to see whether this might be informative as to whether Sky's wholesale customers were at a material disadvantage when retailing Sky Movies on the basis of Sky's wholesale price terms. In doing so, we noted that it was important to remember that Virgin Media was just one retailer with its own characteristics and was not necessarily representative of what other pay-TV retailers would do if they purchased Sky Movies on a wholesale basis. However, our revised finding on the central issue of the significance of FSPTW content (on Sky Movies) to consumers in their choice of traditional pay-TV provider (see Section 6), meant that we no longer believed there was necessarily a link between the take-up of Sky Movies products by Virgin Media subscribers and whether Virgin Media experienced material disadvantage. Nevertheless, in the context of considering whether the evidence in relation to the price terms of Sky's wholesale supply of Sky Movies was such as to cast doubt on our views on significance in Section 6 and, having regard to representations received in the course of our inquiry and taking into account recent developments where relevant, we review in this section the analysis in our August 2011 provisional findings (paragraphs 34 to 39) and discuss the implications of recent changes in Sky's cable rate-card prices (paragraphs 40 and 41).

34. Table 6 shows, for 2009/10, Sky's cable rate card and Virgin Media's incremental retail prices, and also, for comparison purposes, Sky's incremental retail prices and Virgin Media's number of subscribers. The table also shows Virgin Media's incremental retail margin in 2009/10 if it had paid UK VAT, and its actual incremental retail margin using the Luxembourg VAT rate of 3 per cent (which was its applicable rate at that time). In our August 2011 provisional findings we focused on Virgin Media's position if it had paid UK VAT because we were concerned with equally efficient retailers which would pay a similar VAT rate to Sky (we also noted that Virgin Media returned to UK sales being at a UK VAT rate from the beginning of 2012).

35. The data in Table 6 shows that:

(a) Certain of Virgin Media's incremental retail prices differ according to the basic pay-TV channel pack taken (Virgin Media's pay-TV subscribers take one of the following packs: XL, L, M+ and M[38]).

(b) Virgin Media's 2009/10 incremental retail prices to L, M+ and M subscribers for all products were above cable rate-card prices (in some cases well above) [✂]. In July 2010, Virgin Media reduced its incremental retail prices for a number of Sky Movies products. As a result, at the time of our analysis Virgin Media's incremental retail margins were [✂] than those shown in Table 6. In September 2010, Virgin Media's incremental retail margins at UK VAT rates were [✂] per cent for single movies, [✂] per cent for dual movies and [✂] per cent for dual movies/dual sports for M+, L and XL subscribers.

(c) Virgin Media's 2009/10 incremental retail prices to XL subscribers for dual movies and dual movies/dual sports were [✂].[39] Even so, its incremental retail prices for these two products to XL subscribers were still above Sky's incremental retail prices by £3 per month (19 per cent) and £2 per month (7 per cent) respectively.

(d) [✂]

[38] We understood that Virgin Media's M pack [✂] did not include pay-TV channels but provided access to additional FTA channels (compared with Freeview). [✂]
[39] At Luxembourg 3 per cent VAT, they were [✂].

TABLE 6 **Sky's cable rate card and Virgin Media's and Sky's incremental retail prices, 2009/10**

	£ per subscriber including VAT					
	Cable rate-card price (plus UK VAT)	*Virgin Media incremental retail price (incl VAT)*	*Sky incremental retail price (incl VAT)*	*Virgin Media incremental retail margin %**		*Virgin Media subscribers '000*
				Notional UK VAT	*Actual VAT*	
Virgin Media subscribers with XL pack						
Single Movies	[✂]	15.92	8.09	[✂]	[✂]	[✂]
Dual Movies	[✂]	19.04	16.03	[✂]	[✂]	[✂]
Dual Movies/Dual Sports	[✂]	27.04	25.17	[✂]	[✂]	[✂]
Virgin Media subscribers with L pack						
Single Movies	[✂]	19.62	8.09	[✂]	[✂]	[✂]
Dual Movies	[✂]	25.04	16.03	[✂]	[✂]	[✂]
Dual Movies/Dual Sports	[✂]	32.04	25.17	[✂]	[✂]	[✂]
Virgin Media subscribers with M+ pack						
Single Movies	[✂]	21.81	8.09	[✂]	[✂]	[✂]
Dual Movies	[✂]	26.50	16.03	[✂]	[✂]	[✂]
Dual Movies/Dual Sports	[✂]	33.50	25.17	[✂]	[✂]	[✂]
Virgin Media subscribers with M pack						
Single Movies	[✂]	N/A	8.09			[✂]
Dual Movies	[✂]	N/A	16.03			[✂]
Dual Movies/Dual Sports	[✂]	N/A	25.17			[✂]
Total						[✂]

Source: CC calculations based on Virgin Media data.

*Incremental retail price less cable rate-card price as a percentage of incremental retail price. This calculation took no account of retail costs. [✂]
Note: N/A = precise information not available for this period.

36. Table 7 compares the take-up of Sky Movies among Sky and Virgin Media retail subscribers in 2009/10. A comparison of take-up may reflect retailers' success in selling Sky Movies. However, take-up may also be affected by differences in retailer characteristics. For example, Sky's branding of its movie products may affect the take-up of these products as it seems plausible that consumers interested in Sky Movies would more naturally go to Sky in order to subscribe to them than to other retailers. In comparing take-up, we used figures both including and excluding subscribers to Virgin Media's 'M' pack because this was a very basic pack, to which Sky had no equivalent, and because including Virgin Media's 'M' subscribers could bias the comparison with Sky if 'M' subscribers were less likely to purchase Sky Movies.[40] We focused on the comparison without Virgin Media's 'M' subscribers.

TABLE 7 **Comparison of take-up of Sky Movies products, year to June 2010**

	per cent of total subscribers				
	Sky	*Virgin Media*		*Virgin Media less Sky*	
		With 'M'	*Without 'M'*	*With 'M'*	*Without 'M'*
Single movies	[✂]	[✂]	[✂]	[✂]	[✂]
Dual movies	[✂]	[✂]	[✂]	[✂]	[✂]
Single movies/single sports	[✂]	[✂]	[✂]	[✂]	[✂]
Dual movies/single sports	[✂]	[✂]	[✂]	[✂]	[✂]
Single movies/dual sports	[✂]	[✂]	[✂]	[✂]	[✂]
Dual movies/dual sports	[✂]	[✂]	[✂]	[✂]	[✂]
Total	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC calculations based on Sky and Virgin Media data.

[40] [✂], suggesting that, even if other things were equal, take-up among Virgin Media's 'M' subscribers [✂] would be lower than among Sky subscribers.

37. At the time of our August 2011 provisional findings, the data in Table 7 suggested that the take-up of Sky Movies products among Virgin Media subscribers was considerably lower than among Sky subscribers. In total, take-up among Virgin Media's subscribers was about [✂] per cent, compared with take-up among Sky's subscribers of [✂] per cent. These figures implied that Virgin Media had [✂] per cent of Sky Movies subscribers, compared with [✂] per cent of all the pay-TV subscribers with Sky and Virgin Media who did not take a Sky Movies pack. In other words, these figures implied that Virgin Media was only about [✂] as successful in selling packages which included Sky Movies as in selling packages which did not.[41]

38. Virgin Media suggested to us that the low penetration of Sky Movies among its subscribers was because at prevailing cable rate-card prices it did not have an incentive to compete hard with Sky for these customers. Though Sky disagreed with this view (see paragraph 58), we noted that one informed third party [✂] agreed with Virgin Media, having stated in an internal business presentation that Virgin Media resold Sky Movies but had 'limited penetration due to poor wholesale price'.

39. We also considered the take-up of Sky Movies over time. We found that the rate of take-up [✂].

40. As noted above (see paragraphs 25 to 27), Sky reduced its cable rate-card prices [✂]. Virgin Media said that, [✂].

41. In terms of actual financial amounts, in the period between August 2011 and the time of our report, [✂]. Further, it seemed to us that the reductions in Sky's wholesale prices made it difficult for us at the time of our report to interpret the data on take-up, which was all historic. In our view, Sky's changes to wholesale prices were recent and, as any impact on take-up would occur gradually, a comparison of take-up would be of limited value in assessing the current extent of disadvantage experienced by other retailers.

42. Therefore, although historically the take-up of Sky Movies among Virgin Media subscribers had been considerably lower than among Sky subscribers, which could be consistent with other retailers (such as Virgin Media) having been at a material disadvantage compared with Sky in retailing Sky Movies products, and hence with the evidence relating to Sky's cable rate-card prices up to September 2011 (see paragraphs 18 to 30), the recent [✂] reductions in Sky's cable rate-card prices for certain of Sky's products incorporating Sky Movies [✂] made this analysis of limited value. This would have been the case even if we had considered Sky Movies to be significant to consumers in their choice of traditional pay-TV retailer. Additionally, we noted that there was a need for caution in interpreting data on take-up due to differences in retailer characteristics (see paragraph 33).

Points made by Sky in response to our working papers and August 2011 provisional findings

43. Sky commented extensively on our working papers that discussed its prices (working papers 15 and 26), and on our August 2011 provisional findings. We considered Sky's comments carefully and, where appropriate, we took account of them in our analysis (presented above). In this section, we set out briefly our consideration of Sky's main points.

---

[41] We calculated that this was the case both for financial year 2009/10 and for September 2010 (the most recent month for which we had figures available at the time of conducting this analysis).

Reasonableness of Sky's charges and relevance of previous decisions

44. Sky said that Virgin Media clearly wished that the charges for Sky's movie channels were lower, as any business wished it could pay less for its inputs. However, this did not mean that Sky's charges for its movie channels were, in some sense, too high. Sky considered that its wholesale charges for these channels:

    (a) were at levels that were broadly profit-maximizing for Sky; and

    (b) conformed to the well-established and well-recognized test for charges for an input supplied by a vertically integrated operator to a downstream rival not distorting effective competition between them, namely that the vertically integrated operator's downstream business was able to operate profitably at those wholesale charges.

45. In addition, Sky said that:

    (a) Its terms of wholesale supply were entirely reasonable, and were objectively justified and normal. Sky said that its wholesale prices were not 'excessive' and nor (in particular as regards the relationship between wholesale prices and retail prices) did they give rise to any distortion of competition. Sky said that its prices enabled a retailer as efficient as Sky to operate profitably, this being the standard benchmark for assessing the reasonableness of the pricing of wholesale inputs.[42] For these reasons, its prices did not give rise to any AEC.

    (b) We had not identified, or even considered, how our approach differed from the standard, well-established approach under competition law in margin squeeze cases. It seemed to Sky implausible that we believed that Sky would set wholesale charges that would not pass a margin squeeze test. Accordingly, Sky considered it improbable that we were investigating Sky's wholesale charges in terms of the standard analysis based on competition law.

    (c) More well-established approaches to the issue of the potential effect on downstream competition of wholesale charges set by a vertically integrated operator indicated that price/cost tests comprised only one part of the assessment. Sky said that it was widely recognized that failure to pass a price/cost test in a margin squeeze case was not determinative of wholesale charges being abusive under competition law and other issues must also be investigated, notably the incentive and ability to foreclose and the effect of the conduct. In addition, Sky said that there needed to be an objective justification for the approach to pricing that was adopted.

46. We did not assess Sky's cable rate-card prices against the level that Virgin Media wished to pay and we accepted that Sky's prices were likely to be at levels that were broadly profit-maximizing for Sky. However, we noted that it may be profit-maximizing for Sky to set its cable rate-card prices at levels which limit competition from other retailers. In any event, we focus in our analysis on objective evidence about the level of Sky's prices, rather than Sky's incentives.

47. In this inquiry we were not considering the same issue as that considered by the OFT in 2002, which was whether Sky was abusing its dominant position, in particular by means of a margin squeeze. In its 2002 inquiry, the OFT's margin squeeze test con-

---

[42] Sky said that its wholesale prices passed the margin squeeze test laid out in the OFT's 2002 decision ('Decision of the Director General of Fair Trading, No CA98/20/2002, BSkyB investigation: alleged infringement of the Chapter II prohibition, 17 December 2002', www.oft.gov.uk/shared_oft/ca98_public_register/decisions/bskybfinal1.pdf). Sky added that [✂].

sidered whether an equally efficient retail competitor of Sky would be profitable, and the OFT took into account all the revenues that a business similar to Sky would earn from pay TV. If an equally efficient pay-TV competitor was not profitable, it would be expected to exit from the market. In other words, the OFT's test was for whether Sky's prices excluded competitors from the pay-TV market. In this context (and subject to the underlying question of the significance of FSPTW content on Sky Movies), we were considering whether Sky's cable rate-card prices gave it a material advantage over other equally efficient retailers in retailing Sky Movies products rather than whether they were excluded altogether from the pay-TV retail market.

48. Sky also said that our proposed 'test' was conceptually flawed. Sky said that this would result in entirely unproblematic situations falsely being regarded as giving rise to adverse effects on competition. Sky said that this point could be illustrated with a simple example which compared two hypothetical situations: in the first, a pay-TV supplier offered movies and basic channels together; while, in the second, a pay-TV supplier offered the same movies and basic package but also offered a basic-only package, though at a price such that no subscribers purchased it. Sky said that this illustrated that the introduction of a stand-alone offer for a basic-only package was economically irrelevant; in particular, it did not affect at all the ability of other pay-TV rivals to compete. Sky added that, since the application of a standard single-product margin squeeze test did not reveal any issue in the first situation, any meaningful margin squeeze test for situations with multiple options should show that there was no margin squeeze in the second situation either.

49. We considered that this point was misconceived because we were not proposing to replicate a margin squeeze test as applied in abuse of dominance cases to assess whether there was an AEC. Rather in the context of our theory of harm and in circumstances where we found the other elements of our theory of harm to be made out, we were considering whether Sky's cable rate-card prices gave it a material advantage over other equally efficient retailers in retailing Sky Movies products. The comparison of Sky's cable rate-card prices with its incremental retail prices represented only part of the evidence base for our assessment of whether Sky's cable rate-card prices gave it a material advantage over other equally efficient retailers in retailing Sky Movies products. In Sky's two hypothetical situations, the effect on competition would be the same but the evidence base for an assessment of competition would need to be different. In our view, the point that this submission illustrated was that it was necessary for us to look at a range of evidence. However, we also noted that Sky's comparison of hypothetical situations appeared of little relevance to the UK pay-TV market, where a substantial number of subscribers purchased basic-only packages.

Revenue associated with Sky Movies

50. Sky said that the incremental retail price associated with packages which included Sky's movie channels was not a reliable measure of the revenue attributable to those products. In particular, Sky said:

(a) the proposition that incremental price was a reliable measure of incremental revenue had been rejected by the OFT and Ofcom in previous cases which had examined the issue on which our working paper appeared to focus (Sky drew our attention to a 1997 letter from the OFT to the European Commission, to the OFT's 2002 decision and to Ofcom's 2007 to 2010 pay-TV investigation);

(b) the proposition was wrong as a matter of basic economic theory in relation to bundling; and

(c) the proposition also ignored the role of additional revenues (or other benefits) earned by pay-TV retailers by virtue of offering Sky's movie channels ([✂]).

51. We agreed that Sky's incremental retail prices did not reflect the incremental retail revenue attributable to its movie channels (see paragraph 14*(a)*). On points *(a)* to *(c)* in paragraph 50 we additionally noted the following:

(a) Unlike the OFT (in 1997 and 2002) and Ofcom (in 2007 to 2010), we believed that a comparison of cable rate-card prices with incremental retail prices was potentially useful (see paragraphs 18 to 27). We noted that the pay-TV market had changed since the OFT's 1997 letter and 2002 decision. [✂][43] We recognized that, prior to this change, [✂] may have meant that incremental prices were less well understood by customers, and less useful for comparative purposes than they later became. [✂][44] As regards Ofcom's more recent pay-TV inquiry, it was our view that Ofcom could usefully have considered incremental retail prices for Sky Movies products and compared them with cable rate-card prices. In any event, Ofcom referred the matter to us and we had to reach our own view.

(b) It appeared to us that the essence of Sky's offer to consumers (see Table 1) was a basic package plus the option of taking additional products (including additional entertainment packs, movies and sports products and à la carte channels) at an incremental retail price.[45] If some subscribers, who purchased a package including a Sky Movies product, would not have purchased a package in the absence of the movies product, this would suggest that incremental revenue from the movies product exceeds incremental price. It seemed to us that it was an empirical rather than a theoretical matter whether this was the case. The evidence (eg from our December 2010 survey) suggested that some Sky subscribers taking movies products would not subscribe if Sky did not offer these products; hence, in our view, Sky's incremental revenue per subscriber did exceed its incremental price.[46] This was just a way of saying that, if Sky had not offered movies products, its loss in revenue would have exceeded its incremental price multiplied by its number of subscribers to movies products. However, this point in itself was of limited relevance to our analysis. As discussed in paragraphs 18 to 23 and Annex B, the excess of average incremental retail revenue over incremental retail price was only one of the factors affecting whether, if Sky paid the cable rate-card price, it would set an incremental retail price above the cable rate-card price. Furthermore, although Sky's average incremental retail revenue did exceed incremental retail price to some extent, it appeared to us that the evidence suggested that, if Sky paid the cable rate-card price, it would set an incremental retail price above the cable rate-card price. That being the case, the difference between Sky's cable rate-card prices and its incremental retail prices would give an estimate of the relative disadvantage experienced by an equally efficient competitor retailing Sky Movies products (see paragraph 15*(a)*).[47] However, it was only one of three indicators we considered.

(c) We took account of Sky's revenue from additional products in our analysis in Annex B since we estimated the per-subscriber margin on a basic package using data on the movie package price or margin less the incremental movies price or margin. We did not take account of the length of the subscription period as we did

[43] Sky told us that, [✂].
[44] [✂]
[45] From September 2009 to August 2011, it was possible to purchase Sky's movies and sports products without basic channels, but this possibility was not actively marketed and [✂] subscribers took it up.
[46] See footnote to paragraph 14*(a)*.
[47] It would be a lower estimate to the extent that, if Sky paid the cable rate-card price, it would set an incremental retail price above (rather than equal to) the cable rate-card price.

not consider it relevant to our analysis (moreover, we noted that subscribers could start as basic-only subscribers and upgrade to a movies package or vice versa).

52. Sky also said that it was important to recognize that Sky and Virgin Media did not compete on the basis of 'incremental prices'. By way of example, Sky said that it did not, in seeking to attract new pay-TV subscribers, advertise its movie services on the basis of how much extra it cost to subscribe to them in addition to basic-only pay-TV packages.

53. Our view was that competition between traditional pay-TV retailers (including Sky and Virgin Media) was across all pay-TV packages and hence there was not a separate retail market consisting just of FSPTW movie products (see Section 4). We considered the significance of FSPTW movie products to retail competition in Section 6. However, we found unconvincing Sky's statement that it did not, in seeking to attract new pay-TV subscribers, advertise its movie services on the basis of how much extra it cost to subscribe to them in addition to basic-only pay-TV packages.[48] For example, when we examined this issue in November 2010, Sky's website and general marketing material presented Sky's premium channels as an add-on to its entertainment packs. Sky's website stated that those wanting to join Sky TV should 'pick the TV you want to watch from our six entertainment packs' and then '*add* premium packs for 11 Sky Movies channels and five Sky Sports channels' (emphasis added).[49] Furthermore, the Sky Movies page stated: '*add* movies pack; £16 *extra* a month in addition to your entertainment pack(s)' (emphasis added). Regarding entertainment packs, the website said that 'your first pack is £19 per month'.[50] While, when specifically marketing its movie products, we noted that Sky quoted a total package price, it usually did so placing considerable emphasis on other services and did not suggest that customers were paying the package price just for Sky Movies.[51] We believed that this material was reflective of Sky's advertising throughout the period of our inquiry. We noted, for example, that Sky's announcement of its new entertainment packaging[52] explicitly referred to additional premium channel prices, which was what we referred to as incremental retail prices.

54. In a later submission, Sky said that it offered consumers an enormous variety of pay-TV packages (over 1,000 different pay-TV packages, excluding consideration of services such as broadband, telephony, multiroom and HD) and that it had found that the best way of selling its services was to enable consumers to add together the various components of their preferred package (including both pay-TV components and other services) in a 'building block' approach. Sky added that the 'building

---

[48] In a subsequent submission, Sky said that we had used a review of Sky's marketing material to support an assertion that, because this material included references to incremental prices, this meant that Sky must consider that incremental prices were a meaningful measure of revenues received from subscribers for package components. This was not correct. We reviewed Sky's marketing material in working paper 26 (partly repeated in this appendix) only to rebut Sky's statement that it did not, in seeking to attract new pay-TV subscribers, advertise its movie services on the basis of how much extra it cost to subscribe to them in addition to basic-only pay-TV packages, and to illustrate that incremental retail prices were relevant to pay-TV subscribers as a measure of the difference between the price of a package with and without Sky Movies product.

[49] These were the first two bullets of eight: the third bullet dealt with choice of STB and the remaining five advertised particular aspects of Sky's service and provided links to other pages on Sky's website.

[50] Sky's website was similar at the end of April 2011 (the main difference was that the price of the first entertainment pack had increased to £19.50 per month).

[51] For instance, the cover spread to the London *Metro* newspaper on Thursday 4 November 2010, advertising Sky Movies, stated that for £37.75 per month new customers could gain:

- Sky TV, with movies in HD ('enjoy quality Sky TV of your choice plus 5 Sky Movies channels');
- a free Sky+ HD box;
- up to 20MB broadband; and
- unlimited calls (to UK landlines at evenings and weekends).

It appeared to us that the focus of this marketing was not Sky Movies alone but Sky TV plus five Sky Movies channels and other services.

[52] www.sky.com/mysky/enjoymore/entertainment/index.html.

blocks' normally had 'incremental prices' associated with them (although the incremental prices presented altered depending on consumers' choices of their 'building blocks'). However, Sky said that, once the customer had assembled their preferred package, they were presented with the total package price, and it was this price that was the key determinant of whether a potential subscriber chose to subscribe to that package, go back and assemble a different combination of services, or choose not to subscribe to Sky's pay-TV services at all.

55. We believed that the incremental retail price was likely to be relevant when a potential new subscriber was deciding whether or not to add a Sky Movies product to their basic package, though the total package price was likely to be relevant when the potential new subscriber was deciding whether to subscribe or not. We believed that it was the incremental retail price which was likely to be relevant when existing subscribers were deciding whether to upgrade or downgrade by adding/dropping Sky Movies products to/from their subscriptions.

56. Shortly before the publication of our August 2011 provisional findings, Sky provided us with some further evidence that it regarded as relevant to the issue of the appropriateness of using incremental prices as a measure of prices paid by consumers for package components. This evidence comprised responses to a question in an Internet omnibus survey asking respondents how much they paid each month for the Sky Movies channels they received. As a general matter, we attach less weight to research by parties with an interest in the outcome of our inquiry which has been commissioned specifically to influence our inquiry than to research by independent organizations or to research carried out by companies in the ordinary course of business (particularly where we have not been consulted with in advance, though we acknowledge in this case that, after the survey had been carried out, Sky provided us with details of its methodology). Additionally, we noted that the results of this online research might be less reliable than those of face-to-face or telephone research, due to the nature of the market, and the absence of a trained intermediary who could engage the attention of the survey respondent and who could clarify or probe responses in a controlled way.[53] The responses showed that out of 125 Sky dual movies respondents: 14 per cent chose the prompted response[54] 'I pay £16.00 a month for the Sky Movies channels in addition to what I pay for basic channels'; 5 per cent chose 'I pay a different amount for the Sky Movies channels in addition to what I pay for basic channels'; 54 per cent chose 'The Sky Movies channels are included in my total monthly package price, I don't pay a separate price for them'; and 28 per cent chose 'Don't know'. We considered that little could be inferred from these results about the appropriateness of using incremental prices as a measure of prices paid for Sky Movies products, for the following reasons: *(a)* at any one time only a modest proportion of subscribers would be considering switching pay-TV retailer or upgrading/downgrading their package and may be expected to know the incremental retail price of a Sky Movies product; *(b)* the third alternative was not mutually exclusive from the first two (there appeared to be no doubt that Sky Movies channels were included in subscribers' total package price while it was not clear what respondents would have understood by a 'separate price' (the majority of Sky subscribers did not receive a monthly paper bill unless specifically requested)[55]); and *(c)* nothing in the responses altered the point that it was the difference between the price of a package including and excluding dual movies that was relevant to new subscribers consider-

---

[53] We do not suggest that research should never be carried out online, just that online research results can in some circumstances be less reliable than those of face-to-face or telephone research.
[54] The ordering of the prompted responses was randomized in the survey.
[55] Sky subscribers were able to view itemized billing information via 'My Sky' accounts online and also via the red button (Sky interactive).

ing whether or not to include dual movies in their package and to existing subscribers considering whether or not to upgrade/downgrade (see paragraph 55).[56]

57. To summarize our views on Sky's incremental retail prices and its revenues:

(a) we believed that incremental retail prices were relevant to pay-TV subscribers as they were a measure of the difference between the prices of packages with and without Sky Movies products;

(b) we agreed with Sky that average incremental revenue per subscriber might exceed incremental retail price for Sky Movies products (see paragraphs 14*(a)* and 51*(b)*); but

(c) Sky's revenue per subscriber from marginal subscribers to Sky Movies products was likely to be less than its average incremental revenue across all subscribers (see paragraphs 18 to 21); and

(d) the question we were concerned with[57] in this analysis was whether Sky's cable rate-card prices materially disadvantaged equally efficient retail competitors (and the evidence that we believed was potentially relevant to this question was considered in paragraphs 18 to 42).

Retail competition

58. Sky said that Virgin Media was a highly effective competitor to Sky for pay-TV subscribers, including subscribers to packages which included Sky's movie channels. Sky added that Virgin Media earned a positive margin on acquiring a customer taking a package of basic channels and on acquiring a customer taking basic plus Sky Movies channels (especially where such customers also took broadband and/or telephony services) and so had ample incentive to compete against Sky for both types of customers. Sky said that, given the margin Virgin Media earned on a new customer was the same irrespective of whether a customer was new to pay TV or switched from Sky, this meant that Virgin Media also had an incentive to seek to persuade existing Sky customers to switch to Virgin Media, regardless of whether they were basic or basic plus Sky Movies customers, as it would earn a positive margin in both cases.

59. We agreed that Sky and Virgin Media competed for pay-TV subscribers. However, in our view competition in the pay-TV retail market was not effective (see Section 5).

60. Sky said that the [✂] take-up of Sky Movies products by Virgin Media's subscribers was due to a number of factors which were largely outside Sky's control, and which lacked easy solutions. In particular, Sky noted:

(a) Unlike Sky's own DTH satellite platform, cable platforms were 'closed' platforms so Sky had no option other than to wholesale to Virgin Media in order to reach households on Virgin Media's platform (rather than retailing directly to those households).

---

[56] Respondents with dual movies/dual sports were asked the same question with the response 'I pay £16 …' being amended to 'I pay £7.25 a month for the Sky Movies channels in addition to what I pay for basic channels and the Sky Sports channels' and the other responses being the same. However, as the £7.25 difference between the dual movies/dual sports product price and the dual movies product price was not an incremental retail price in the sense used in this appendix, we did not see that this added anything to the results for respondents with dual movies (the comparable question would have asked about the £27.50 per month incremental price paid for the dual movies/dual sports product).

[57] Subject to our views at the time of our report as to the relevance of this issue in our assessment overall (see paragraph 1).

(b) Virgin Media retailed competing movie services,[58] on which it may earn higher margins and which it may therefore promote more vigorously than it promoted Sky Movies. Sky also noted that Virgin Media retailed other products and services (such as broadband and telephony) on which it earned high margins and which, therefore, attracted greater marketing effort. Sky said that, consequently, Virgin Media lacked incentives to encourage its existing subscribers without Sky Movies to add Sky Movies to their packages, and to discourage its existing subscribers with Sky Movies from dropping Sky Movies from their packages.

(c) Regulatory constraints had limited Sky's flexibility in adopting pricing structures which would better incentivize Virgin Media in selling Sky Movies (see paragraph 32).

61. We explained above (see paragraph 33) that our revised findings on the significance of Sky Movies to consumers' choice of traditional pay-TV retailer meant in effect that we no longer believed there was necessarily a link between the take-up of Sky Movies products by Virgin Media subscribers and whether Virgin Media experienced material disadvantage. Furthermore, it appeared to us that the take-up of Sky Movies products by Virgin Media subscribers relative to Sky subscribers needed to be treated with some caution since take-up did not reflect recent changes in cable rate-card prices and also could be affected by differences in retailer characteristics (see paragraph 42). However, on the three specific points raised by Sky (see paragraph 60):

(a) The 'closed' nature of cable and other platforms could be relevant to the relative disadvantage of a particular retailer if Sky retailed over such platforms on terms that placed the platform/retailer at less of a disadvantage than the terms of Sky's wholesale cable rate card. However, this seemed unlikely because the prices at which Sky retailed Sky Movies on the TalkTalk platform had been higher than Sky's cable rate-card prices,[59] and there could be additional disadvantages to other retailers from having Sky retailing on their platforms, for example Virgin Media said that it thought Sky would have little incentive to promote its Sky Movies products on the platforms of other retailers.[60]

(b) If the level of Sky's cable rate-card prices placed other retailers at a relative disadvantage in retailing Sky Movies products, the other retailers could respond in part by reducing their margin compared with the margin they would otherwise charge. A likely consequence would be that other retailers, such as Virgin Media, could earn higher margins from retailing other products than from retailing Sky Movies, and would have less incentive actively to sell Sky Movies. If so, the lower take-up of Sky Movies among Virgin Media's subscribers compared with Sky's subscribers may result both from Virgin Media retailing Sky Movies packages at higher prices than Sky charges for comparable packages and also from Virgin Media having less incentive actively to sell Sky Movies than other products. In

[58] However, Virgin Media told us that it did not retail 'competing movie services' as none of the movie services it provided to its customers contained FSPTW movies. Virgin Media added that the subscription movie services offered by Virgin Media (such as PictureBox) contained SSPTW titles and library titles, [✂]. We noted that, subsequent to our August 2011 provisional findings, BT informed us that historically PictureBox had sometimes shown some FSPTW content (eg from Studiocanal) (see Appendix 4.12).

[59] While it is not straightforward to make comparisons, Table 4.2 shows that in October 2010 Sky charged £22 (including VAT) for its Sky Movies product on the TalkTalk platform, and this compared to a cable rate-card price for single movies of £[✂] including 17.5 per cent VAT, and for dual movies of £[✂] including 17.5 per cent VAT. Thus, the price for the product on the TalkTalk platform was higher than the cable rate-card price for dual movies even though it had fewer channels.

[60] Virgin Media considered that self-retail by Sky would not resolve the distortions of competition that existed from a lack of effective competition as Sky would be the retailer on all other platforms and would have no incentive to promote its channels or innovate on those platforms in a way that would risk cannibalizing its revenues from its own platform. Virgin Media considered that Sky would exploit the self-retail opportunity by acting as a 'cuckoo in the nest' with the ultimate aim of acquiring the customer for its own platform.

such circumstances, Virgin Media's lack of incentive to sell Sky Movies would be a consequence of the level of Sky's cable rate-card prices, and not an alternative explanation of the low take-up of Sky Movies products by Virgin Media subscribers.

(c) We discuss Sky's arguments about regulatory constraints in paragraph 32.

62. Sky told us that there was no reason to believe that, if it set lower wholesale charges to Virgin Media for Sky Movies, this would result in Virgin Media attracting more Sky Movies subscribers to the extent necessary to increase Sky's overall wholesale revenue. Sky added that there was also no good reason to believe that reductions in wholesale charges would have any impact on the relative competitiveness in the pay-TV retail market of Sky and Virgin Media. Sky said it was probable that Virgin Media would simply take the reduced wholesale charge as increased margin, ie use it to boost its own profitability. In support of this view, [✂]. Sky also referred to Virgin Media's [✂] from June 2009 when it started paying Luxembourg VAT at 3 per cent instead of the previous UK VAT rate of 17.5 per cent. Sky said that, in the 12 months following the change, Virgin Media's dual movies subscribers [✂] compared with the same period the previous year, [✂].

63. We put these points to Virgin Media, which responded as follows:

(a) As regards [✂], Virgin Media told us that, although [✂]. Virgin Media said that the weighted average change in Sky's cable rate-card prices in September 2005 was an [✂], and the price of dual movies/dual sports (for which there were [✂]) [✂]. Virgin Media also said that the incremental margins for its predecessor cable companies on all Sky Movies products ([✂]) were still negative after the price change.

(b) Virgin Media said that, even after it started paying VAT at Luxembourg rates, it still had insufficient incentive to market Sky Movies. Thus it had not planned any significant marketing of the Sky Movies products, other than [✂]. Virgin Media said that, in July 2010, it had [✂] prices [✂] for a number of Sky Movies products to make its prices [✂] and attractive to customers. Virgin Media added that this was a result of a number of factors, including [✂].

More generally, Virgin Media said that meaningful changes to the structure and level of Sky's cable rate-card prices would be effective in stimulating additional sales of Sky's premium channels via Virgin Media but this was entirely hypothetical as Sky had never been willing to agree to the necessary changes. Virgin Media also pointed out that Sky's argument here appeared inconsistent with its argument elsewhere (see paragraph 60*(b)*) that, since Virgin Media could earn higher margins on other pay-TV products, it lacked incentives to encourage its existing subscribers without Sky Movies to add Sky Movies to their packages, and to discourage its existing subscribers with Sky Movies from dropping Sky Movies from their packages.

64. We did not think we could necessarily infer from the two episodes discussed in the preceding two paragraphs that Sky's cable rate-card prices made no difference to Virgin Media's competitive position relative to Sky when retailing Sky Movies, for two principal reasons:

(a) Even after the [✂] in the dual movies cable rate-card price, it was [✂] than Sky's incremental retail price for dual movies.[61] In this context, we noted that although

[61] This compared Sky's cable rate-card price for dual movies including VAT [✂] with Sky's weighted average incremental retail price for dual movies, which we calculated to be £[✂].

the cable rate-card price for the dual movies product [✂], the cable companies' strategy at the time could have been affected by [✂]. We considered it relevant that, in September 2005, Sky also made a range of changes to its retail pricing and packaging such that the difference in monthly subscription charges between (i) Sky's basic plus dual movies packages, and (ii) the corresponding basic-only package in each case, fell by £0.50, one cable company (Telewest) reduced its incremental retail prices by £0.50 and the other cable company (ntl) held flat its incremental retail prices for dual movies.

(b) Virgin Media's move to selling via Luxembourg at a lower rate of VAT did [✂] and, as Sky acknowledged, there was subsequently [✂] in Virgin Media's sales of the Sky Movies products, compared with [✂]. Although the data available to us ([✂]) suggested that [✂], it did not support the idea that the level of Sky's cable rate-card prices made no difference to Virgin Media's competitive position relative to Sky when retailing Sky Movies.

However, as we note in paragraph 42, by the time of our report, the reduction in Sky's cable rate-card prices for certain of its products incorporating Sky Movies [✂] made evidence on the take-up of Sky Movies products by Virgin Media subscribers of limited value.

Partial foreclosure

65. In response to our working paper which considered Sky's prices (working paper 26), Sky said that the core focus of our analysis appeared to be the potential effect of Sky's wholesale prices for packages that included its movie channels on Virgin Media, as a competitor to Sky at the downstream level. Sky said that the issues we addressed in the working paper amounted to a concern as to whether Sky's whole-sale prices were likely to give rise to 'partial foreclosure'.[62] In Sky's view, the issue of 'partial foreclosure' had been examined by economists and competition specialists for over 30 years, but despite this, no standard or well-established approach had been developed for its assessment when firms were already vertically integrated. Sky said that this reflected the complexity of the issue and the inability to observe the relevant benchmark for analysis, ie what a non-vertically-integrated, similarly-situated upstream supplier would charge third parties for its products. Sky said that our analy-sis of this issue failed to appreciate the existence or importance of this work.

66. Sky added that, by its nature, partial foreclosure was likely to be less harmful to the competitive process than complete foreclosure: while partial foreclosure might affect the intensity of downstream competition, it did not prevent downstream rivals from offering products based on the input. Sky said that, traditionally, competition policy had pursued exclusionary practices more robustly than practices which might simply affect the intensity of rivalry. In Sky's view, that was why, for example, theories of how vertical restraints could lead to exclusion had been taken much more seriously by competition authorities than mechanisms explaining how vertical restraints might simply dampen competition. Sky told us that this seemed to be a reasonable attitude as any direct consumer harm due to a reduced competitive threat at the downstream level was likely to be smaller with partial foreclosure than with complete foreclosure.

[62] By partial foreclosure, we understood Sky to mean a situation where a vertically integrated company supplies a product to unintegrated downstream rivals at an appreciably higher price (or otherwise worse terms) than would an unintegrated whole-saler that was in other respects the same as the vertically integrated company. Similarly, total foreclosure would mean a situation where a vertically integrated company refuses to supply a product to unintegrated downstream rivals where an un-integrated wholesaler that was in other respects the same as the vertically integrated company would supply it (or where a vertically integrated company makes the product available on terms that are so unattractive that it is not profitable for down-stream rivals to purchase it and this would not be the case in the absence of vertical integration).

Sky submitted that, moreover, assessing how much 'dampening' of competition justified regulatory intervention required a very refined benchmark, by reference to which to judge how much imperfection was tolerable before the conduct of market participants was impugned as 'restrictive' of the relevant competitive norm. Sky said that this seemed to be particularly so when combined with the clear potential for Type II errors (arising from the difficulty of establishing partial foreclosure), which could lead to welfare-reducing intervention.

67. However, while generally we had sympathy with a number of these points, it seemed to us that they did not fully reflect the context of our analysis. We were carrying out a market investigation. This investigation involved assessing the effectiveness of competition in a market and, if competition in that market was not effective, identifying the features that accounted for the absence of effective competition. As we state in our guidelines,[63] we see competition as a process of rivalry, and we are not advancing a general proposition that competition always leads an integrated company to supply its downstream rivals. Our analysis was specific to competition within the pay-TV retail market and the role of Sky Movies products within that market. Our assessment of Sky's cable rate-card terms was within the context of our theory of harm which required also that Sky had market power in pay-TV retailing, that FSPTW movie products were significant to pay-TV retail competition, and that there were barriers to other retailers acquiring FSPTW rights directly (see Sections 5 to 7).[64]

68. Sky also said that it appeared that we had conflated issues that were (and should remain) distinct: *(a)* whether there was a problem with the concentration of exclusive rights to movie content in the hands of Sky, in the form of market power upstream which may need to be addressed; and *(b)* whether Sky's wholesale prices for its movie products favoured its own downstream business. Sky said that the sensible way to answer this question seemed to be to start from a benchmark where the supplier of the upstream input was not vertically integrated, while at the same time keeping all other industry features constant. In Sky's view, the current allocation of rights in the upstream market must be taken as given when analysing foreclosure incentives. Sky said that adopting a benchmark where downstream rivals could each have access to movie rights on a non-exclusive basis violated a key rule of economic analysis, ie that the effects of changes in individual assumptions must be analysed holding all other circumstances constant. Sky added that, while the allocation of rights in the upstream market was of course a legitimate topic for investigation, this issue was distinct from an assessment of the wholesale prices currently charged by Sky.

69. In our view, the approach we took in our August 2011 provisional findings was the best available for our purpose in a context where the other parts of our theory of harm appeared to be made out.[65] Sky's approach required an assessment of the level of wholesale prices that would be charged by a stand-alone wholesale supplier of Sky Movies, which would have been hard to know and would have added an additional difficulty into the analysis. We also noted:

(a) Under Sky's approach, a key consideration affecting retail competition was likely to be whether the stand-alone wholesale supplier charged the same price to other retailers as to Sky. If Sky was able to negotiate a much more favourable

[63] *CC3*, paragraph 1.16.
[64] As noted in Section 8, we believed that, in circumstances where it appeared that FSPTW content on Sky Movies was not significant to consumers' pay-TV subscription decisions, it was not necessary for us to examine issues in relation to wholesale supply by reference to the questions we posed under part *(d)* of our theory of harm in order to reach a conclusion overall as to whether our theory of harm was made out. Rather, we considered whether there was evidence of any disadvantage in this respect which was such as to cast doubt on our views on the significance of FSPTW content based on other evidence.
[65] See footnote to paragraph 67.

price, then there was no effective change from the current situation as other equally efficient retailers were still disadvantaged in competing with Sky.

(b) The wholesale price charged by a stand-alone wholesale supplier would depend, as Sky noted, on the extent to which it had wholesale market power. We discuss this issue in Section 4 where we did not find a sustainable source of market power arising simply from wholesaling Sky Movies. That being the case, a stand-alone wholesale supplier would be unable on a sustainable basis to charge above cost by more than a small amount. [66] Hence, Sky's proposed approach was similar to comparing Sky's cable rate-card price with total cost (perhaps plus a small margin of, say, 5 per cent), which was very similar to one of the approaches we used (see paragraphs 28 to 30 and Table 5).[67] However, we considered it an advantage of our analysis that it used evidence from three different approaches, rather than just one.

70. Sky made two recommendations for what it suggested would be a more meaningful way forward:

(a) Sky described a safe harbour approach, built around a properly conducted comparison of Sky's wholesale and retail prices. Sky said that this should compare in particular Sky's wholesale price with a properly calculated incremental revenue, ie one that weighed appropriately the share of subscribers who 'trade up' to Sky Movies, and those 'trading into' Sky altogether because of Sky Movies. Sky described it as a 'safe harbour' because it was conservative (eg it assumed that the rival would adopt Sky's pricing structure), and unless some other compelling evidence suggested otherwise, if the test was passed it should clearly lead to the conclusion that Sky was not engaging in complete foreclosure. Sky said that its analysis showed that the wholesale pricing of Sky Movies fell sufficiently within this safe harbour. Sky said that, if an appropriate measure of revenues from Sky Movies was taken, its analysis showed that, at its current prices, it would have made healthy margins from its Sky Movies products when it paid the cable rate-card price for the input. Sky said that this simple approach could be extended to the issue of partial foreclosure in an ad hoc manner, by requiring that the test be passed not just by a rival that was as efficient as the integrated firm, but by one who was less efficient by a given per unit amount y (with the choice of y being completely arbitrary).

(b) Sky's second suggestion was for a possible test to help establish whether it was engaging in partial foreclosure. Sky said that it had developed this from the approach used by DG Competition in the assessment of vertical mergers, which considered whether it would be profitable for the integrating firm to increase the wholesale price of an input (though Sky accepted that using this approach in the present case was more difficult because a pre-vertical integration counterfactual could not be observed, and because downstream competition included mixed bundling). In the same logic, Sky said that it was possible to start from the observed equilibrium where Sky was vertically integrated, and might already have increased its wholesale price partially to foreclose its retail competitors, and then ask: 'starting from the current level of the wholesale price, would a non-integrated upstream firm offering the same movie channels have an incentive to decrease the wholesale price?' If the exercise suggested that there was no or little incentive to decrease wholesale prices, then this should be at least a strong indication

---

[66] As noted in paragraphs 4.124 to 4.129, we did not think that a hypothetical stand-alone wholesale monopolist over Sky Movies would be able to impose a small but significant non-transitory increase in price over the competitive level.
[67] Table 5 shows that prices of Sky Movies products were between [✂] and [✂] per cent above the cost per subscriber, though we recognized that caution was needed in interpreting these figures (see paragraph 29).

that partial foreclosure was not a problem. Using a combination of numbers generated by our analysis in working paper 26, and Sky's own data, Sky said that it had checked whether a non-integrated upstream monopolist would increase its upstream profits by decreasing the cable rate-card price by a non-trivial amount (equivalent to £2.00 for practical application). Sky said that the results showed that such a price reduction would fail to generate enough additional upstream sales for a non-integrated upstream monopolist to cover the costs of the wholesale price reduction on existing sales. This suggested that the cable rate-card prices charged by Sky could not be considered to be consistent with significant partial foreclosure. Sky said that its proposed approach seemed to have merit, as it directly addressed the question of relevance and did so in a manner that was rather similar to the treatment of partial foreclosure in vertical merger cases.

71. We considered these two suggestions. Our comments on them, in turn, are as follows:

(a) We did not suggest that Sky's cable rate-card prices totally foreclosed other equally efficient retailers. Indeed it was always apparent that they did not do so, in particular from the fact that Virgin Media did retail Sky Movies products. We saw difficulties with Sky's proposed ad hoc extension to the issue of partial foreclosure, which required that the test be passed by a rival that was less efficient than the integrated firm, as it was unclear how to set the efficiency parameter, y. Furthermore, we believed that we should be concerned with equally efficient retail competitors, rather than inefficient retail competitors, because it was a normal function of competition for inefficient competitors to be disadvantaged and efficient competitors to be advantaged.

(b) We also saw difficulties with Sky's second recommendation, for two principal reasons:

(i) Sky's approach focused only on whether a hypothetical stand-alone wholesale supplier would reduce the wholesale price charged to other retailers compared with the current wholesale price charged by Sky to other retailers. It assumed no change in the price notionally paid by Sky and hence appeared implicitly to assume a wholesale supplier that charged lower prices to Sky than to other retailers. In our view, this was not appropriate since it was likely to maintain any advantage Sky had relative to other retailers.

(ii) Sky assumed that the wholesale supplier charged a simple linear price per subscriber. As noted above (see paragraph 31), we expected there to be a 'non-linear' pricing structure that rewarded retailers for increasing the number of subscribers, and we understood that [✂]. Sky's assumption of a simple linear price per subscriber did not therefore seem very realistic.

We recognized that it was not straightforward to calculate a wholesale pricing structure that both did not discriminate against retailers other than Sky and was plausibly non-linear. However, we believed this was a major difficulty with Sky's approach. In our view, a simple solution was to look at average cost per subscriber, which was one of the approaches we took.[68]

72. As we saw difficulties with Sky's suggested approaches, we did not carry out a detailed appraisal of Sky's results from applying these approaches.

[68] Subsequently, Sky said that a benchmark did not need to be an exact reflection of reality (ie of how a monopolist might truly behave) as it was there to isolate the effects that matter. In our view the problem with Sky's recommended approaches was that they did not isolate the effects that mattered.

Response to our August 2011 provisional findings

73. In its response to our August 2011 provisional findings, Sky provided a report by CRA which made a number of detailed comments on the analysis in Annex B, which we took into account (see Annex B). Sky also reiterated a number of points it had made previously in its comments on our working papers. Sky's principal points were that:

(a) It was not appropriate for the CC to avoid setting out an appropriate counterfactual against which to evaluate Sky's rate card. In Sky's view, the logically correct counterfactual was the rate card that would be set by a non-integrated monopolist supplier of movies content.

(b) A counterfactual involving the sale of channels by an independent upstream monopolist would be particularly insightful, but an 'as-efficient competitor' test would also be particularly valuable in the current circumstances, as there was a presumption that Sky was constrained in the wholesale market by the need to acquire rights upstream in competition with others.

(c) The CC's notion of 'disadvantage' was not a suitable standard for assessment. Sky said that if one was to understand 'disadvantage' in the sense that Sky's own costs of retailing movie content were lower than the cost of rivals, it was unclear how this was measured and how this difference could be eliminated.

74. However, our views on Sky's points in paragraph 73 were as follows:

(a) In our August 2011 provisional findings, we did set out an appropriate benchmark for our analysis. This benchmark was a situation where Sky did not have a material advantage over equally efficient retail competitors. We accepted that this benchmark could not be measured precisely, but in the absence of perfect information, a benchmark could be useful even if it was not precisely measurable. In our view, the usefulness of such concepts arose because it was better to be approximately correct than to be precisely wrong. Indeed, the standards used in competition assessments (for example, whether there is a substantial lessening of competition) are generally not precisely measurable and require an element of judgement.

(b) We have commented above (see paragraph 69) on the difficulty of assessing the prices that would be charged by an independent upstream monopolist. In the light of these difficulties, our view was that the simple solution was to look at average cost per subscriber, which was one of the measures we used. Our benchmark incorporated the idea of equally efficient retail competitors and may be regarded as an adaptation of the 'as-efficient competitor' test.

(c) In our view, considering whether Sky had a material advantage over equally efficient retail competitors was potentially a direct and relevant way of assessing circumstance *(d)* in our theory of harm (see Section 3).[69] Moreover, as regards the comparison of Sky's own costs of retailing movie content with the cost of its rivals: first, this was only one part of our assessment;[70] second, we set out how we measured the difference in costs in Annex C (though we acknowledged caution was needed in interpreting cost data (see paragraph 29)); and third, the

[69] In so far as the FSPTW content on Sky Movies was significant to consumers' pay-TV subscription decisions and the other parts of our theory of harm were satisfied.
[70] The other parts of our analysis were the comparison of cable rate card with incremental retail prices (see paragraphs 18–27) and the effect on other retailers (see paragraphs 33–42).

question of how any difference could be eliminated was logically separate from that of the standard of assessment which, if we had found an AEC, we would have considered as part of our assessment of remedies.

Overall assessment of Sky's wholesale prices

75. Our finding on the significance of FSPTW content on Sky Movies to subscribers in their choice of traditional pay-TV retailer (see Section 6) implied that it was not necessary to examine issues in relation to wholesale supply by reference to the questions we posed under part *(d)* of our theory of harm in order to reach a conclusion overall as to whether our theory of harm was made out (see Section 8). Nevertheless, we considered whether the evidence before us in relation to the price terms of Sky's wholesale supply of Sky Movies was such as to cast doubt on our views on the significance of FSPTW content (and Sky Movies) based on other evidence. In reaching the following conclusions, we had regard to representations received in the course of our inquiry and we took into account recent developments where relevant.

76. Sky's retail prices reflect the commercial practice of bundling pay-TV content into packages (both Sky and other traditional pay-TV retailers bundle pay-TV content into packages). However, the evidence we saw did not suggest to us that bundling adversely affected competition in itself.

77. We compared Sky's cable rate-card prices with Sky's incremental retail prices (the additional prices Sky's own subscribers pay for Sky Movies products) and to Sky's estimated costs (what Sky pays for supplying the Sky Movies products). Table 8 (left-hand column) summarizes our comparison of Sky's cable rate-card prices in 2009/10 with its incremental retail prices (adjusted to exclude variable retailing costs) and with its costs per subscriber (including an estimated cost of capital). The lower end of the range shows the excess of Sky's cable rate-card prices over its adjusted incremental retail prices and the upper end of the range shows the excess over its costs per subscriber in 2009/10. For example, for the dual movies product, Sky's cable rate-card price was [✂] per cent above its incremental retail price and [✂] per cent above its estimated cost per subscriber.

TABLE 8 **Summary of assessment of Sky's cable rate-card prices for Sky Movies products, 2009/10**

	Excess over adjusted incremental retail price or cost %	*Difference between Virgin Media and Sky take-up (as % of Sky take-up)*
Single movies	[✂]	[✂]
Dual movies	[✂]	[✂]
Dual movies/dual sports	[✂]	[✂]
Other*	[✂]	[✂]
Total		[✂]

Source: CC calculations (see Tables 4, 5 and 7 above).

*Other combinations of movies and sports are available but have [✂] subscribers.

78. However, following our August 2011 provisional findings, Sky [✂] reduced its cable rate-card prices for [✂] (see paragraphs 25 to 27), with the following effects: *(a)* Sky's cable rate-card price for [✂] its incremental retail price; *(b)* [✂], the cable rate-card price for [✂] its incremental retail price [✂]; and *(c)* the cable rate-card prices [✂] incremental retail prices, [✂].

79. We also looked at how the take-up of Sky Movies by the customers of the other pay-TV retailer selling Sky Movies (Virgin Media) compared with the take-up of Sky

Movies by Sky's own pay-TV customers (the right-hand column of Table 8 shows the take-up of Sky Movies products by Virgin Media subscribers compared with Sky subscribers). However, our revised finding on significance to consumers' choice of traditional pay-TV retailer (see Section 6) meant that we no longer believed there was necessarily a link between take-up of Sky Movies products by Virgin Media subscribers and whether Virgin Media experienced material disadvantage in the pay-TV retail market. Moreover, Sky's reductions in its wholesale prices for certain of its products which incorporated Sky Movies made it difficult to interpret this data. As Sky's changes to wholesale prices were recent and, as any impact on take-up would have occurred gradually, a comparison of take-up became of limited value in assessing the extent of any disadvantage experienced by other retailers.

80. While in light of our finding on significance it was not necessary to conduct a detailed appraisal of Sky's wholesale prices, we observed that, even had we reached a different view on significance, the recent wholesale price reductions by Sky meant that it was no longer clear that the price terms upon which Sky supplied Sky Movies to its rivals resulted in 'limited wholesale availability' of FSPTW content (and Sky Movies) such as to place them at a material disadvantage to Sky when retailing Sky Movies. Importantly, the conduct we observed was not such as to cast doubt on the view we had reached on significance based on other evidence.

Illustration of two approaches used to assess relative disadvantage of other equally efficient retailers compared to integrated broadcaster and retailer

1. Table A1 sets out two hypothetical scenarios for prices and wholesale costs of an integrated supplier, which charges a wholesale price for selling a movie product to other retailers and an incremental retail price for selling to its own retail subscribers.[1]

TABLE A1 **Illustration of different cost and price situations for a movie product**

Case	*A*	*B*
Cost per subscriber		
Variable cost*	6	6
Fixed/sunk cost†	2	2
Total cost per subscriber	8	8
Prices per subscriber of integrated supplier		
Wholesale price	8	12
Incremental retail price	6	9
Assessment of wholesale price		
Whether incremental retail price would exceed wholesale price if integrated supplier paid wholesale price	No‡	Yes
Difference between wholesale price and incremental retail price (%)	NA§	+33
Difference between wholesale price and cost per subscriber	0	+50

Source: CC calculations.

*Costs of supplying movie product which vary with the number of subscribers in the short term.
†Costs of supplying movie product which do not vary with the number of subscribers in the short term.
‡Incremental retail price is equal to variable cost and hence does not exceed marginal cost (which would be between variable cost and total cost depending on the time period over which marginal costs are assessed).
§Not applicable since the incremental retail price would not exceed the wholesale price if the integrated supplier paid the wholesale price.

2. In case A (low retail price), the integrated supplier sets the wholesale price of its movie product equal to the cost of the product, but it sets its incremental retail price for the product below cost (recovering the fixed/sunk cost of supply (assumed in Table A1 at 2 per subscriber) from other retail prices, for example from the sale of basic packages). If other retailers match the integrated supplier's incremental retail price, they too will suffer a loss of 2 on the retailing of the product, but they do not necessarily suffer a disadvantage in competing with the integrated supplier at the retail level (because they compete with the integrated supplier across all products and can also set an incremental retail price for the movie product below the wholesale price). A plausible reason for case A would be that a low incremental retail price of the movies product induces additional consumers to subscribe to pay TV, and retail competition across all products pushes incremental retail price below wholesale price. Case A is consistent with effective retail competition. Neither of our two approaches to assessing wholesale price (see paragraph 16 above in the main part of this appendix) suggested that other retailers were at a disadvantage in this case as:

[1] The following discussion assumes that both the integrated supplier and other retailers set prices across all products that at least cover their costs. It also assumes that the integrated supplier's costs of supplying the movie product are either fixed/sunk or variable in the short term with the total number of subscribers taking the movie product (whether from the integrated supplier or from other retailers). It also assumes that there are no additional costs in retailing the movie product (compared with retailing just a basic package).

(a) under our first approach, incremental retail price does not exceed marginal cost and hence we do not proceed to a comparison of wholesale price with incremental retail price; and

(b) our second approach shows that wholesale price does not exceed total cost per subscriber.

3. In case B (high wholesale price), the integrated supplier sets its wholesale price for the movie product above cost. Again, it sets its incremental retail price below its wholesale price but incremental retail price is now above cost. Where other retailers offer an imperfect substitute for the packages offered by the integrated supplier and where there are also barriers to other retailers themselves becoming integrated suppliers by acquiring movie rights, this may be a viable strategy for the integrated supplier that enables it to earn profits in excess of costs, and with the consequence that prices to consumers are above the level they would be if wholesale prices were closer to cost. Case B is consistent with the integrated supplier having market power and illustrates a situation where other retailers are at a disadvantage compared with the integrated retailer in retailing the movie product. In this case, our two approaches suggested that other retailers were at a disadvantage which may have been material as:

(a) under our first approach, incremental retail price exceeds marginal cost and hence we proceed to a comparison which shows wholesale price is 33 per cent above incremental retail price; and

(b) our second approach shows that wholesale price is 50 per cent above total cost per subscriber.

Analysis of Sky's marginal revenue

1. In this annex, we compare Sky's incremental retail prices for Sky Movies (IRPSM) with estimates of its marginal retail revenue, that is the change in retail revenue associated with a change in IRPSM (we refer to this as marginal revenue). Through the course of our inquiry we made a number of changes to this analysis, in particular following Sky's response to our August 2011 provisional findings, which included extensive comments from Sky's economic advisers (CRA and Professor Damien Neven). The analysis in this Annex relates to the financial year ended 30 June 2010, ie before Sky's reductions [✂] to its wholesale prices for certain of its products which incorporated Sky Movies [✂].

2. As discussed in the technical note below (see equations 4 and 5), Sky's marginal revenue can be seen as the sum of three components:

   (a) IRPSM.

   (b) A 'demand effect', reflecting that Sky faces a downward-sloping demand curve, ie more Sky Movies subscribers require lower prices and vice versa.

   (c) A 'packages effect'. This reflects first that a change in the price of Sky Movies packages may affect the number of Sky subscribers (this arises because a lower IRPSM is likely to bring in new subscribers (on each of which Sky earns additional net revenue equal to the Sky Movies package price, ie price (less marginal cost) of the basic package plus the IRPSM and other revenue, eg from payments for HD) as well as inducing existing basic-only subscribers to upgrade to include Sky Movies in their package). It also reflects that subscribers may downgrade to an alternative product than basic-only, for example in response to an increase in the price of dual movies, some dual movies subscribers may downgrade to single movies.

3. The sum of *(b)* and *(c)* reflects the difference between IRPSM and Sky's marginal revenue from Sky Movies. Component *(b)* is negative (ie implies that the IRPSM is above marginal revenue) but component *(c)* may be positive;[1] thus, if component *(c)* is big enough compared with *(b)*, the IRPSM could be below marginal revenue.

4. As also discussed in the technical note below, if Sky maximizes profits,[2] its marginal revenue will be equal to marginal opportunity cost, comprising:

   (a) the marginal cost of supplying Sky Movies; and

   (b) the change in wholesale revenue, which we describe as the 'wholesaling' effect. This reflects that a change in Sky's IRPSM is likely to affect the number of subscribers to Sky Movies with other retailers and hence affect Sky's wholesaling revenue.

---

[1] The packages effect will be zero if, in response to a price change on a particular package, all packaging changes made by subscribers are between subscribing to that package and a basic-only subscription with Sky. The packages effect will be positive to the extent that changes in the package price induce some consumers to move between subscribing with Sky and not subscribing. It will be negative to the extent that changes in the package price induce some subscribers to move between subscribing to that package and a subscription with Sky other than basic-only.

[2] We believed it was reasonable to assume that Sky maximizes its profits; indeed, Sky told us that it considered its cable rate-card prices for Sky Movies to be at levels which were broadly profit-maximizing for Sky.

5. We compared IRPSM with estimates of marginal revenue based on the components described in paragraph 2 above (which we described as direct estimates of marginal revenue—see paragraphs 13 to 17 below) and with estimates based on the components described in paragraph 4 (which we described as estimates based on marginal opportunity cost). We discuss the marginal opportunity cost estimates first (see paragraphs 6 to 12). In order to estimate components *(b)*, *(c)* and *(e)* which depended on consumer behaviour, we used data from research carried out for Sky in 2009 (to our knowledge, the only available source for such data) which asked dual movies and dual movies/dual sports subscribers whether, if the price of their pay-TV package increased by 5 and 10 per cent, they would continue to subscribe to their existing package at the increased price; or would change their subscription (ie downgrade with the same retailer or move to another retailer) or would stop subscribing to pay TV.[3] Our analysis based on this research took into account subscribers responding by reducing their movies packs (for example, downgrading from a dual movies package to a single movies one) as well as subscribers giving up their movie packs (ie downgrading from a dual movies to a basic-only package), switching to another pay-TV retailer and giving up their pay-TV subscription altogether.[4]

Estimates based on marginal opportunity cost

6. Table B1 shows a comparison of IRPSM with marginal revenue estimated using data on Sky's costs of supplying Sky Movies and our estimates of the wholesaling effect. The wholesaling effect depended on the number of Sky Movies subscribers with Sky who responded to a marginal increase (decrease) in the price of Sky Movies by moving from (to) Sky to (from) other pay-TV retailers, relative to the total number who ceased subscribing to Sky Movies with Sky.

TABLE B1 **Estimates based on marginal opportunity cost**

£ per month per subscriber excluding VAT

	Dual movies			*Dual movies/dual sports*		
Marginal cost assumption	*Variable cost*	*Content cost*	*Total cost*	*Variable cost*	*Content cost*	*Total cost*
Estimates of marginal cost of wholesaling and 'wholesaling effect'						
Estimate of marginal cost*	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Estimated wholesaling effect†	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Range for wholesaling effect‡	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
CC comparison of IRPSM with Sky marginal revenue						
Price (IRPSM)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Estimated marginal revenue	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Range for marginal revenue‡	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Sample size§	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC calculations using data provided by Sky and Sky's market research company (Human Capital).

*Variable cost figures are as stated by Sky; content and total cost figures are from our calculations in Annex C.
†Wholesaling effect is calculated from the estimated gain in Sky Movies subscribers with Virgin Media (in 2009/10 Sky's only significant wholesale customer for Sky Movies products) relative to the loss of Sky Movies subscribers with Sky if package prices increased by 5 per cent (calculated from consumer research carried out for Sky) and the wholesale margin.
‡Estimated 95 per cent confidence interval for sampling variation—see discussion in paragraph 8.
§Total size of relevant consumer sample asked what they would do if prices increased by 5 per cent.

[3] This research is referred to in Appendix 4.4, paragraphs 7*(b)* & 11–13. It covered subscribers to dual movies, dual sports and dual movies/dual sports (Top Tier) but not any subscribers taking single movies or single sports. The report produced for Sky is available at http://stakeholders.ofcom.org.uk/binaries/consultations/third_paytv/responses/Annex_5.pdf.
[4] See equation 5 in the technical note. The survey results also indicated that some subscribers retained the same movie pack but downgraded their entertainment pack—we did not take such downgrades into account as we had insufficient information to do so.

7. Table B1 shows estimates based on three measures of marginal cost per subscriber: first, using Sky's data on short term variable costs; second, including all content costs of movies (and sports for the dual movies/dual sports product) as it could be argued that these were variable in the longer term; and third, including all costs attributed to Sky Movies (and sports for the dual movies/dual sports product), which we regarded as an upper estimate of marginal cost. The estimated wholesaling effect was small, so estimated marginal revenue largely depended on the cost assumption. However, as shown in Table B1, under all three assumptions IRPSM exceeded estimated marginal revenue.[5]

8. In responding to our August 2011 provisional findings, Sky commented that we did not report confidence intervals and that it was unclear whether our estimates had any statistical reliability.[6] We noted that the sample sizes used in the research (see Table B1) were not so small as to cause concern. It was not straightforward to calculate a confidence interval for the wholesaling effect as it was a ratio in which both numerator and denominator were subject to sampling variation, but we made an estimate of the 95 per cent confidence interval.[7]

9. We noted, however, that sampling variation was not the only source of uncertainty about our estimates of the wholesaling effect and marginal revenue. Other possible sources of uncertainty included uncertainty about marginal cost (though this was dealt with in Table B1 through showing a number of sensitivities); and any biases in consumers' responses to hypothetical questions about price increases. We noted that particular care was taken in the research to mitigate such possible biases,[8] but we are also aware that online research may be less reliable than face-to-face and telephone research as there is no trained intermediary who can engage the attention of the respondent and clarify or probe responses in a controlled way. We also noted one specific issue with the research in question, which was that, in response to a price increase, a fairly high proportion of respondents changing their subscription said that they would stop subscribing to Sky, rather than stay with Sky and downgrade to a smaller package (the results suggested that around 35 to 40 per cent of respondents changing their subscription said they would stop subscribing or switch away from Sky, rather than downgrade, for dual movies customers, and about 55 to 60 per cent for dual movies/dual sports[9]). This seemed high compared with other available evidence.[10] However, if respondents overstated unsubscribing/switching in relation to downgrading, this would suggest Table B1 overstates the wholesaling effect and marginal revenue, strengthening the finding that IRPSM exceeds estimated marginal revenue.[11]

---

[5] In the market research, respondents were asked what they would do if package prices increased by 5 and 10 per cent. Responses (shown in Table B1) were based on responses to a 5 per cent price increase as this was close to a marginal change. Responses for a 10 per cent increase (shown in Table B5) indicated relatively more switching from Sky to Virgin Media and hence a larger wholesaling effect. However, under all assumptions IRPSM continued to exceed estimated marginal revenue.

[6] These comments were in relation to a different analysis than that shown in Table B1, but appeared relevant to all analyses using consumer research.

[7] The numerator of the ratio was the wholesale margin-weighted sum of subscribers who switch to Virgin Media and the denominator was the total number of subscribers who no longer subscribed to Sky. In calculating the confidence interval, we assumed the covariance between estimates was zero. Since there was some positive covariance between numerator and denominator (because subscribers switching to Virgin Media were a component of the total number of subscribers who no longer subscribed with Sky), the resulting confidence interval was likely to be wider than the true 95 per cent confidence interval.

[8] These were set out in the research report (see reference in the first footnote to this annex).

[9] In relation to dual movies, about 75 per cent of these would stop subscribing to pay TV altogether and the remainder switch to other pay-TV retailers (the comparable figure for dual movies/dual sports was 55 per cent).

[10] Other evidence included our December 2010 survey and [✂]. Of course, Sky's actual experience on downgrades and churn reflected changes in subscriber circumstances and/or preferences rather than the effect of price increases on Sky Movies products; however, we would expect this to increase churn relative to downgrades due to factors such as subscribers moving house.

[11] Some further sensitivities using different survey responses are shown below in Table B5.

10. We also noted that the results in Table B1 reflected a low level of diversion from Sky to Virgin Media[12] in response to a price increase of 5 per cent in subscribers' movie packages. Of those subscribers changing their subscription in response to a 5 per cent price increase, 5 per cent diverted to Virgin Media for dual movies and 5.7 per for dual movies/dual sports.[13] We considered whether this relatively low level of diversion was consistent with other aspects of our analysis. In Appendix 4.6, we assumed a [✄] per cent diversion from satellite to cable and suggested that this seemed low. However, in Appendix 4.6 we were concerned with competition in pay TV and hence with changes in the price of all Sky packages, whereas here we were concerned with a change just in the price of one package (dual movies or dual movies/dual sports) which was likely to cause more subscribers to downgrade rather than switch to Virgin Media. Hence we did not see any inconsistency with our analysis in Appendix 4.6.

11. Given that diversion from Sky to Virgin Media was low, we noted that it could also be thought that diversion from Virgin Media to Sky was low. Consequently, it could be suggested that Sky lacked the incentive to increase its wholesale prices in order to retain more retail subscribers compared with Virgin Media. However, the focus of our analysis in this context was not on Sky's incentives but on whether the evidence suggested its prices gave Sky a material advantage over equally efficient retail competitors.

12. In our August 2011 provisional findings, we suggested that the wholesaling margin was likely to be small because the number of Virgin Media's Sky Movies subscribers was small relative to the number of Sky's subscribers. In its comments in response to our provisional findings, Sky pointed out that: *(a)* it was the marginal change in Virgin Media's subscribers which affected the wholesaling effect; *(b)* this was not necessarily related to the total number of subscribers with the different retailers; and hence *(c)* nothing about the wholesaling effect followed simply from comparing the total number of subscribers with the different retailers. We accepted this point. However, as already noted, the available evidence suggested the wholesaling effect was small.

Direct estimates of marginal revenue

13. We also made direct estimates of marginal revenue using data on Sky's retail margins and on subscriber responses to price increases.

14. Table B2 shows Sky's estimates of its margins on the two most important Sky Movies packages (dual movies and dual movies/dual sports).

[12] During 2009/10, Virgin Media was Sky's only significant wholesale customer for Sky Movies products.
[13] The percentage of subscribers changing their subscriptions diverting to all other pay-TV retailers was 9.9 per cent for dual movies and 9.5 per cent for dual movies/dual sports.

TABLE B2 **Sky estimates of margin on certain Sky Movies packages and CC-derived figure for basic packages, 2009/10**

£ per month per subscriber excluding VAT

	Dual movies	*Dual movies/ dual sports*
Pay-TV revenue per subscriber	[✂]	[✂]
Contribution from other products	[✂]	[✂]
Variable costs (movies)	[✂]	[✂]
Variable costs (programming)	[✂]	[✂]
Variable costs (subscribers)	[✂]	[✂]
Acquisition costs per subscriber	[✂]	[✂]
Margin	[✂]	[✂]

Source: Sky (2009/10).

15. Sky's margin estimates deducted short-run variable cost and an estimate of customer acquisition costs from its average package price. It seemed to us that, since pay-TV customers tended to stay with pay-TV retailers for long periods, prices may be set with regard to longer-term considerations and hence more costs may be variable than shown in Table B2. Therefore, we conducted our own analysis, using three estimates of the retail margin:

(a) Sky's figures, which we regarded as a low estimate of marginal costs (ie a high estimate of the retail margin);

(b) Figures based on Sky's total attributed costs: we included the costs per subscriber that Sky attributed to its retail, platform and basic channel businesses[14] as well as the attributed costs per subscriber for its Sky Movies (and where appropriate Sky Sports) business, as in our analysis based on marginal opportunity cost (see paragraph 7). We regarded these as a high estimate of marginal cost.

(c) Since it seemed likely that only some of Sky's attributed costs varied with subscriber numbers, we used a further estimate based on Sky's estimate of variable third party programming costs, content costs for Sky's channels and half of remaining attributed retail and programming costs. We regarded these as a medium estimate of marginal cost.

The results are shown in Table B3.

[14] In calculating basic channel/FTA cost per subscriber, we assumed [✂] per cent of subscribers were with Sky.

TABLE B3 **CC assumptions on margin costs and implied margins on Sky Movies and basic packages**

	Analysis for dual movies subscribers			*Analysis for dual movies/dual sports subscribers*		
Marginal cost assumption	*Low*	*Medium*	*High*	*Low*	*Medium*	*High*
Pay-TV revenue per subscriber	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Contribution from other products	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Costs (movies/sports)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Costs (other programming)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Costs (retail)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Margin	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Implied margins over variable cost for other packages†						
Dual movies/dual sports				[✂]	[✂]	[✂]
Dual sports				[✂]	[✂]	[✂]
Dual movies	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Single sports				[✂]	[✂]	[✂]
Single movies	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Basic	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: Sky and CC estimates based on Sky data (2009/10).

*Includes variable subscriber costs and acquisition costs per subscriber shown in Table B2.
†Our approximate estimate of margins over variable cost for dual movies and dual movies/dual sports subscribers respectively ([✂]).

16. Table B3 shows the margins for dual movies and dual movies/dual sports subscribers under these assumptions. Table B3 also shows our calculation of the implied margins if these subscribers downgraded to lower priced packages, taking into account both the lower price and the lower cost of these packages. ([✂])

17. Table B4 summarizes our direct estimates of marginal revenue. In all cases, the packages effect increased marginal revenue but it was not large enough to offset the downward-sloping demand curve effect and hence our estimate of marginal revenue was less than IRPSM:

(a) Looking first at the dual movies product, marginal revenue was higher under a low marginal cost assumption than if higher marginal cost was assumed (indeed under a low marginal cost assumption the upper end of the range for marginal revenue was slightly above IRPSM). This reflected that, with lower marginal cost ie higher margin, there was a greater loss of income from those no longer subscribing. For the dual movies product, our direct estimate of marginal revenue was higher than our estimate based on marginal opportunity cost (and this remained true even when a high estimate of marginal cost was used). We considered possible reasons for this discrepancy. It seemed to us unlikely that marginal cost per subscriber was above our high estimate (which was based on total cost per subscriber). However, as noted in paragraph 9 above, it was possible that respondents to the consumer research overstated unsubscribing/switching in relation to downgrading, and if so the downward-sloping demand effect would tend to be understated relative to the packages effect and hence marginal revenue would tend to be overstated (another implication would be that demand was less elastic than implied by the elasticity estimates shown in Table B4). In relation to the estimates under medium and high marginal cost assumptions, another possibility was that the relatively high incremental margin on the dual

movies product reflected to some extent the stickiness of prices in the face of customer inertia.[15]

(b) Turning to the dual movies/dual sports product, marginal revenue was highest under the medium marginal cost assumption. This reflected that the packaging effect from those no longer subscribing (which was largest under the low marginal cost ie high margin assumption) could be offset by the effect from subscribers downgrading to other premium packages (eg dual movies or dual sports) especially as these packages had higher margins than dual movies/dual sports due to Sky’s practice of mixed bundling. For the dual movies/dual sports product, our direct estimate of marginal revenue was only higher than our estimate based on marginal opportunity cost under our low marginal cost assumption; under the medium and high marginal cost assumptions our direct estimate of marginal revenue was lower than our estimate based on marginal opportunity cost.

TABLE B4 **Direct estimates of marginal revenue,* 2009/10**

£ per subscriber per month, including VAT at 15 per cent

	Dual movies			*Dual movies/dual sports*		
Marginal cost assumption	*Low*	*Medium*	*High*	*Low*	*Medium*	*High*
CC calculation of marginal revenue						
Price (IRPSM)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Downward sloping demand curve	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Packages effect†	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Estimated marginal revenue	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Range for marginal revenue†	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Comparison of different estimates of marginal revenue						
Estimated in this table	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Estimated in Table B1§	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Other information						
Margin (basic package)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Implied own price elasticity¶	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Sample size (weighted)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC calculations using data provided by Sky and Sky's market research company (Human Capital).

*All figures include VAT at 15 per cent.
†In calculating this effect, we took into account downgrades from dual movies to basic-only and to single movies, and from dual movies/dual sports to basic-only, single and dual movies, single and dual sports. The survey results also showed some downgrades in the number of entertainment packs—we did not take these into account as we had insufficient information to do so. However, we noted that taking such downgrades into account would reduce the estimated basic packages effect.
‡Estimated 95 per cent confidence interval for sampling variation—see discussion in paragraph 8.
§Differed from figures in Table B3 as VAT was added. Figures under our margin assumptions were a range based on all cost assumptions in Table B3; figures under Sky (CRA) margin assumption were based on variable costs in Table B3.
¶Own price elasticity implied by market research for dual movies or dual movies/dual sports with all other prices held constant.

Sensitivities

18. Table B5 summarizes estimates of marginal revenue using alternative results from the consumer research:

(a) for a 10 per cent as well as a 5 per cent increase in the price of respondents’ Sky Movies package;

[15] We noted this point in our August 2011 provisional findings (see Appendix 11.1, paragraph 26). However, while this would have represented a departure from the short-term profit maximization assumed in this annex, given that margins on movies were [✂], it would not have altered the analysis.

(b) including only respondents who were 'definitely sure' about how they would respond if the price of their Sky Movies package increased by 5 and 10 per cent;

(c) including respondents who said they would stop subscribing to pay-TV or that they would switch pay-TV retailer only if they were 'definitely sure' about this response but including all other respondents (whether or not they were 'definitely sure').

TABLE B5 **Sensitivity analyses**

	Dual movies			*Dual movies/dual sports*		
Marginal cost assumption	*Low*	*Medium*	*High*	*Low*	*Medium*	*High*
IRPSM	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Estimated marginal revenue using all responses for 5% price increase (repeated from Tables B1 and B4)						
Marginal opportunity cost	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Direct	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Estimated marginal revenue using all responses for 10% price increase						
Marginal opportunity cost	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Direct	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Estimated marginal revenue using 'definitely sure' responses for 5% price increase						
Marginal opportunity cost	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Direct	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Estimated marginal revenue using 'definitely sure' responses for 10% price increase						
Marginal opportunity cost	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Direct	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Estimated marginal revenue using 'definitely sure' responses for quitters/ switchers and 5% price increase						
Marginal opportunity cost	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Direct	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Estimated marginal revenue using 'definitely sure' responses for quitters/ switchers and 10% price increase						
Marginal opportunity cost	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Direct	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC calculations.

19. Table B5 suggests that IRPSM exceeds marginal revenue under all these sensitivities.

Conclusion

20. We compared Sky's IRPSM with estimates of its marginal retail revenue for its Sky Movies products under a number of different assumptions. In all cases, IRPSM exceeded our estimate of marginal revenue.

Technical note:

The profits of an integrated pay-TV supplier can be stated as follows:

1. $\sum_i pi \quad s_i + \sum_z w_z s_z^* - C$

$where\ p_i$ = *retail price of pay-TV package i (packages include basic channel products and may also include movies and sports products)*

$s_i = number\ of\ subscribers\ to\ retail\ package\ i$

$w_z = price\ of\ wholesale\ product\ z$

$s_z^* = number\ of\ other\ retailers'subscribers\ who\ take\ product\ z$

$C = total\ cost$

Profit maximization implies for all i (differentiating by s_i)

$$2. \quad \frac{dp_i}{ds_i} s_i + p_i + \sum_{j \neq i} p_j \frac{ds_j}{ds_i} + \sum_z w_z \frac{ds_z^*}{ds_i} - \sum_{k\ in\ i} \frac{dC}{ds_k} - \sum_{l\ in\ j} \frac{dC}{ds_l}\frac{ds_l}{ds_i} - \sum_z \frac{dC}{ds_z^*}\frac{ds_z^*}{ds_i} = 0$$

For simplicity, we consider a package consisting of basic channels and movies channels offered by the integrated pay-TV supplier, at price p_{b+m}. We assume that a change in the retail price of this pay-TV package affects the pay-TV supplier's revenue and hence profits in the following ways:

- Upgrading/downgrading to/from a package consisting only of basic channels.
- Changing this supplier's number of retail subscribers. For example, an increase in the price of the package may cause some subscribers (those who value a package with only basic channels at less than the price of a basic-only package, p_b) to stop subscribing altogether rather than downgrade to basic-only.
- Changing other retailers' number of subscribers—this may affect wholesale revenue as we assume the integrated pay-TV supplier supplies the movie channels to other retailers, at price w_m.

We also assume that the marginal cost of basic packages is constant and also that the marginal cost of the movies product is constant. Hence:

- $\frac{\mathrm{dC}}{\mathrm{ds_b}} = \mathrm{c_b}$
- $\frac{\mathrm{dC}}{\mathrm{ds_m^*}} = \mathrm{c_m}$
- $\frac{dC}{ds_{b+m}} = \mathrm{c_b} + \mathrm{c_m}$

Profit maximization for this package implies (differentiating by s_{b+m}):

$$3. \quad \frac{dp_{b+m}}{ds_{b+m}} s_{b+m} + p_{b+m} + p_b \frac{ds_b}{ds_{b+m}} + w_m \frac{ds_m^*}{ds_{b+m}} - (c_b + c_m) - c_b \frac{ds_b}{ds_{b+m}} - c_m \frac{ds_m^*}{ds_{b+m}} = 0$$

This equation can be rewritten:

$$4. \quad (p_{b+m} - p_b) + \frac{p_{b+m}}{e_{b+m}} + \left(1 + \frac{ds_b}{ds_{b+m}}\right)(p_b - c_b) = c_m - \frac{ds_m^*}{ds_{b+m}}(w_m - c_m)$$

where , $\mathrm{e_{b+m}}$ is the own-price elasticity of demand for the movies+basic package, that is$\mathrm{e_{b+m}} = (\frac{ds_{b+m}}{s_{b+m}} / \frac{dp_{b+m}}{p_{b+m}})$.

The left-hand side of equation 4 reflects marginal revenue. It has three components:

- The first component is the difference between the basic+movies package price and the basic-only package price.

- The second component reflects that, as long as the firm faces a downward-sloping demand curve, a change in the number of subscribers is associated with a change in price. Other things equal, more retail subscribers is associated with lower prices and hence incremental revenue per subscriber is lower than price.

- The third component is associated with a change in the number of subscribers. A reduction in the package price may attract new subscribers as well as inducing upgrades from existing basic subscribers, and for these new subscribers the supplier earns additional profits (assuming the price of the basic-only package exceeds incremental cost of the basic-only channels). This component is zero if changes in the package price have no effect on the total number of subscribers (since this implies the decrease in the number of basic-only subscribers is exactly equal to the increase in the number of basic+movies subscribers ie $\frac{dsb}{ds_{b+m}} = -1$).

The right hand side of equation 4 has two components:

- The first component is the marginal cost of supplying the movies product;

- The second component reflects the effect of changes in the integrated pay-TV supplier's retail subscribers on its wholesaling revenue.

Equation 5 generalizes equation 4 to take account of there being more than just a basic and a basic+movies package (assuming that marginal cost of supplying each package, c_j, is constant.

5. $(p_{b+m} - p_b) + \frac{p_{b+m}}{e_{b+m}} + \left\{\left(1 + \frac{ds_b}{ds_{b+m}}\right)(p_b - c_b) + \sum_{j \neq b}\left(\frac{ds_j}{ds_{b+m}}\right)(p_j - c_j)\right\} = c_m - \sum_z \frac{ds_z^*}{ds_{b+m}}(w_z - c_z)$

Equation 5 is similar to equation 4 except that the third component on the left-hand side and the second component on the right hand side are more complex.

Calculation of costs per subscriber

1. Sky is an integrated wholesaler and retailer of pay TV and it also retails telecommunications products and some other services. We asked Sky to provide us with a breakdown of most of its costs into retail, wholesale, platform and non-TV; and, within wholesale, into Sky Sports, Sky Movies and basic/FTA channels.

2. In response, Sky expressed concern about the nature of this task, and the time available to undertake it. Sky said that its main concerns were that it was being asked to allocate every cost and revenue line within its entire business and to do so in a period of only some two weeks. Sky said that it was not possible to attribute all of its costs, either because they were common across more than one of our categories, or because in the time available it had not been possible for Sky to ascertain a reasonable basis for allocation. Sky also said that:

   (a) The amount of time afforded to conduct this task meant that it could not be fit for purpose. It was probable that a fuller and more rigorous assessment would produce different results from those included in the spreadsheet and, to conduct an exercise of the requisite standard, significantly more time would be required than our current timetable allowed.

   (b) It was possible that more detailed consideration of the nature of the relevant costs would reveal that a particular cost should be attributable to a different category.

   (c) As it had never previously undertaken such an exercise for any business or regulatory purpose, it would need to seek external assistance to conduct an exercise of the requisite standard.

   Nonetheless we asked Sky to use its knowledge and experience of its business to respond to our request in a meaningful way. We recognized that the resulting cost figures were subject to a range of uncertainty.

3. We used Sky's data to calculate costs for Sky Movies and Sky Sports (see Table C1). This involved a number of steps:

   (a) We started with the attributed costs calculated by Sky (Table C1 shows movies and sports content costs and other attributed costs as well as the total for movies, sports and other channels).

   (b) We subtracted Sky Box Office costs as these were not relevant to the cable ratecard price.

   (c) For costs that Sky was unable to attribute to individual headings (both for the business as a whole and for wholesaling), we allocated pro rata with attributed costs.[87]

[87] This equated to the higher end of the range referred to in Appendix 5.4, paragraph 321. The range quoted in Appendix 5.4 was £[✂] million to £[✂] million; while Table C1 shows total movies costs of £[✂] million (£[✂] million attributed costs plus allocation of £[✂] million unattributed costs).

(d) We estimated an approximate cost of capital employed.[88]

(e) We subtracted business and advertising revenue to calculate the net wholesale costs of supplying sports and movies channels to non-business customers.

TABLE C1 **Calculation of Sky's net wholesale costs for year to June 30 2010**

				£ million
	Sky Sports	*Sky Movies*	*Other**	*Total wholesale*
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]		[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]				[✂]
[✂]				[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]			
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]
[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC calculations based on Sky data.

*Sky's basic pay and FTA channels.
[✂]

4. We carried out a sense-check of our estimated costs for Sky Movies. This suggested that they were reasonable, though perhaps on the high side for the following reasons:

(a) Our allocation of £[✂] million of unattributed costs to Sky Movies [✂]. Unattributed costs were principally marketing costs and administration and facilities costs. Sky told us that much of its promotion of movies occurred in the period leading up to Christmas, and that the costs of this promotion were about £[✂] million, though this covered all movies on Sky (including SBO), not just those on the Sky Movies channels. Furthermore, we believed that part of this sum should be attributed to the retail rather than the wholesale business (because the promotion was concerned with recruiting new customers to Sky). As regards administration and facilities costs, it seemed to us that a pro rata allocation might well overstate the costs associated with broadcasting the Sky Movies channels as this was a relatively simple activity compared with other parts of Sky's business.

(b) Our estimates showed total non-content costs for Sky Movies (excluding cost of capital) of £[✂] million. This compared with £[✂] million of direct and indirect overheads shown in an analysis Sky carried out of Sky Movies' profitability in early 2009.[89]

5. We then calculated the total number of subscribers to Sky Movies and Sky Sports channels in 2009/10, in order to estimate the cost per subscriber (see Table C2). We

[88] We estimated the net book value of fixed assets attributable to each heading and, based on the analysis in our profitability assessment (see Appendix 5.4), increased this by [✂] per cent to allow for net current assets and intangibles. (The capital employed figure used in our profitability assessment was [✂] per cent higher than the fixed asset figure in 2009 under the annual revaluation approach, and [✂] per cent higher under the year of investment approach, although we noted that the main intangible in our profitability assessment related to the subscriber base, which we believed related to the retail business rather than the wholesale business.)
[89] Sky told us that [✂].

assumed that costs associated with single movies and sports were half those associated with the dual movies and sports products respectively.

TABLE C2 **Estimated number of subscribers for Sky Sports and Movies channels for year to 30 June 2010 and cost per subscriber**

million

	Dual sports	*Dual movies*	*Single sports*	*Single movies*
Sky (UK DTH)	[✂]	[✂]	[✂]	[✂]
Sky (estimated ROI DTH)	[✂]	[✂]	[✂]	[✂]
Virgin Media	[✂]	[✂]	[✂]	[✂]
Other cable (estimated)	[✂]	[✂]	[✂]	[✂]
Total	[✂]	[✂]	[✂]	[✂]
Cost of single product relative to dual (ratio)			0.5	0.5
Total dual-equivalent customers	[✂]	[✂]		
Estimated Sky Player and Sky by Wire	[✂]	[✂]		
Revised total dual-equivalent subscribers	[✂]	[✂]		
Costs (£m)*	[✂]	[✂]		
Cost per subscriber per month (£)	[✂]	[✂]	[✂]	[✂]

Source: CC calculations based on Sky and Virgin Media data.

*See Table C1.

6. Table C2 reflects costs of both SD and HD channels. We compared the resulting calculated costs per subscriber with Sky's cable rate-card prices for its SD channels (see Table 5 in the main appendix). As Sky obtained additional revenue for HD channels from both its retail and wholesale customers, this factor led to an understatement in Table 5 of Sky's cable rate-card prices relative to its cost per subscriber.

7. In response to our working paper which considered Sky's prices (working paper 26), Sky made the following points:

(a) Sky said that our cost estimates included an allowed return based on a ROCE approach, and that the key problem with using a ROCE approach in the context of TV broadcasting businesses was that their asset bases largely comprised intangible rather than tangible capital. It was for this reason that other metrics, principally return on sales, were used to evaluate the performance of TV broadcasters. During the period of our investigation Sky provided evidence on profitability to the CAT as part of its appeal of Ofcom's decision in its Pay TV Statement, including an expert report by David Hulbert. Sky referred us to the evidence given by Mr Hulbert to the CAT in which he stated that wholesale pay-TV channels regularly earned a return on sales of 30 per cent or more, with US operations somewhat more profitable than those in non-US territories. Sky also said that use of the cost of capital of Sky as a whole would be unlikely to be appropriate for an analysis relating only to its channel business.

(b) Sky said that a high proportion of the costs included in our calculations were fixed and/or common costs. Sky added that there was no single 'right' way of allocating such costs which, in Sky's view, made them arbitrary, in the sense that different estimates of the 'cost' of channel packages could be obtained by using different (and no less valid) allocations of fixed costs, common costs and assets. However, Sky said that there was an obvious way of avoiding this type of arbitrary cost allocation, which was to calculate total revenues (calculated as the sum of wholesale charges (both notional and actual) multiplied by subscriber numbers, plus other revenues such as advertising revenues) and to compare these revenues with the estimated total costs of Sky's notional broadcasting business, using an appropriate metric such as return on sales. While Sky accepted that such an approach still involved issues that required judgement (notably levels of

the notional internal charges for Sky's premium channels, and allocation of Sky overhead costs to the notional broadcasting business), Sky said that the scope of the judgements to be made was vastly reduced, and involved a significantly smaller level of arbitrariness.

(c) Sky said that our approach of deducting advertising and business revenue to calculate net wholesale costs (see paragraph 3*(e)* in this annex) made the 'cost' figures dependent on the amount of revenue earned other than via wholesale charges, which was unsatisfactory and resulted in illogical outcomes. Sky also said that this approach implicitly assumed that the costs of both these activities were equal to their revenues, and that there was no basis for such an assumption.

(d) Sky said that the analysis was for a single year only (2009/10), and that it was inappropriate to rely on data from a single year for this type of analysis because companies could experience significant year-on-year changes in costs and revenues.

(e) Sky said that the variable costs of Sky's wholesale movies business were the [✂]. Sky said that this undermined the assumption that costs of single movies subscribers were half those of dual movies subscribers.

(f) Sky said that the figure used in working paper 26 for the purpose of assessing Sky's wholesale prices appeared to be at the bottom end of the range for fully allocated costs estimated in our profitability working paper.

8. Our views on these points were as follows:

(a) The purpose of this exercise was to estimate the costs to Sky of supplying its Sky Movies products to other retailers. These costs included the economic cost of using the capital employed in the business as well as the relevant operating costs. We estimated the cost of capital as the multiple of the capital employed and the cost of capital. Our estimate of capital employed assumed that the ratio of capital employed to fixed assets for the movies and sports channels was the same as we estimated for Sky's business as a whole (see Appendix 5.4), and therefore included some allowance for intangible assets.[90] We agreed that the risk associated with the provision of movies and sports channels might differ from that for Sky as a whole. In order to assess the importance of this factor, we looked at a sensitivity analysis assuming for illustrative purposes a higher cost of capital (20 per cent) for the supply of Sky Movies products than for the rest of Sky's business. However, the impact on the excess of the cable rate-card price over cost was modest (see the comparison in Table C3 of column 2 (20 per cent cost of capital) with column 1 ([✂] per cent cost of capital, as assumed in Tables C1 and C2), which resulted in the estimated excess of cable rate-card price over cost in Table 5). Hence, we did not believe that our assessment was sensitive to the precise cost of capital of the supply of Sky Movies products. We regarded the returns earned by wholesale pay-TV channels in other countries as beyond the scope of our inquiry, and not obviously relevant to our purpose, which, within this analysis, was to estimate Sky's costs.

(b) We believed that it was reasonable to allocate costs according to the number of subscribers, and we noted that the results were not very sensitive to the assumption that costs of single movies were half those of dual movies subscribers (see

[90] This applied to the cost estimates in this annex. The cost estimates in the working paper on which Sky was commenting assumed that capital employed was equal to fixed assets and therefore did not include an allowance for intangible assets.

subparagraph *(e)* below). However, as suggested by Sky, we show in Table C3 estimates based on an alternative approach that did not allocate fixed and common costs according to the number of subscribers. We calculated this as follows:

(i) We estimated total cable rate-card revenue as the sum of wholesale charges (both actual and notional) multiplied by subscriber numbers for each Sky Movies product plus other revenues such as advertising revenues.

(ii) We calculated variable cost (based on the estimate of £[✂] per movies subscriber and [✂] per sports subscriber shown in Table B1 in Annex B).

(iii) We allocated non-variable attributed movies and sports costs to each product (and to business sales and advertising) pro rata with variable margin (revenue less variable cost). In order to do this, we assumed that the revenue for combined movies and sports products was split pro rata with the cable rate-card prices of the individual products.[91]

(iv) We then allocated unattributed movies and sports costs to each product (and to business sales and advertising) pro rata with the revised margin (variable margin less attributed cost).

(v) We then calculated total cost for each product (and for business sales and advertising sales) as the sum of variable cost, attributed cost and unattributed cost. We then calculated the percentage excess of rate-card price over cost by subtracting total cost from cable rate-card revenue and dividing by total cost. The resulting estimates are shown in column 3 of Table C3. Under this approach cable rate-card prices exceeded cost by at least [✂] per cent for all products. A comparison of column 3 with column 1 in Table C3 showed that under this approach there was less difference between products in the ratio of cable rate-card price to cost. This was because costs were allocated pro rata with margin (rather than the number of subscribers) and hence more costs were allocated to the products with the highest prices.

TABLE C3 **Sensitivity analysis for estimated excess of cable rate-card price over cost per subscriber**

per cent

Description	*1* *As per Table 5*	*2* *20% cost of capital*	*3* *Alternative cost allocation*	*4* *Alternative treatment of business revenue*	*5* [✂]	*6* *Single movies costs 40% of dual movies*	*7* *Lower end of range for allocated costs*	*8* *Alternative treatment of business and HD revenue*
Single movies	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Dual movies	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Single movies/ single sports	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Dual movies/ single sports	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Dual sports/ single movies	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Dual movies/ dual sports	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC calculations based on Sky data.

[91] For example, for the dual movies/dual sports product, the cable rate-card price for dual movies was £[✂] and the cable rate-card price for dual sports was £[✂], so we allocated [✂] per cent of revenue to movies [✂] and the remaining [✂] per cent to sports.

(c) We believed that it was reasonable to treat advertising revenue as a negative cost allocated pro rata with subscribers because advertising revenue was only earned to the extent that the relevant channels were viewed and viewing of the relevant channels ultimately depended on subscriptions, ie advertising depended on subscriptions (but the reverse was very unlikely to be true—consumers did not subscribe to Sky Movies and Sky Sports to view advertising). We could not apply this reasoning to Sky's business revenue (ie revenue from showing Sky Sports in pubs and other commercial premises). Therefore, we carried out a further sensitivity analysis which excluded business revenue but allocated a percentage of sports costs to business sales.[92] The results are in column 4 of Table C3, and showed that the excess of cable rate-card price over cost was slightly reduced for the combined movies and sports products. We noted also that the estimates in column 3 of Table C3 did not rely on treating either advertising or business revenue as a negative cost allocated pro rata with subscribers.

(d) We asked Sky to provide a cost breakdown for 2009/10, which, at the time of the request, was the most recent full year for which costs were available. Sky did not provide evidence that 2009/10 was an unrepresentative year and, in this context, we note also that our analysis for 2009/10 based on Sky's cost allocations produced figures which [✂] (see Appendix 5.4, paragraph 322). After issuing our provisional findings in August 2011, we considered whether to request 2010/11 data to update the analysis but we decided not to do so as there was no evidence suggesting that costs per subscriber in 2010/11 would differ greatly from those in 2009/10.

(e) We calculated that the effect of allowing for [✂] (the effect was small as there were few single movies subscribers compared with dual movies subscribers). This had negligible effect on the calculated excess of cable rate-card price over cost (see comparison of column 5 with column 1 of Table C3). Since it could be argued that the single movies pack should bear less than half the costs of dual movies (because single movies subscribers did not have access to the Sky Movies Premiere and Sky Movies Showcase channels), we also looked at a further case where costs of the single movies pack were only 40 per cent of the costs of the dual movies pack. This had the effect of slightly increasing the excess of cable rate-card price over cost for the single movies products (see comparison of column 6 with column 1 of Table C3) but, since there were few subscribers to the single movies products, there was negligible effect on the excess of cable rate-card price over cost for the dual movies products.

(f) Sky's views as to the figure used in working paper 26 for the purpose of assessing Sky's wholesale prices were not correct as we used estimates at the upper, not lower, end of the range for fully allocated costs shown in our profitability analysis (see footnote to paragraph 3*(c)* in this annex). Column 7 of Table C3 shows that the effect of instead using estimates at the lower end of the range for fully allocated costs shown in our profitability analysis would be to increase modestly the excess of cable rate-card price over cost.

9. As noted in paragraph 6 in this annex, our estimates did not include any revenue from HD charges. [✂][93,94,95]

[92] We estimated this percentage by dividing business revenue by total sports cable rate-card revenue (estimated as set out in subparagraph *(b)*(iii). This gave an estimate of [✂] per cent.

[93] [✂]

[94] [✂]

[95] We reduced Sky Movies and Sky Sports cost per subscriber by [✂] per cent. This reflected HD revenue at £[✂] per Sky subscriber, as a percentage of total Sky Movies and Sky Sports revenue at cable rate-card prices.

10. Sky also said that we had implicitly made the following assumptions: *(a)* Sky's costs per subscriber were the same for its subscribers in the Republic of Ireland as for its UK subscribers; *(b)* the variable costs of dual premium packages (dual sports and dual movies) were double the variable costs of single premium packages (single sports and single movies, respectively); and *(c)* costs per premium package could be summed to obtain costs per subscriber (for example, the combined cost of a single movies subscriber and a dual sports subscriber together were the same as one subscriber to a package containing both single movies and dual sports). Sky said that these assumptions were invalid but it did not explain why, and nor did it provide any evidence to suggest that alternative assumptions would make a material difference to our comparison of Sky's cable rate-card prices with costs.

11. Sky also reiterated that it considered many of the figures to be unreliable as they were the product of an analysis that Sky had been required to undertake in an inadequate amount of time (see paragraph 2 in this annex). As noted in that paragraph, we did not believe that these issues negated the broad reasonableness of the figures or the usefulness of them for our purposes.

12. Overall, we considered that the analysis set out in this annex supported the initial assessment in our working paper that the excess of Sky's cable rate-card price over its cost per subscriber in 2009/10 was [✂].

History of the cable rate card [✂]

1. The first cable rate card was introduced by Sky in 1995 as part of informal undertakings made to the OFT in lieu of a reference to our predecessor, the Monopolies and Mergers Commission (MMC). Sky said that, in 1995, it had introduced a discount scheme designed to incentivize cable operators to sell more subscriptions to Sky's premium channels in light of a rapidly declining 'pay to basic ratio' (ie the number of Sky premium channels taken by premium channel subscribers, expressed as a ratio of a retailer's basic channel subscribers). Following complaints from cable operators about this discount scheme, the Director General of Fair Trading (OFT) commenced a review under the monopoly provisions of the Fair Trading Act 1973, which culminated in the acceptance by the OFT of informal undertakings (the 'March 1995 undertakings') from Sky in lieu of a reference to the MMC. Under these undertakings, Sky was required only to conclude new contracts for the distribution of its channels via cable in accordance with a rate card ('the May 1995 rate card'), the discount structure of which had been agreed by the OFT in advance. Sky was expressly prohibited from discriminating in any way, whether duly or unduly, and from departing from the rate card in any way.

2. In February 1997 and in October 1997, variations were made to the cable rate card to reflect new undertakings given by Sky in July 1996 in response to an OFT review into the March 1995 undertakings (which focused on, among other things, 'must carry restrictions'). The July 1996 undertakings required Sky: *(a)* to obtain the OFT's advance approval of rate cards (which covered both basic and premium channels at the time) and their discount structures; *(b)* to supply all operators on the basis of these published rate cards and discounts, with no discrimination or departure; and *(c)* not to make the carriage of any channel conditional on carrying any or all of Sky's other channels.

3. In 1998 and 2000, following periodic reviews conducted by the OFT, there were further variations to the cable rate-card scheme, in particular permitting Sky to remove certain of its basic channels from its regulated rate card. After the 2000 review, the only channels which Sky continued to be obliged to supply in accordance with rate-card terms approved by the OFT were its premium channels (ie its Sky Sports and Sky Movies channels).

4. In March 2000, the OFT opened an investigation into Sky's wholesale activities under the Chapter II provision of CA 1998. The main issues that the OFT explored were:

   (a) whether the supply by Sky of its premium channels to cable operators was at prices that amounted to an anticompetitive margin squeeze;

   (b) whether Sky's discounts from base (wholesale) prices for its premium channel packages were anticompetitive; and

   (c) whether Sky's mixed bundling approach to the wholesale pricing of its premium channel packages was anti-competitive.

5. The OFT found that Sky's wholesale discounts did not infringe CA 1998 because it believed that, during the period of its inquiry, these discounts had not acted to foreclose entry. The OFT also found that there were insufficient grounds to conclude that Sky had abused its dominant position by exercising a margin squeeze on its premium channel distributors or by practising anticompetitive mixed bundling in the wholesale

provision of such channels. The OFT also said that Sky need not continue to observe the July 1996 undertakings.

6. Despite the fact that, since the OFT's determination, there was no regulatory requirement for Sky to have a rate card for any of its channels, Sky continued to operate a cable rate card setting out the terms on which it would supply its premium products to cable pay-TV retailers (at least in respect of its SD channels).

7. [✂] Our review of Sky's correspondence with rival pay-TV retailers indicated that there had been other, more recent, occasions when it had discussed departing from rate-card terms but no agreements had yet been reached.[96]

8. [✂], which set out the terms on which Virgin Media could distribute the Sky Movies HD channels.[97] [✂][98]

9. [✂]

10. On pricing, the wholesale charges (exclusive of VAT) associated with the distribution of the Sky Movies HD channels by Virgin Media [✂].[99,100]

11. [✂]

12. [✂], Sky and Virgin Media provided for Virgin Media to be able to distribute Bonus SVOD services, including movie content, to its customers, either by means of Virgin Media's existing cable services [✂][101,102]

13. In October 2011, Virgin Media launched the bonus SVOD service (branded Sky Anytime) on its cable platform and on Virgin Player.

---

[96] [✂]
[97] Virgin Media carries HD versions of all of the Sky Movies channels.
[98] Virgin Media was entitled to distribute the Sky Movies HD services to Virgin Media's cable services [✂].
[99] [✂]
[100] [✂]
[101] [✂]
[102] [✂]

Non-price terms of supply

Introduction

1. In our August 2011 provisional findings, in the context of our provisional view that all of the other three parts of our theory of harm were made out, we considered whether the non-price terms of Sky's wholesale supply of Sky Movies resulted in a limited availability of FSPTW content and Sky Movies, and thereby restricted the ability of Sky's pay-TV rivals to compete with Sky. In particular, we considered whether, in the absence of barriers to the acquisition of FSPTW rights:[1]

   (a) Virgin Media would have been able to offer a pull SVOD service sooner that it was otherwise able to;

   (b) Virgin Media would have been able to distribute the Sky Movies HD channels sooner than it was otherwise able to;

   (c) [✂];

   (d) pay-TV retailers other than Virgin Media (and some smaller cable operators), in particular BT, would have been able to distribute the Sky Movies service; and

   (e) Virgin Media (and any other pay-TV retailer that would have secured distribution of the Sky Movies service) would have been able to compete more effectively because it would have been able to offer movie products which were differentiated from Sky's products and better suited to its subscriber base.

   Whilst the issues raised in *(a)* to *(c)* were historical, we understood that the issues raised in *(d)* and *(e)* were ongoing.

2. In arriving at our views, we considered several sources of evidence, including a review of correspondence and meeting notes relating to previous negotiations over the wholesale supply of Sky's movie products to other pay-TV retailers, and parties' comments on those negotiations. Our reviews of the documentation and the submissions of the parties were useful in helping us to understand the facts relating to previous negotiations, though we were not always able to form a view on the parties' motivations. In part, this was because what we reviewed was mainly the written correspondence and did not reflect many of the verbal exchanges that had occurred, and also we were aware that correspondence may have been written with a particular negotiating position in mind, not least because, since 2007, there had been a parallel regulatory process in progress.

3. In our August 2011 provisional findings we said that, although Sky had made its movie products with FSPTW content available to some other pay-TV retailers, it appeared to us that the terms of Sky's wholesale supply of Sky Movies were such that it had a material advantage over its rivals in the pay-TV retail market. We said that, in part, this was because Sky's rivals had been limited to offering the portfolio of Sky Movies products offered by Sky and to offering them in largely the same way in

[1] In the context of our provisional view that all of the other three parts of our theory of harm were made out, we considered that in the absence of barriers to the acquisition of FSPTW rights, Sky would have faced more competition at the wholesale level which would either have influenced Sky's wholesaling behaviour or resulted in others acquiring FSPTW content directly from the studios.

which they were offered by Sky, thereby preventing these rivals from offering movie products in ways which could have been more attractive to their respective subscriber bases and more suited to their respective platforms. In particular, we reached the provisional view that, on the basis of the evidence we had seen at that time, had there been no barriers to the acquisition of FSPTW rights, some of Sky's rivals[2] would have been able to launch a pull SVOD service sooner and Sky's rivals (in particular, Virgin Media) would have enjoyed greater freedom in their ability to differentiate their movie offering (eg by repackaging content/channels and adopting different pricing structures). We also said that being able to do these things would have enhanced the ability of Sky's rivals to compete with Sky in the pay-TV retail market. In our August 2011 provisional findings, we judged that the evidence on the other areas relating to Sky's wholesale supply was inconclusive.

4. Since our August 2011 provisional findings (as set out in our May 2012 revised provisional findings), we reassessed the significance of FSPTW content to competition between traditional pay-TV retailers for subscribers. Our revised views implied that it was implausible, as a matter of principle, that the terms of Sky's wholesale supply of Sky Movies could cause Sky's rivals to be at such a disadvantage when competing for subscribers as to harm competition.[3] Indeed, this appeared to be a necessary implication of our revised finding on the issue of significance. This in turn implied that it was not necessary to examine issues in relation to wholesale supply by reference to the questions we posed under part *(d)* of our theory of harm in order to reach a conclusion overall as to whether our theory of harm was made out.

5. Nevertheless, in this appendix we set out the assessment we conducted at the time of our August 2011 provisional findings with regard to Sky's non-price terms of wholesale supply and we summarize both the main responses we received and relevant recent developments. We have done so with a view to establishing whether this evidence is, in the round, such as to cast doubt on our finding on the significance of FSPTW content to consumers' pay-TV subscription decisions, reached on the basis of other evidence (see Section 6). Our views on Sky's terms of supply in relation to pricing are set out in Appendix 8.1.

6. We noted that some of the matters we considered related to circumstances which were in the past and, therefore, had to be considered in that context. Either the issue had been resolved by the time of our report (ie the issues identified in paragraphs 1*(a)* to *(c)*), and/or the evidence related to a period when it seemed likely that the FSPTW content on Sky Movies was more important to retail pay-TV competition than was the case at the time of our report. Therefore, in our judgement, it was not appropriate to give undue weight to such evidence as it would not necessarily be informative about the current significance of FSPTW content in pay-TV retail competition. In this appendix we present first the historical issues which, by the time of our report, had been resolved, before discussing those issues which we understood to be ongoing.

---

[2] We noted in our August 2011 provisional findings that some of Sky's rivals could have developed a pull SVOD service sooner than Sky because their systems used broadband or cable technology, which included a 'return path'; though we also recognized that [✂].

[3] See paragraph 3.11.

Historical issues

Sky Movies SVOD service to Virgin Media

Analysis in our August 2011 provisional findings

7. Prior to our August 2011 provisional findings, [✂].

8. In our August 2011 provisional findings, we noted that some of Sky's rivals could have developed a pull SVOD service sooner than Sky because their systems used broadband or cable technology, which included a 'return path'. Sky had only been able to offer a pull SVOD service to its STBs (Anytime+) since complementing its DTH satellite broadcasting platform with a broadband Internet connection.[4] We noted that the major studios had licensed Sky to distribute their content on an SVOD service. We also noted that [✂]. This suggested to us that the studios saw value in an SVOD service being offered to consumers. Therefore, we said that it appeared to us that, had Sky not been able to use its bidding advantages to acquire exclusive SVOD rights from all six of the major studios, some of these studios would have granted these rights to Sky's rivals (on an exclusive or non-exclusive basis), or Sky's wholesale behaviour would have been different (eg Sky might have developed an SVOD product to distribute to its rivals. We said that, in either case, a pull SVOD product would have been launched sooner.

9. In our August 2011 provisional findings, we noted that [✂].

10. Prior to our August 2011 provisional findings, Sky told us that [✂]. Sky said that, normally, it would not be regarded as surprising that a firm was only willing, or indeed able, to engage in discussions about the wholesale supply of a product once it had begun retailing that product itself.

11. We said in our August 2011 provisional findings that [✂] was not clear.[5] However, we said that because Sky had been able to obtain SVOD rights from all the major studios and other potential bidders had not, it appeared to us that a pull SVOD product had come to market later than it otherwise would have done.

12. Prior to our August 2011 provisional findings, [✂].

13. While we noted in our August 2011 provisional findings the [✂], we said that it was not clear to us whether the reason why Sky had only been [✂] was because it served its interests or the studios, or both. As noted in paragraph 9, [✂].

14. At that time, we noted that, [✂], Virgin Media was not in the same position. [✂] Virgin Media had offered the Sky Movies linear channels for many years and, with its cable platform, it could have offered a pull SVOD service many years prior to Sky's Anytime+ service, had it been able to obtain the necessary content rights.

15. Overall, in our August 2011 provisional findings, we reached the provisional view that, on the basis of the evidence we had seen, but for the barriers to the acquisition of FSPTW rights which we had identified at that time, and in the context of our provisional view that all of the other three parts of our theory of harm were made out,

---

[4] Previously Sky had a pull SVOD service (via Sky Player (now branded Sky Go)) to the PC and a push SVOD service to its STBs (Sky Anytime).

[5] In our August 2011 provisional findings we said that it was unlikely to be in the studios' interests to cede control of their rights to another party completely when it was part of their core business to maximize the value of their rights overall through optimal licensing arrangements. [✂]

Sky's rivals would have been in a better position than Sky to generate value both for themselves and the studios from a pull SVOD service because of their technological advantages with regard to this service. We said that, had they been able to offer a pull SVOD product with content in the FSPTW sooner than Sky, this would have enhanced their ability to compete with Sky in the pay-TV retail market.

Responses to our August 2011 provisional findings and revised provisional findings and relevant developments

16. In response to our August 2011 provisional findings, Sky said that, to the extent that our conclusion was predicated on a belief that rights to offer SVOD movie services in the FSPTW could (or should) have been licensed by rights owners separately from linear rights, this failed to recognize that licensing of the right to exploit movies on both types of service during the FSPTW to a single licensee was the norm, world-wide, and this had nothing at all to do with Sky's alleged 'bidding advantages'. We took from this submission that Sky believed a rival seeking to offer an SVOD service would have needed to bid for these rights exclusively, and such exclusivity would generally imply holdbacks against both SVOD and linear exploitation by others.

17. [✂] It appeared to us that Sky's reasoning implied that, whether or not the studios would have licensed exclusively to a rival seeking to offer an SVOD service earlier would have depended on what the rival would have been prepared to bid compared with what Sky would have been prepared to bid for exclusivity as a predominantly linear provider (ie prior to it having a pull SVOD service) and, therefore, there was no guarantee that a rival SVOD service would have emerged absent the barriers to the acquisition of FSPTW rights. We noted that our view in our August 2011 provisional findings that a pull SVOD product would have been launched sooner did not rely on rights being awarded to a rival (either on an exclusive or non-exclusive basis). Although this was one possibility, we also said that Sky could have wholesaled its movie products differently as a result of facing more effective competition for FSPTW rights. However, we acknowledged at that time that we could not be sure that such a service would have emerged.

18. Sky also said that the delay in launching SVOD was the sole example we had provided of innovation that we considered to have been adversely affected by the practice of licensing FSPTW movie rights exclusively, that it was a historic issue and that Sky considered there was no sound basis for a belief that the situation in relation to pull SVOD movie services would be repeated in the future.

19. Disney told us that [✂]. Disney also said that it was far from certain that consumers would have wanted an SVOD service at that time. Disney said that, even assuming that there was unmet demand for a stand-alone SVOD service during the period preceding the launch of Anytime+, and that rivals were capable of meeting this demand, such demand had now been met by Sky, ie these concerns had now been addressed. Similarly, Warner told us that our view that a pull SVOD service would have been launched earlier was backward looking and noted that, in any event, Sky had rolled out Anytime+; and Universal said that we had overstated the effects which may have occurred as a result of any delay in the development on new SVOD products given that the Sky Anytime+ service had launched and there was a range of alternative methods of watching movies.

20. Overall, having considered this further evidence, we concluded that we could not be sure that, but for barriers to the acquisition of FSPTW rights, a pull SVOD product with content in the FSPTW would have emerged sooner (see paragraphs 45 and 46).

Sky Movies HD channels to Virgin Media

Analysis in our August 2011 provisional findings

21. Prior to our August 2011 provisional findings, [✂].

22. [✂]

23. Sky told us that, in its brief correspondence with Virgin Media in 2007 in relation to the supply of its HD channels, it had raised: *(a)* concerns about whether Virgin Media was fully committed to ensuring the success of Sky's HD channels on Virgin Media, given, in Sky's view, Virgin Media's publicly-stated disdain for HD; and *(b)* [✂]. According to Sky, it was on concluding arrangements for the supply of Sky's HD linear channels, that [✂].

24. Sky also said that, in its view, correspondence from Virgin Media to Sky in 2007/08 should be viewed with a degree of scepticism as it appeared to Sky to have been written with Ofcom or other regulatory bodies or courts in mind. Sky said that this correspondence was written at a time when Virgin Media might have hoped to achieve its desired outcomes through regulatory intervention, rather than through genuine commercial negotiation.

25. [✂] Sky said that, [✂], Virgin Media carried just one HD channel (BBC HD), which it had launched in June 2006 despite there being over 30 HD channels available for carriage in the UK, 15 of which were not Sky's channels. Sky noted that Virgin Media had not even launched an HD version of any of its own channels (eg Living). Sky said that the fact that Virgin Media did not begin carrying HD channels (other than the BBC's HD channel) until July 2009 could not be attributed in any sense to Sky and, as such, understanding why Virgin Media did not carry Sky's HD movie channels on its platform before July 2009 was not necessary for the purposes of our investigation. Sky said that Virgin Media's actions at this time were consistent with Virgin Media being sceptical about HD and being under significant capacity constraints.

26. Sky told us that it responded to Virgin Media [✂] and expressed an interest in offering its nine Sky Movies HD channels. [✂] Sky said that Virgin Media decided to prioritize the launch of five basic HD channels, which it included in its XL pack.[6]

27. [✂]

28. Sky submitted that its view of Virgin Media's position in relation to HD was consistent with a statement by Virgin Media's CEO in a Q2 2010 earnings call, which said: 'We've gone from 1–26 HD channels in the last 12 months. I think that's a statement itself that it is time … I don't think we were late to market, I think we were right to market. We waited for Sky to stimulate the demand that they're doing. They're doing very well and we're carrying off the back of them'.

29. Sky also told us that, where it was responsible for launching an entirely new, innovative product, such as HD, it was perfectly legitimate for Sky to have a period of exclusivity. Sky said that this was especially the case when other retailers displayed little genuine enthusiasm for selling the new product. Sky said that, during a period of exclusivity, it would not forego much revenue from not wholesaling to other retailers,

[6] Virgin Media selected four third-party basic pay-TV HD channels, three of which (MTVN HD, National Geographic HD and FX HD) began to be carried on 30 July 2009, and the fourth (ESPN HD) began on 3 August 2009. Virgin Media also launched an HD version of Channel 4 on 31 July 2009. Later in the year, in October 2009, Virgin Media launched an HD version of its Living channel. Further launches of HD channels on its platform did not occur until April the following year.

and, through a marketing message which linked HD with its satellite platform, it could attract new subscribers. Sky said that this incentive, generated through a period of exclusivity, gave it a reason actively to promote HD and to ‘create the market’. Sky said that, once demand for the new service had been established and HD was no longer a new and uncertain technology, the benefits of wider distribution came to dominate, just as for other established and proven products.

30. [✂]

31. [✂]

32. [✂]

33. Virgin Media said that the reasons given by Sky for refusing to supply Virgin Media with its Sky Movies channels in HD appeared to have been concocted after the event. Virgin Media said that, for example, Sky’s stated preference for self retail was a relatively recent preference, which, in Virgin Media’s view, had been developed retrospectively, to justify the withholding of access to content.

34. We said in our August 2011 provisional findings that, from the evidence we had seen, [✂]. We said that [✂].

35. Overall, in our August 2011 provisional findings, we said that the evidence appeared to us to be inconclusive as to whether, had there not been barriers to the acquisition of FSPTW rights and were Sky not to have controlled almost all this content, Virgin Media would have been able to retail HD movies channels sooner.

Responses to our August 2011 provisional findings and revised provisional findings and relevant developments

36. In response to our August 2011 provisional findings, Virgin Media told us that it strongly disagreed with our provisional view that the evidence was ‘inconclusive’ on this issue. Virgin Media said that the notion that offering consumers HD channels was not a priority for Virgin Media as early as it was for Sky was inconsistent with the contemporaneous evidence. Virgin Media said that the first provider in the UK to launch HD TV was Telewest, and the commercial strategies of both ntl and Telewest from as early as 2005 showed their strong interest in HD. [✂]

37. Virgin Media said that Sky’s arguments were heavily based on public statements made by Virgin Media representatives which either sought to ‘play down’ the benefits of HD services, or ‘play up’ other services offered by Virgin Media. Virgin Media said that these arguments were clearly without merit, as they were unsupported by, and contrary to, the contemporaneous evidence. Virgin Media said that, [✂].

38. Virgin Media also said that its lack of take-up of HD versions of Sky’s premium channels in [✂] was not inconsistent with its long-standing desire for these channels. Virgin Media said that it did not take up supply at that time because [✂].[7]

39. [✂]

[7] [✂]

[✂]

Analysis in our August 2011 provisional findings

40. Prior to our August 2011 provisional findings, [✂].

41. [✂]

42. [✂]

43. In our August 2011 provisional findings we said that, overall, the evidence appeared to us to be inconclusive as to whether, had there not been barriers to the acquisition of FSPTW rights and were Sky not to have controlled almost all this content, [✂].

44. We did not receive any responses to our August 2011 provisional findings or revised provisional findings on this issue.

Assessment of historical issues

45. Our purpose in considering the terms of Sky's wholesale supply of Sky Movies was with a view to establishing whether the evidence in this regard was such as to cast doubt on our finding on the significance of FSPTW content which we had reached on the basis of other evidence (see paragraph 5).

46. In relation to the historical issues set out above, we found the evidence to be inconclusive as to whether Sky had restricted wholesale supply in the ways alleged and, therefore, whether, regardless of our position on significance, other traditional pay-TV retailers would have been at a material disadvantage to Sky. Importantly, the conduct we observed was not such as to cast doubt on our findings on significance (ie we were not persuaded that there was sufficiently clear and compelling evidence that Sky was restricting its wholesale supply of Sky Movies via non-price terms in order to limit the ability of its pay-TV rivals to compete for subscribers).

Ongoing issues

Availability of Sky Movies service to pay-TV retailers other than cable retailers

Analysis in our August 2011 provisional findings

47. Prior to our August 2011 provisional findings, both BT and Virgin Media told us that Sky had withheld the wholesale supply of its premium content to other pay-TV retailers owing to the strategic benefits that Sky derived from limiting the ability of third parties to grow their competing pay-TV subscriber bases. [✂]

48. In our August 2011 provisional findings we said that [✂].[8]

49. Prior to our August 2011 provisional findings, BT made a number of general submissions to us about its negotiations with Sky. [✂]

50. [✂] BT said that, if Sky was genuinely interested in self-retailing on BT's platform, it would have approached BT and other pay-TV retailers, yet it did not. BT said that, while initially it might have been rational for Sky to say that it preferred to retail

---

[8] [✂]

directly to customers, once it became clear that such a deal was not likely to be possible, it should have pursued a wholesale deal rather than withholding supply; however, at this time, BT said that, despite discussions over [✂], no wholesale agreement had been reached. BT contrasted its protracted negotiations with Sky with BT's discussions for [✂].

51. Prior to our August 2011 provisional findings, [✂].

52. [✂]

53. [✂]

54. [✂]

55. Sky told us that it was important to appreciate the context of these discussions. [✂][9]

56. [✂]

57. [✂]

58. [✂]

59. [✂][10]

60. We said in our August 2011 provisional findings that, from the evidence we had seen, [✂]. We noted that, [✂].

61. We said that, in our view, [✂].

62. Overall, we said in our August 2011 provisional findings that the evidence appeared to us to be inconclusive as to whether, had there not been barriers to the acquisition of FSPTW rights and were Sky not to have controlled almost all this content, BT would have been able to distribute the Sky Movies SD channels.

63. [✂]

64. [✂]

65. In our August 2011 provisional findings [✂].

Responses to our August 2011 provisional findings and revised provisional findings and relevant developments

66. In response to our August 2011 provisional findings, BT reiterated a number of the points it had made previously to us and told us that our August 2011 provisional findings in relation to Sky's rate-card prices fully supported BT's contention that Sky was not a willing wholesaler of its channels to third parties on commercially viable terms. BT said that our provisional findings showed that Sky had set its rate-card prices at a level to limit the ability of potential rival retailers of premium movie services to compete effectively with Sky and grow their retail subscriber bases. BT said that any rival operator would be aware of this fact and would be unwilling to enter into a wholesale arrangement that did not address this issue by way of lower wholesale

[9] [✂]
[10] [✂]

rates. [✂] We noted that, since our August 2011 provisional findings, Sky had [✂] reduced the wholesale prices of certain of its products incorporating Sky Movies [✂] (which we discuss in Appendix 8.1).

67. BT also told us that, whilst it agreed with our statement that [✂].

68. At the time of our report, we understood that Sky and BT were in discussions about the wholesale supply by Sky to BT of Sky Movies, [✂].

69. [✂]

70. [✂]

71. [✂]

72. [✂]

73. [✂][11]

74. In late June 2012, BT told us that [✂].[12]

75. In terms of other relevant developments, in November 2011, Sky told us that [✂].[13]

76. In July 2012, Sky told us that it had signed a carriage agreement with TalkTalk which would enable TalkTalk to distribute the full suite of Sky Movies channels (SD) (plus the Sky Movies Anytime+ SVOD service on a bonus basis)[14] [✂] over TalkTalk's broadband network to YouView-compatible STBs [✂].[15] Sky said that [✂].

Offering products differently

Analysis in our August 2011 provisional findings

77. In our August 2011 provisional findings, we also considered whether, as a result of what we had observed overall, Sky's rivals had been less able to compete with Sky due to being limited in their ability to offer products which were differentiated to Sky's products.

78. Virgin Media told us that its agreements with Sky included many restrictions which impeded innovation and which it would not expect to exist in a scenario without barriers to rights acquisition. Virgin Media told us that, [✂].

79. Virgin Media submitted that it could generate more benefits for consumers in relation to Sky's SD linear movie channels by: [✂].

80. Virgin Media told us that, in relation to Sky's HD linear movie channels: [✂].

81. Sky told us that the restrictions on packaging reflected the basis on which Sky had acquired the rights from the studios, not just how Sky currently exploited those rights. Virgin Media submitted that it could generate more benefits for consumers in relation

---

[11] [✂]
[12] [✂]
[13] [✂]
[14] To dual movies subscribers.
[15] [✂]

to Sky's HD linear movie channels by offering many of the same innovations as it listed in relation to the supply of Sky's SD movie channels. [✂]

82. Virgin Media told us that, in relation to Sky's SVOD movie product: [✂].

83. Virgin Media submitted that it could generate more benefits for consumers in relation to Sky's SVOD movies product by: [✂].

84. In our August 2011 provisional findings, we considered whether the various restrictions listed by Virgin Media in relation to Sky's SD movie channels, HD movie channels and SVOD movie products existed to protect the interests of the movie studios (for example, with respect to the value they could achieve in other windows) or of Sky. To the extent that they existed to protect the interests of Sky then it seemed likely that rival pay-TV retailers would have been able to negotiate contracts without these restrictions if there had been no barriers to the acquisition of FSPTW rights. We noted that, in general, product differentiation which could be expected to increase consumption without cannibalizing value in neighbouring windows, or which could be expected to increase the quality of the product and consumers' willingness to pay (eg through improved functionality) were likely to have been in the studios' interests.

85. In our August 2011 provisional findings, we said that, overall, on the basis of the evidence we had seen, we believed that, had Sky's rivals (in particular Virgin Media) enjoyed greater freedom in their ability to differentiate their movie offerings, for example by repackaging content/channels and adopting different pricing structures, they were likely to have been able to generate value both for themselves and the studios. However, they were unable to do so because of the presence of barriers to the acquisition of FSPTW rights, which had enabled Sky to control almost all this content. We said that, had they been able to differentiate their offerings, this would have enhanced their ability to compete with Sky in the pay-TV retail market.

Responses to our August 2011 provisional findings and revised provisional findings and relevant developments

86. In response to our August 2011 provisional findings, Sky told us that our conclusion that the non-price terms of its wholesale supply of its movie channels and related services had prevented Virgin Media from offering those services to consumers in ways that differed from Sky was cursory, principally comprising a recital of seemingly untested assertions by Virgin Media of what it considered it might have been able to offer consumers in a scenario without barriers to rights acquisition. Sky said that our view had been underpinned by a vague and unspecified counterfactual in which any terms of supply on Sky's part were possible (ie without regard to reality) and/or we had specified a counterfactual which included the non-exclusive licensing of rights. Sky added that our analysis also did not consider any detrimental effects of alternative configurations of rights. Sky told us that, whilst pay-TV retailers chose the prices at which to sell to consumers the products they acquired on a wholesale basis, and how to present these products attractively, they had no right to interfere with the products themselves, for example by reconfiguring them or rebranding them. Sky said that there was no evidence or analysis to support the belief that the constraints in Sky's contracts which restricted other pay-TV retailers' freedom to differentiate their movie offerings were included to protect the interests of Sky rather than the studios.

87. On the specific contractual restrictions cited in our August 2011 provisional findings, Sky told us that: [✂].

88. Overall, having considered this further evidence, we concluded that we could not be sure that, but for barriers to the acquisition of FSPTW rights, Sky's rivals (in particular Virgin Media) would have enjoyed greater freedom in their ability to differentiate their movie offerings.

Assessment of ongoing issues

89. Our purpose in considering the terms of Sky's wholesale supply of Sky Movies was with a view to establishing whether the evidence in this regard was such as to cast doubt on our finding on the significance of FSPTW content reached on the basis of other evidence (see paragraph 5).

90. It appeared to us that some of the points which Sky raised in response to our August 2011 provisional findings had merit. Overall, in relation to the ongoing issues set out above, we found the evidence to be inconclusive as to whether Sky was restricting wholesale supply in the ways alleged and, therefore, whether, regardless of our position on significance, other traditional pay-TV retailers were at a material disadvantage to Sky. Importantly, the conduct we observed was not such as to cast doubt on our findings on significance (ie we were not persuaded that there was sufficiently clear and compelling evidence that Sky was restricting its wholesale supply of Sky Movies via non-price terms in order to limit the ability of its pay-TV rivals to compete for subscribers).

91. We noted that, since our August 2011 provisional findings, [✄]. We also noted that, since our August 2011 provisional findings, Sky had reached an agreement with TalkTalk for the wholesale distribution of the Sky Movies channels and bonus SVOD service.

Evidence on the effects of any bargaining power Sky may hold

1. This appendix summarizes the evidence we considered on whether the studios had been able to extract the 'competitive' price from Sky for their FSPTW rights or whether Sky had been able to exploit bargaining power. If Sky had been able to exploit bargaining power, this could give rise to adverse effects on or distortions between studios. We took into account all the evidence received in the course of our inquiry including submissions made in response to our August 2011 provisional findings and our May 2012 revised provisional findings. In that context, we also took account of the market developments which occurred during our inquiry, the most relevant of which was the, in our view, significant activity by LOVEFiLM and Netflix to acquire SVOD-only FSPTW rights [✂] from non-major studios [✂].

2. We considered the possible effects on the major studios and the non-major studios separately. We noted that Sky's ability to exercise bargaining power was likely to be inversely related to the importance to Sky of the content which it was seeking to license. It appeared to us that, generally, the output of a major studio was likely to be more important for Sky to license than the output of a non-major studio, although this might not always be the case.[1]

Effects on major studios

3. In this section, we discuss the possible effects on major studios.

4. It was apparent at the time of our August 2011 provisional findings that Sky's payments to the major studios for FSPTW movie rights had [✂]. However, we recognized that the trend in the prices paid by Sky to the major studios for their FSPTW rights could be driven by many factors, and we could not infer from this trend that Sky had [✂] over this period. In any case, we noted that our primary interest was in how the price the studios obtained compared with some notional 'competitive' level, and price trends could not, on their own, provide many insights on this issue.

5. In order to assess whether Sky believed itself to be exercising bargaining power, we reviewed many of Sky's internal documents. [✂][2]

6. [✂]

7. Although informative, we recognized that only limited weight could be placed on this evidence. Therefore, we considered if there was any quantitative evidence which could indicate whether in the UK (or in any other countries in which only one company holds the FSPTW rights of the major studios) the major studios obtained less revenue, or agreed worse terms, from the licensing of their FSPTW rights compared with other countries where there was more than one licensee of these rights.

8. We noted that this comparison was complicated by the fact that there were many other factors which varied between countries, which might have influenced the revenue/terms studios had been able to negotiate. We also noted that measuring the degree of competition for rights on the basis of whether more than one company

[1] For example, Sky told us that the output of a non-major studio such as MGM was as important as that of a number of major studios. Sky said that, generally, what was important for Sky was to be able to show as many movies in the top 100 as possible, regardless of whether they were from a major or non-major studio.
[2] [✂]

currently held the FSPTW rights of all the major studios risked being overly simplistic, not least because it was not clear that an alternative bidder needed to be successful in order to provide a constraint on the winning bidder. This meant that countries which we classified as being similar on the basis of the number of companies that held the FSPTW rights of the major studios (eg the UK, [✂] and [✂]) could have very different levels of competition for rights.

9. Notwithstanding these limitations, we asked the major studios to provide us with their movie revenues in each window in each of ten different countries for a three-year period from 2008 to 2010.[3] We also requested information from them specifically about the FSPTW, including: *(a)* the revenue from each of their five largest licensees in the most recent of these years; *(b)* the fee per subscriber paid for the main category of movies by the largest licensee for each year; and *(c)* the number of subscribers of their largest licensee for each year.

10. We considered:

(a) the relative importance of the FSPTW to the studios compared with the importance of other windows, as indicated by the pay-TV revenue shares;

(b) whether the number of licensees holding FSPTW rights from the major studios in a country had any effect on the studios' prices; and

(c) whether the number of licensees holding FSPTW rights from the major studios in a country had any effect on the studios' other contractual terms.

Value of the different movie windows

11. We examined the relative value of the different windows to the movie studios in ten countries. For these purposes, we divided movie revenues between five main windows: theatrical, home entertainment, PPV/VOD, pay TV[4] and FTA TV.[5] It was not possible to break down pay-TV revenue between FSPTW and SSPTW but we believed that the majority of the pay-TV revenue shown was for the FSPTW.

12. Table 1 shows the revenue shares in 2008 and 2009 aggregated across studios. We present the shares for individual studios in Appendix 9.2.

[3] The ten countries were the UK, France, Germany, Italy, Spain, Sweden, the USA, Canada, Japan and Australia.
[4] Where we refer to pay-TV revenue, we mean pay-TV subscription revenue, ie excluding PPV/VOD revenue.
[5] We do not show separately information for the EST window, which accounted for a small proportion of revenue.

TABLE 1 **Studios' revenue share by window—country comparison**

	Theatrical	*Home ent*	*PPV/ VOD*	*Pay TV*	*Free TV*
					per cent
2009					
USA/Canada*	[✂]	[✂]	[✂]	[✂]	[✂]
UK	[✂]	[✂]	[✂]	[✂]	[✂]
France	[✂]	[✂]	[✂]	[✂]	[✂]
Japan†	[✂]	[✂]	[✂]	[✂]	[✂]
Germany	[✂]	[✂]	[✂]	[✂]	[✂]
Italy	[✂]	[✂]	[✂]	[✂]	[✂]
Australia	[✂]	[✂]	[✂]	[✂]	[✂]
Spain	[✂]	[✂]	[✂]	[✂]	[✂]
Sweden†	[✂]	[✂]	[✂]	[✂]	[✂]
Total‡	[✂]	[✂]	[✂]	[✂]	[✂]
Average*§	[✂]	[✂]	[✂]	[✂]	[✂]
2008					
USA/Canada*	[✂]	[✂]	[✂]	[✂]	[✂]
UK	[✂]	[✂]	[✂]	[✂]	[✂]
France	[✂]	[✂]	[✂]	[✂]	[✂]
Japan	[✂]	[✂]	[✂]	[✂]	[✂]
Germany	[✂]	[✂]	[✂]	[✂]	[✂]
Italy	[✂]	[✂]	[✂]	[✂]	[✂]
Australia	[✂]	[✂]	[✂]	[✂]	[✂]
Spain	[✂]	[✂]	[✂]	[✂]	[✂]
Sweden†	[✂]	[✂]	[✂]	[✂]	[✂]
Total‡	[✂]	[✂]	[✂]	[✂]	[✂]
Average*§	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC calculations based on information provided by six movie studios. EST is excluded from the table, so the total share for a country may not sum to 1.

*Figures for USA and Canada together.
†[✂]
‡Total for all countries (equivalent to weighted average of figures for individual countries).
§Unweighted average of figures for individual countries.

13. The movie window that typically generated most revenue was the home entertainment window, which accounted for around [✂] of the studios' revenues. In the UK, the pay-TV window represented around [✂] per cent of the studios' total revenues. This was close to the simple average of the figures across all countries, but above the weighted average (weighted by total revenue), which was heavily influenced by the USA.

14. If Sky were exercising bargaining power in respect of the major studios, we might have expected to see these studios receiving a lower share of revenue from pay TV in the UK and other countries where a single movie channel provider acquired all the FSPTW rights (though the revenue shares would also be influenced by many other factors, eg the importance of pay TV in each country relative to other ways of watching movies (eg cinemas, DVDs and FTA TV), and the importance in each country of major studios' movies relative to the movies of non-major studios). The only two countries other than the UK (out of the ten countries for which we received data) where a single movie channel provider had acquired all the FSPTW rights were [✂] and [✂]. As already noted, the pay-TV revenue share for the UK was around or slightly above average, whilst the pay-TV revenue share for [✂] was above average. Although the share for [✂] was below average, we considered that this was explained by the low penetration of pay TV in [✂].[6,7] Moreover, there were other

[6] A 2008 study for Sky by PwC ('The outcome for consumers in relation to pay TV in Europe') suggested that the 2006 penetration of genuine pay TV (pay TV providing more than just access to more FTA channels) was less than [✂] per cent in [✂], compared with [✂] per cent in [✂], and around [✂] per cent in [✂].

[7] [✂] low pay-TV penetration may also be expected to affect PPV/VOD sales (which would be less affected by any bargaining power issue, as the PPV/VOD window is usually non-exclusive). A comparison of pay-TV revenue shares with PPV/VOD

countries (including the USA) where FSPTW rights were held by more than one channel producer but where pay TV also had a low revenue share.

15. Overall, this evidence did not clearly indicate that Sky had exercised bargaining power, at least in relation to the major studios. Rather, it suggested that there was no clear relationship between the number of companies holding FSPTW rights and the revenue share attributable to pay-TV.

Prices obtained by the major studios

16. We looked at the prices earned by the major studios for their FSPTW rights to assess whether there was any indication that they had earned less in those territories where there was only one licensee holding all their FSPTW rights compared with other territories. We sought to compare the CPS in the contracts between the six major studios and their largest pay-TV licensee in each of the ten territories. In the FSPTW, the studios often set their prices on the basis of a CPS times the number of subscribers. Therefore, to some extent, when making comparisons across territories, CPS could be considered as a measure of price. For each studio in each country, the largest pay-TV licensee was likely to have been the company holding the studio's FSPTW rights (though other pay-TV licensees may have held pay-TV rights to distribute movies in later windows).

17. Different CPSs applied to different categories of movies. The most common categorization was set according to box office performance, but different studios in different countries had different criteria. This made direct international comparison difficult. Therefore, we focused on the CPS of the top category of movies in the FSPTW for the largest licensee in each territory, recognizing that the threshold for this top category might not be exactly the same across different studios and countries.

18. The studios told us that, in most territories, licence fees had three formats: sole CPS, a flat fee plus a CPS, or a sole flat fee. For comparison purposes, we converted the flat fee into 'effective' CPS by dividing the flat fee by the most recent available number of subscribers at that time. The results are in Table 2.

- - - - - - - - - -

revenue shares (see Table 1) suggested that the ratio for [✂] was above, rather than below, average and hence did not support the bargaining power view.

TABLE 2 **CPS for top category movies in FSPTW**

US$

	*Disney**	*Fox*	*Paramount†*	*Sony Pictures*	*Universal‡*	*Warner§*
USA	[✂]		[✂]			[✂]
Canada			[✂]			[✂]
UK	[✂]		[✂]	[✂]	[✂]	[✂]
France	[✂]		[✂]	[✂]	[✂]	[✂]
Japan	[✂]		[✂]	[✂]		[✂]
Germany	[✂]		[✂]	[✂]	[✂]	[✂]
Italy	[✂]		[✂]	[✂]	[✂]	[✂]
Australia	[✂]		[✂]	[✂]		[✂]
Spain	[✂]		[✂]	[✂]		[✂]
Sweden	[✂]		[✂]	[✂]		[✂]

Source: CC estimates based on information provided by the studios shown in the table. Reported CPS rates were for the top category movies in the FSPTW between the studio and the largest licensee. Top category meant the most successful in the box office, and the criteria varied across the territories and studios. Reported CPS rates were the rates at the time the comparison was undertaken. However, when approximation (flat fee divided by number of subscribers) was needed, we used information on the most recent available year. Underlined figures were converted from local currency to US$ using an approximate exchange rate for 2010. Exchange rates may differ from those expected at the time the contracts were signed due to currency fluctuations.

*[✂]
†[✂]
‡[✂]
§[✂]

19. We noted that the figures for the UK (and also [✂]) [✂] and, although the figures for [✂] tended to be towards the lower end of the range, this was not the case for all studios. In our view, this data did not clearly indicate that the major studios were suffering lower prices in the UK from Sky's position as the sole licensee of their FSPTW rights compared with other territories.

20. We also looked at the studios' aggregate pay-TV revenue per subscriber from each of their largest licensees. In some cases, the studios' revenue figures covered only movies in the FSPTW, while in other cases their revenue figures covered all movies (ie including library movies). Table 3 shows the revenue per subscriber (where only FSPTW movies are included the figures are underlined).

TABLE 3 **Average revenue per subscriber under contracts with largest pay-TV licensee in most recent year**

US$

	Disney	*Fox*	*Paramount*	*Sony Pictures*	*Universal*	*Warner*
USA	[✂]					
Canada			[✂]			[✂]
UK	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
France		[✂]	[✂]		[✂]	
Japan	[✂]	[✂]	[✂]	[✂]		[✂]
Germany	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Italy	[✂]	[✂]	[✂]	[✂]		
Australia	[✂]	[✂]	[✂]	[✂]		[✂]
Spain	[✂]	[✂]	[✂]	[✂]		[✂]
Sweden	[✂]	[✂]	[✂]	[✂]		[✂]

Source: CC estimates based on information provided by the studios shown in the table. Average revenue per subscriber was the revenue divided by the number of subscribers. Underlined cells refer to FSPTW movies only; others were for all movies in the contract. [✂]

21. We noted that Table 3 showed a large variation in revenue per subscriber, the reasons for which were unclear.

22. The figures for the UK (and [✂] and [✂]) [✂]. Therefore, again, this data did not clearly indicate that the major studios were suffering lower prices in the UK from

Sky's position as the sole licensee of their FSPTW rights compared with other territories.

Terms agreed by the major studios

23. We considered whether there was any evidence that the terms agreed by the major studios with Sky in the UK were better or worse than the terms they agreed in markets with more than one licensee of their FSPTW rights.

24. For example, if Sky were exercising bargaining power in respect of the major studios, we might expect the length of the FSPTW to be longer and/or the timing of the FSPTW to be earlier in the UK (and possibly also in other territories in which there was only one licensee of the major studios' FSPTW rights) compared with other territories. We might also expect greater restrictions on the studios' ability to license their other rights, for example by tying SVOD rights with linear rights or through other hold-backs (recognizing that some restrictions might be in the studios' interests).

25. We observed that the length of the FSPTW (approximately 12 to 15 months) and the timing of the FSPTW (approximately 9 to 12 months after cinematic release) were broadly consistent across most European territories, and many other territories world-wide, regardless of the number of licensees of the major studios' FSPTW rights. We also observed that, in almost all territories, SVOD rights were licensed by the studios with the linear rights in the same window.

26. On the basis of this evidence, it did not appear to us that the major studios had achieved either worse terms or better terms in the UK (or in other markets with only one licensee of their FSPTW rights) than in other territories.

Assessment of effects on major studios

27. Overall, although we recognized that the analysis we had conducted was limited in its scope and subject to a number of limiting factors, the evidence did not clearly indicate that the major studios had achieved either prices or terms in the UK (or in any other market where there was only one licensee of their FSPTW rights) which were worse than in other territories.

28. This conclusion was consistent with the fact that, during the course of our investigation, the major studios generally gave us no indication that they had any concern about being unable to extract the full value for their FSPTW rights because of Sky having significant bargaining power [✂].

29. Through the course of our inquiry, we also observed that [✂]. We noted that [✂]. It appeared to us [✂].

Effects on non-major studios

30. In this section, we discuss the possible effects on non-major studios. We begin by setting out the views of some of the non-major studios which we received prior to our August 2011 provisional findings and some observations made by a third party which we received in response to our May 2012 revised provisional findings. We then set out the results of the analysis we presented in our August 2011 provisional findings, before considering the impact of the developments in the market since that time.

Views of the non-major studios and third parties

31. Prior to our August 2011 provisional findings, one of the non-major studios told us that, while there was consumer demand to watch movies released by studios other than the six major studios, as evidenced by the performance of those movies at the box office, most of them struggled to sell their movies to pay-TV providers for exhibition on linear channels in the FSPTW. The studio told us that, to the limited extent that Sky did take movies from non-major studios, the lack of competing distribution outlets in the FSPTW for those movies meant that Sky could dictate the terms. The studio told us that, under these circumstances, prices were not determined on the basis of the market value of the movie to the consumer, but were driven by Sky's buyer power. The studio said that it believed that the price Sky paid for its movies could be up to 80 per cent less than the price Sky would pay for the same movie from one of the six major studios.

32. Also prior to our August 2011 provisional findings, another of the non-major studios told us [✂].

33. Some of the non-major studios told us at that time that [✂].

34. In response to our provisional findings, [✂]. In response to our revised provisional findings, our attention was drawn to a recent report of the Film Policy Review Panel which noted that access to Sky's platform 'may act as a constraint on the ability of independent distributors to invest resources in cinema releases and in acquiring rights'.

35. It appeared to us that there were two ways in which the non-major studios might be adversely affected if Sky were exercising bargaining power: *(a)* Sky could license fewer movies from the non-major studios than it licensed from the major studios (accounting for any differences in quality[8]); and/or *(b)* Sky could negotiate less favourable terms for movies of the same quality. We considered both of these possibilities, as discussed in turn below.

Does Sky license fewer movies distributed by the non-major studios?

36. Sky provided us with data on viewing figures by movie for all movies that were broadcast on Sky's movie channels in 2009/10, along with information on the studio that distributed[9] the movie and the category[10] of that movie (based on consistent box office classifications in relation to movies that have had a cinematic release). Using this data, we compared the number of movies Sky broadcast which were distributed by non-major studios with the number it broadcast which were distributed by major studios. Table 4 shows the results.

[8] We recognized that 'quality' is difficult to measure but proxies could include number of viewings and box office success.
[9] We noted that it was common for multiple companies to be 'producers' of a title, which may then be distributed by one or more of the 'producers' or by a third party. To the extent that non-major studios licensed the content they produced to the six major studios for distribution, or distributed content produced by partner studios, then the analysis we performed using the data supplied to us by Sky (which reported on the basis of the studio which *distributed* the movie) may have over- or underestimated the numbers of movies *produced* by non-major studios broadcast by Sky.
[10] [✂]

TABLE 4 **Number of movies by category and studio type shown on Sky Movies channels in 2009/10**

Studio	*A*	*B*	*C*	*D*	*Library*	*MoW*	*Total*
Major studios (number)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Proportion of total movies shown on Sky distributed by these studios (%)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	*100*
Proportion of category (%)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Non-major studios (number)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Proportion of total movies shown on Sky distributed by these studios (%)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	*100*
Proportion of category (%)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total (number)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Proportion of total movies shown on Sky distributed overall (%)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	*100*
Proportion of category (%)	*100*	*100*	*100*	*100*	*100*	*100*	*100*

Source: Sky data.

Notes:
1. The analysis only included movies broadcast on Sky movies channels in 2009/10 (ie it excluded any mini-series and magazine programming that was also broadcast).
2. In response to a CC information request, movies broadcast on Sky's movie channels were classified by Sky into four categories based on US and UK box office success as follows:

- Category A: US box office greater than $100m and/or UK box office greater than £10m
- Category B: US box office $50m–$100m and/or UK box office £2.5–£10m
- Category C: US box office < $50m and/or UK box office <£2.5m
- Category D: straight to DVD titles (no UK or US cinematic release)
- 'Movie of the week' (MoW): straight to TV titles
- Library titles

37. Table 4 shows that Sky broadcast [✂] movies distributed by non-major studios on its movie channels in 2009/10, which accounted for [✂] per cent of the total number of movies shown. In the same period, Sky broadcast [✂] movies distributed by major studios, equivalent to [✂] per cent of the total.

38. Table 4 indicates that, for the movies acquired by Sky from non-major studios for exhibition in 2009/10, [✂]. If we excluded library movies and movies of the week from the analysis, on the basis that we were interested primarily in movies in the FSPTW, [✂] acquired from the major studios were [✂] of the movies acquired from the non-major studios were [✂].

39. From this analysis, it appeared to us that, of the movies Sky obtained for exhibition in the FSPTW from the six major studios, [✂], of the movies Sky obtained for exhibition in the FSPTW from the non-major studios, [✂].

40. We performed the same analysis based on the total number of movie viewings (rather than the total number of movies), and found a similar picture, as shown in Table 5.

TABLE 5 **Total viewing on Sky Movies channels by category and studio in 2009/10**

Studio	*A*	*B*	*C*	*D*	*Library*	*MoW*	*Total*
Major studios (million viewings)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Proportion of total viewing on Sky of movies distributed by these studios (%)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	*100*
Proportion of category (%)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Non-major studios (million viewings)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Proportion of total viewing on Sky of movies distributed by these studios (%)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	*100*
Proportion of category (%)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total (million viewings)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Proportion of total viewing overall (%)	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	*100*
Proportion of category (%)	*100*	*100*	*100*	*100*	*100*	*100*	*100*

Source: Sky data.

Notes:
1. The analysis only included movies broadcast on Sky movies channels in 2009/10 (ie it excluded any mini-series and magazine programming that was also broadcast).
2. Movies broadcast on Sky's movie channels were classified by Sky into four categories based on US and UK box office success as follows:
- Category A: US box office greater than $100m and/or UK box office greater than £10m
- Category B: US box office $50m–$100m and/or UK box office £2.5–£10m
- Category C: US box office < $50m and/or UK box office <£2.5m
- Category D: straight to DVD titles (no UK or US cinematic release)
- 'Movie of the week' (MoW): straight to TV titles
- Library titles

41. Table 5 shows that [✂] per cent of the viewings of movies on Sky Movies in 2009/10 were of a movie distributed by one of the major studios.

42. Table 5 indicates that movies which were distributed by non-major studios derived a [✂] their total movie viewings on Sky from [✂]. If we excluded library movies and movies of the week from the analysis, [✂] per cent of the viewings of movies that were distributed by the major studios [✂] per cent for non-major studios [✂].

43. The analysis in Table 5 also indicated that, of the movies Sky obtained for exhibition in the FSPTW from the major studios, [✂], of the movies Sky obtained for exhibition in the FSPTW from the non-major studios, [✂].

44. [✂]

45. Over the three-year period from 2008 to 2010, the non-major studios gained a share of the UK cinema box office of between 20 and 30 per cent, though shares were volatile (see Appendix 3.1). Movies which received a cinema exhibition were classified in the data into categories A to C. In 2009/10, there were [✂] such movies distributed by the six major studios broadcast on Sky's movie channels, while there were [✂] such movies from non-major studios (see Table 4). This evidence suggested that Sky might be broadcasting [✂] number of movies distributed by the non-major studios, ie they represented [✂] per cent of such movies shown by Sky, compared with being responsible for 20 to 30 per cent of revenue at the UK box office, although we were aware that other factors might explain this difference. In particular, it might be that [✂] movies distributed by the non-major studios were responsible for generating their 20 to 30 per cent share of the box office relative to the number of movies distributed by the six major studios.[11]

[11] We also noted that box office success would be a poor indicator of quality if the non-major studios were to have difficulty licensing their rights competitively for cinema exhibition. However, we did not see any clear evidence to suggest that this was the case. We also noted that [✂].

Does Sky negotiate lower prices or worse terms for movies distributed by the non-major studios?

Prices

46. We considered whether there was any evidence that Sky paid lower prices to non-major studios than it did to major studios for movies of the same quality.

47. Sky provided us with data on its payments to each of the six major studios under its output deals and separately under its other deals (for movies and other programming) for the three-year period from 2008 to 2010. It also provided us with data on its payments in aggregate to non-major studios for the same period.

48. In general, we would expect a broadcaster to pay more to broadcast a movie (or group of movies) which it thought would attract more viewings and, as such, number of viewings was one way of measuring the quality of a movie. We took Sky's payment data for 2009 and its viewing data for 2009/10 (see Table 5) and we compared the rates that Sky paid to the six major studios with the rates it paid to the non-major studios per movie viewing. The results are presented in Table 6. (We produced two variants of the cost/viewing ratio based on whether or not it included the payments that Sky paid to the six major studios other than in relation to its output deals.)[12]

TABLE 6 **Cost/viewing by studio**

	Share of viewings %	*Share of costs (including 'other' payments)* %	*Share of costs (excluding 'other' payments)* %	*Cost/viewing (including 'other' payments)*	*Cost/viewing (excluding 'other' payments)*
Major 6	[✂]	[✂]	[✂]	[✂]	[✂]
Universal	[✂]	[✂]	[✂]	[✂]	[✂]
Paramount	[✂]	[✂]	[✂]	[✂]	[✂]
Sony Pictures	[✂]	[✂]	[✂]	[✂]	[✂]
Disney	[✂]	[✂]	[✂]	[✂]	[✂]
Fox	[✂]	[✂]	[✂]	[✂]	[✂]
Warners	[✂]	[✂]	[✂]	[✂]	[✂]
Non-major studios	[✂]	[✂]	[✂]	[✂]	[✂]

Source: Sky data.

49. Table 6 indicates that, [✂] movies distributed by the six major studios accounted for [✂] per cent of viewings, they accounted for [✂] per cent of Sky's payments for content. Movies distributed by the non-major studios accounted for [✂] per cent of viewings, [✂] per cent of payments. This evidence suggested that, on average, the six major studios were [✂] the non-major studios.[13]

50. However, the data in Table 6 includes payments by Sky for library movies and movies of the week, which, for movies distributed by the major studios, represented [✂] per cent of viewings. Table 7 shows the same results for movies which were classified by Sky in categories A to D (ie movies which were in the FSPTW).

[12] Sky indicated that these payments related to both movies and other programmes. To the extent that these payments related principally to non-movie content, they should be excluded from the calculations. [✂]
[13] [✂]

TABLE 7 **Cost/viewing by studio, only FSPTW movies**

	Share of viewings %	*Share of costs (including 'other' payments)* %	*Share of costs (excluding 'other' payments)* %	*Cost/viewing (including 'other' payments)*	*Cost/viewing (excluding 'other' payments)*
Major 6	[✂]	[✂]	[✂]	[✂]	[✂]
Universal	[✂]	[✂]	[✂]	[✂]	[✂]
Paramount	[✂]	[✂]	[✂]	[✂]	[✂]
Sony Pictures	[✂]	[✂]	[✂]	[✂]	[✂]
Disney	[✂]	[✂]	[✂]	[✂]	[✂]
Fox	[✂]	[✂]	[✂]	[✂]	[✂]
Warners	[✂]	[✂]	[✂]	[✂]	[✂]
Non-major studios	[✂]	[✂]	[✂]	[✂]	[✂]

Source: Sky data.

51. Table 7 suggests that FSPTW movies distributed by the six major studios accounted for [✂] per cent of viewings of movies broadcast during the FSPTW on Sky's movie channels, [✂] per cent of Sky's payments for FSPTW movie content. [✂], FSPTW movies distributed by the non-major studios accounted for [✂] per cent of viewings of movies broadcast during the FSPTW, [✂] per cent of Sky's payments for FSPTW movie content. The evidence suggested that, on average, the six major studios had at least historically [✂] for content broadcast in the FSPTW [✂].

52. If we used share of UK box office revenue as a proxy for the value of a movie, the non-major studios, when compared with the six major studios, [✂]. Movies distributed by the non-major studios were responsible for earning between 20 and 30 per cent of revenues at the UK box office, and these movies were responsible for [✂].

53. Sky said that our analysis did not constitute robust evidence, and the findings should be considered with a great deal of caution. Sky submitted that a cost per viewing analysis was simplistic and failed to consider additional factors which were important determinants of the fees paid by Sky for movies. Sky told us that, whilst (expected) viewing was one aspect of the value of the right to broadcast a title, other aspects were also important and were not captured by our analysis. Sky submitted that it would be willing to pay more for content which was most valuable to its customers, which would not necessarily be reflected in viewing figures. Sky noted, as an example, that a title which attracted 10,000 viewers, all of which placed a relatively 'high' value on it, might be more valuable to Sky than a title which attracted 20,000 viewers, all of which placed a relatively 'low' value on it. In Sky's experience, [✂]. Sky noted that this was reflected in the fact that [✂].

54. Warner told us that, due to the many variables which influenced the terms of any particular deal, it would not be straightforward to assess whether the non-major studios received less favourable deals from Sky than the six major studios. Warner stated that movies were highly differentiated products with studios producing different mixes (both among themselves and from year to year) in terms of genre, volume, value and popularity of output.

55. We accepted that both the number of viewings and the share of UK box office revenues were imperfect proxies for the value of a movie to Sky. There were many reasons why Sky might generally pay a higher price for content distributed by the major studios than for content distributed by non-major studios. For example, Sky might use the content of the major studios more than content of non-major studios to attract new subscribers to Sky Movies. Sky also told us that [✂].

56. In order to examine how Sky perceived its negotiations with the major studios compared with its negotiations with non-major studios, we reviewed a number of internal documents provided to us by Sky relating to these negotiations. [✂]

57. One interpretation of this evidence was that [✂].

Terms

58. We noted that Sky's arrangements with the six major studios with regard to movies in the FSPTW were all different. However, there were some common elements. [✂]

59. At the time of our August 2011 provisional findings, we were aware of [✂] non-major studios which at that time [✂] similar output deals with Sky [✂], as well as [✂]. Where Sky did not have an output deal with a non-major studio (or distributor), it often licensed movies individually or on the basis of a slate (ie a set of specified movies). However, compared with an output deal, it appeared to us that these arrangements provided non-major studios with little certainty about the value their movies would generate in the FSPTW.

Assessment of effects on non-major studios

Summary of the findings from our analysis

60. Given the arrangements in place between Sky and the six major studios, which provided Sky with a high number of movies, including the majority of movies which had been popular recently in cinemas, it did not appear to us that concluding output deals (as distinct from slate deals (ie for a specified set or number of titles)) with non-major studios had been as important for Sky (albeit some non-major studios might have been more important than other non-major studios, and possibly more important than some major studios). As non-major studios have traditionally delivered fewer top 100 movies, and have done so less consistently than the major studios, it appeared to us that, in order for Sky to be able to offer a movie service with a broad range of the most popular recently-released movies, concluding an output deal with non-major studios might have been desirable but not essential. Accordingly, it appeared to us that Sky had more discretion in its negotiations with the non-major studios, as compared with the major studios, in relation to the terms it offered (for example insofar as whether to offer an output or package deal and on what financial terms).

61. The results of our analysis conducted prior to our August 2011 provisional findings suggested that [✂].

62. Nevertheless, it was not clear from the results of our analysis the extent to which [✂].

Market developments in relation to non-major studios

63. Prior to publishing our August 2011 provisional findings, we were aware that some non-major studios had recently found alternative buyers for their FSPTW rights. For example, eOne told us that it had recently agreed a five-year output deal with LOVEFiLM for its SVOD rights in the FSPTW, and [✂], which it transpired subsequently was Netflix.

64. [✂] eOne said that the interest of LOVEFiLM and Netflix in the FSPTW rights of non-major studios was a fantastic injection of competition, from which all the non-major

studios were benefiting. eOne said that, for the first time for many years, the non-major studios had a genuine alternative outlet for their FSPTW rights to Sky.

65. [✄]

66. Subsequent to our August 2011 provisional findings, LOVEFiLM also acquired the exclusive FSPTW rights of Studiocanal and Netflix also acquired the exclusive FSPTW rights of MGM and Momentum.

67. On the basis of this evidence, we found that, as a result of the emergence of the OTT services of LOVEFiLM and Netflix, there had been a significant increase in the competition for the FSPTW rights of many of the non-major studios. For this reason, even if we were to have found that Sky had exercised bargaining power over non-major studios in the past, the extent to which it was able to do so now appeared to us to have become much more limited. Moreover, we had no reason to believe that the interest of these other parties in the FSPTW rights of non-major studios would diminish in the foreseeable future.

The effect on competition between all movie studios

68. We also considered whether, to the extent that Sky had exercised bargaining power over non-major studios in the past, competition between all studios might have been affected. However, it was not clear to us that it would have been. Given that studios gained revenues from many windows, not just the FSPTW, and from many geographic markets, not just the UK, it was unclear to us that any detriment suffered by some non-major studios in the FSPTW in the UK would have affected their ability to compete overall (for example, because they could invest less). Moreover, we found no reason to believe that any restriction on the ability of some non-major studios to compete would necessarily have adversely impacted upon final consumers given that competition between the major studios appeared to us to be broadly effective (see Appendix 3.1).[14] The recent evidence [✄] of significant competition for the FSPTW rights of non-major studios [✄] reinforced this view.

[14] Given that the six major studios are responsible for over 70 per cent of box office revenues (see Appendix 3.1, paragraph 8).

Revenue shares by studio

We reviewed the revenue data of the six major studios across the different windows over a three-year period. Some studios supplied us with their revenues for 2007, 2008 and 2009 [✂], while others supplied us with their revenues for 2008, 2009 and 2010 [✂], and [✂] supplied us with its revenues for 2008 and 2009. For the purpose of comparison across territories, we focused on the revenues in 2008 and 2009, when the revenue figures for all the studios and all countries were available. The results are reported in the table below.

Revenue share attributable to pay TV by major studio—international comparison

% of total revenue

	*Disney**	*Fox*	*Paramount*	*Sony Pictures†*	*Universal‡*	*Warner*	*Country total§*
2009							
USA	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Canada	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
UK	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
France	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Japan	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Germany	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Italy	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Australia	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Spain	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Sweden	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total¶	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
2008							
USA	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Canada	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
UK	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
France	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Japan	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Germany	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Italy	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Australia	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Spain	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Sweden	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]
Total¶	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]	[✂]

Source: CC estimates based on information provided by the studios shown in the table.

*[✂]
†[✂]
‡[✂]
§Total for all studios in the country concerned.
¶Total for all countries.

Glossary

Act	Enterprise Act 2002.
ARPU	Average revenue per user. A measurement used by **pay-TV** or mobile companies to indicate the average monthly revenue earned from a subscriber.
Bandwidth	A term used to describe the capacity of an Internet connection defined as the maximum bit rate downstream.
BARB	Broadcasters' Audience Research Board Ltd. The pan-industry body which measures TV viewing. BARB was set up in 1981 to provide the industry standard TV audience measurement service for broadcasters and the advertising industry. BARB is owned by the BBC, ITV, Channel 4, Five, BSkyB and the Institute of Practitioners in Advertising and is a not-for-profit company limited by guarantee.
BBC iPlayer	The BBC's free 'catch-up' **VOD** service.
Blackout	A period between film release windows when a film is not available to watch in one or more windows (eg there is often a 'blackout' period shortly before the **FSPTW** window where a film ceases to be available in the **TVOD** window).
Blu-ray disc	**HD** optical disc. Similar to a **DVD** but with greater capacity.
Broadband	An Internet service or connection generally defined as being 'always on' and providing a bandwidth greater than narrowband.
BT	British Telecommunications plc.
BT Vision	A division of **BT**'s retail business, which offers a hybrid **digital TV** service, utilizing both **DTT** and **IPTV** to deliver TV and **VOD** services.
Bundling	The packaging together and marketing of different services (eg telephony, **broadband** and TV).
CA 1998	The Competition Act 1998.
CA 2003	The Communications Act 2003.
Cable (TV)	The distribution of TV and other services through a closed fibre-optic/hybrid fibre-coaxial network to individual premises (see also **Virgin Media**).
CAT	Competition Appeal Tribunal.
Catch-up content	**VOD** content made available for a limited period following its broadcast on a **linear TV channel**.
CC	Competition Commission.

Channel	A linear stream of programming/content, distributed on a scheduled basis.
Churn	The rate of loss of customers subscribing to a particular **pay-TV** package or retailer.
Conditional access	A technology enabling a broadcaster to restrict access to content that it has made available in a digital platform only to those customers who have been authorized to access it.
Content aggregator	A broadcaster or **VOD** service provider, which creates a linear channel or **VOD** service (respectively) through the aggregation of content (whether proprietary or licensed). This service may be retailed directly to consumers or wholesaled to a retailer.
CPS	Cents per subscriber.
Delivery technology	The technology for delivering audiovisual content to viewers' reception equipment (ie analogue terrestrial, **DSat**, **cable**, **DTT**, mobile TV and **broadband** TV). **Sky** uses **DSat**, **Virgin Media** uses **cable**, **TUTV** uses **DTT**, **TalkTalk** uses **IPTV** and **BT Vision** uses a hybrid of **DTT** and **IPTV**.
Digital switchover	The process of switching over the current analogue TV broadcasting signal to a digital signal.
Digital TV	Converts sounds and pictures from the broadcaster into computerized 'bits' of information to be sent through an aerial, satellite, telephone line or cable; the digital signal is then turned back into pictures and sound by a decoder.
DRM	Digital Rights Management. Allows publishers to control access to, and facilitate payment for, their content.
DSat	Digital satellite, referring to the distribution of digital content via satellite.
DTH	Direct to home. Another term for **DSat** distribution technology.
DTO	Download to own. Also known as **EST**. Content available to consumers to download and retain permanently.
DTR	Download to rent. Content available to consumers to download and retain for a limited period of time.
DTT	Digital terrestrial television. A digital distribution technology using terrestrial transmitters.
DVD	Digital versatile (or video) disc. A high-capacity disc for carrying audiovisual content.
DVR	Digital video recorder. See also **PVR**.

EPG	Electronic programme guide. A programme schedule, typically broadcast alongside **digital TV** or radio services, to provide information on the content and scheduling of current and future programmes.
EST	Electronic sell-through. See **DTO**.
First Pay TV Consultation	The first Ofcom **pay-TV** consultation published on 18 December 2007.
Freesat	An **FTA DSat** service, launched in May 2008, backed by the BBC and ITV.
Freeview	The brand name for **FTA DTT** services, launched in October 2002, promoted and marketed by DTV Services Limited consortium.
FSPTW	First subscription **pay-TV** window. The first period in which a movie is made available on **pay TV** on a subscription basis.
FTA	Free-to-air linear broadcast TV. Unencrypted **channel**s and transmissions which may be received via any suitable receiver, free of subscription charge, funded primarily by advertising and sponsorship and, in the case of the BBC, by the licence fee.
HD	High definition.
HDTV	High-definition television. A broadcasting system providing higher picture quality than traditional TV systems (ie **SD**).
Holdback	A restriction precluding certain uses of content for a period of time.
Hypothetical monopolist test	An economic test used to assess whether demand-side and supply-side substitutes provide a sufficiently strong competitive constraint to be included in a relevant market.
Internet protocol	The packet data protocol used for routing and carriage of messages across the Internet and similar networks.
IP	Intellectual property.
iPlayer	See **BBC iPlayer**.
IPTV	**Internet protocol** television. TV services delivered to consumers on a closed basis, using the Internet, managed by the service provider.
IRR	Internal rate of return. The discount rate that would give a project a present value of zero.
ISP	Internet service provider. A company that provides access to the Internet.
Library film	After a film has exited the **FTA** window, a film is categorized as a library film.
Linear TV	Scheduled broadcast TV programmes.

LOVEFiLM	A UK-based provider of movie and entertainment services, offering both streamed content distributed over the open Internet (ie an **OTT service**) and **DVD** rental by post.
LOVEFiLM Instant	**LOVEFiLM**'s brand for its **streamed content**, available through a streaming-only **SVOD** subscription service (launched in December 2011), or as part of various packages including **DVD** rental by post.
Major studios	Refers to the six largest Hollywood studios, which are NBC Universal (Universal), Paramount Pictures (Paramount), Twentieth Century Fox Film Corporation (Fox), Walt Disney Pictures (Disney), Sony Pictures Entertainment (Sony Pictures) and Warner Bros International Distribution Inc (Warner), including their parent and affiliated companies.
MOW	'Movie of the week', a made-for-TV movie.
Netflix	A US-based provider of a streaming-only **SVOD OTT pay-TV service** offering movie and entertainment content. **Netflix** launched its service in the UK in January 2012.
Non-major studios	Movie studios (or distributors) other than the six **major studios** (and their parent and affiliated companies).
Now TV	Sky's **OTT pay-TV service**, launched in July 2012.
NVOD	Near video on demand, where the same content is broadcast on a number of different linear **channel**s at staggered start times.
Ofcom	Office of Communications.
OFT	Office of Fair Trading.
Output agreement	An agreement in which a producer sells a proportion of (sometimes all) its output to a particular buyer.
OTT service	Over-the-top service. These services use the open Internet to distribute content to consumers.
OTT pay-TV service	A service which uses the open Internet to distribute paid-for content to consumers (in principle either on linear **channel**s or a **VOD** basis). In this report we use **pay-TV service** to refer to subscription services, save where otherwise indicated.
Pay-TV platform	A specific combination of distribution and reception technology and conditional access which enables customers of traditional pay-TV retailers to view pay-TV content.
Pay-TV service	Any service offering paid-for content which can be watched on a TV, though it may also be watched on other devices. In this report we use **pay-TV service** to refer to subscription services, save where otherwise indicated.
PPV	Pay-per-view. A service offering single viewings of a specific film, programme or event, broadcast to viewers, for a one-off fee.

Progressive download	A form of **pull VOD** where a video is downloaded for immediate playback, and continues downloading while the start of the video is being viewed.
PSBs	Public service broadcasters. These include the BBC, ITV1, Channel 4, Five, S4C and Teletext. The BBC must, under its charter, provide high-quality, diverse programming for the public benefit on all its **channel**s; the licences granted to the commercial PSB **channel**s impose similar conditions.
Pull VOD	A service which allows the user to select content from the service provider's catalogue for immediate download or streaming.
Push VOD	A service whereby content is delivered to and stored on a viewer's **STB** hard drive by the service provider, which may be selected and viewed subsequently by the customer.
PVR	Personal video recorder, also known as a **DVR**. A device which records video and stores it on to a hard disc in digital format.
Reference Consultation	Ofcom's consultation on making a reference to the **CC**, published on 31 March 2010.
Reference Decision	Ofcom's decision to make a reference to the **CC**, published on 4 August 2010.
ROCE	Return on capital employed.
ROS	Return on sales (or operating margin).
SAC	Subscriber acquisition costs.
Satellite TV	The transmission of TV **channel**s from a satellite direct to premises served by a satellite dish.
SBO	Sky Box Office, Sky's **PPV** service.
SD	Standard definition.
Second Pay TV Consultation	Ofcom's second consultation document on **pay TV**, published on 30 September 2008.
Sky	British Sky Broadcasting Group plc, the main **satellite TV** provider in the UK.
Sky+	The brand name for **Sky**'s **PVR**.
Sky Anytime	The brand name for **Sky**'s **push VOD** service.
Sky Anytime+	The brand name for **Sky**'s **pull VOD** service.
Sky by Wire	The brand name for **Sky**'s **broadband** TV service.
Sky Go	The brand name for **Sky**'s Internet-distributed service (previously known as **Sky Player**).

Sky Movies	The brand name for **Sky**'s premium movie products, including both linear movies **channel**s, available in **SD** and **HD**, and on-demand movie content.
Sky Player	See **Sky Go**.
Sky Store	The brand name for **Sky**'s **TVOD** service, available within **Sky Anytime+**.
SSNIP	Small but significant non-transitory increase in price. A conceptual approach used to help define the relevant market or markets, used in the **hypothetical monopolist test**.
SSPTW	Second subscription **pay-TV** window. The period subsequent to the **FSPTW,** in which a movie is made available on **pay TV** on a subscription basis.
STB	Set-top box. A tuner/decoder connected to a TV for display. There are different **STB**s for each distribution technology, eg **DTT**, **DSat**, **cable** or **IPTV**.
Streamed content	Audio or video files sent in compressed form over the Internet and watched by the viewer as they arrive.
SVOD	Subscription video on demand. A **VOD** service which allows subscribers to watch programmes or films whenever they choose, for a regularly charged fee.
TalkTalk	The trading name of Tiscali UK Limited. TalkTalk TV distributes linear TV **channel**s and on-demand content via **IPTV**.
Third Pay TV Consultation	Ofcom's third consultation document on **pay TV**, published on 26 June 2009.
Time shift	Viewing of a programme or movie at a time subsequent to its initial broadcast, either by the viewer recording it or by the broadcaster repeating the broadcast at a later time, eg 1 hour after the initial broadcast.
TIRR	Truncated internal rate of return.
TiVo	An Internet-connected **PVR** developed and marketed by TiVo Inc, now offered exclusively in the UK by **Virgin Media** to its subscribers.
TPS	Technical platform services. A group of services comprising **conditional access**, regionalization, **EPG**s and access control.
TSPTW	Third subscription **pay-TV** window. The period subsequent to the **SSPTW,** in which a movie is made available on **pay TV** on a subscription basis.

Traditional pay-TV service A service which uses a **pay-TV platform** (often proprietary to the service provider) to distribute paid-for content to consumers (either on linear **channel**s or a **VOD** basis). In this report we use **pay-TV service** to refer to subscription services, save where otherwise indicated. These services are offered in packages of basic and premium pay-TV products, and are often sold bundled with communications products. The traditional **pay-TV platform**s are those of **Sky**, **Virgin Media**, **BT Vision**, **TalkTalk** and **TUTV**. Some parties retail traditional pay-TV services on other parties' platforms (eg **Sky** retails some of its content on **TalkTalk**'s platform and a number of broadcasters retail their services on **Sky**'s platform).

TUTV Top Up TV. A **pay-TV** broadcaster, which offers **push VOD** services distributed by **DTT**.

TV content Content which is made principally for distribution on TV, though it might subsequently be available in different ways (eg on **DVD**).

TVOD Transactional video on demand. A service offering viewings of a specific programme or film on an on-demand basis in return for a one-off fee, such that the viewer is entitled either to download and retain a copy (see **DTR**) or to stream a remotely-stored copy of the programme for a defined period of time (typically 24 or 48 hours).

Virgin Media A company created by the merger in March 2006 of ntl and Telewest, and the subsequent purchase of Virgin Mobile in February 2007. It controls access to nearly all the UK's **cable** network and offers customers TV (both linear **channel**s and on-demand services), **broadband**, fixed-line telephony and mobile telephony.

VOD Video on demand. A service which enables viewers to watch programmes or films from a range of content whenever they choose, not restricted by a linear schedule.

WACC Weighted average cost of capital. The rate that a company is expected to pay on average to all its security holders to finance its assets.

Window Movies are sold in different formats in distinct or overlapping release 'windows'. Typically, a movie is first released in cinemas, then on **DVD**, then for **TVOD** and **PPV**, then on subscription pay TV (both linear **channel**s and **SVOD**) and finally on **FTA** TV. After a film has progressed through these windows, it is categorized as a **library film**.

WMO Wholesale must-offer.

YouView A joint venture between Arqiva, the BBC, **BT**, Channel 4, ITV and **TalkTalk** to develop a set of standards for an **STB** to enable a hybrid service using **DTT** and **IPTV**.