

CHANGES TO BBC IPLAYER

Competition assessment

April 2019





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EXECUTIVE SUMMARY

The BBC plans to make changes to its BBC iPlayer service. The changes will enable it to keep pace with rapidly evolving consumer tastes driven by technological advances in the sector.

These proposed changes will add content to BBC iPlayer and importantly allow licence fee payers to get access to an increased volume of content beyond the 30 day catch up window. The changes are designed to meet the growing expectations of consumers who use Video on Demand (VoD) platforms to access content and will mean that the BBC iPlayer service will match the range of content offered by its competitors.

Ofcom has directed the BBC to undertake a Public Interest Test on the proposed changes to determine whether the changes lead to an adverse impact on fair and effective competition, and if so, whether any incremental public value created justifies any identified adverse impacts.

This report considers the scope for the changes to lead to adverse impacts on competition. We use the following framework to assess the impact of changes to BBC iPlayer on competition in the audio-visual sector.

- We describe some of the competitive dynamics which provide the context for the proposed changes to BBC iPlayer.
- We describe the suppliers that are likely to be affected by the BBC iPlayer changes. It is likely that additional viewing of programmes on BBC iPlayer will come from a range of different sources including: cannibalising existing BBC viewing through both its linear and BBC iPlayer services; other Broadcaster VoD ("BVoD") services including ITV Hub, All4, My5 as well as VoD offered within PayTV bundles¹; other subscription VoD ("sVoD") services such as Netflix, Amazon and NowTV; other linear TV; other types of audio-visual content (for example YouTube or gaming) whether watched on TV or on portable devices.
- We estimate the effect of horizontal static impacts (i.e. the reduction in viewing) on the revenues and profit margins of providers of rival services.
- For those suppliers where an appreciable static impact is plausible, we consider the dynamic impacts on substitutes for BBC iPlayer including: the impact on incentives to invest and innovate; and the potential for competitor responses.
- We consider whether there are vertical impacts. Specifically, we consider whether the changes to BBC iPlayer affect the ability or incentive of the BBC to engage in a vertical foreclosure strategy by limiting rivals' access to inputs such as rights to "secondary" content. We also consider the impact of the changes on the incentives of producers to create content.

We distinguish the VoD services which are included within a Sky or Virgin standard PayTV service, from sVoD which is a standalone VoD service available on an Over The Top (OTT) application using broadband networks.

Technological advances are driving innovation in this dynamic sector

The audio-visual sector has seen dynamic change in recent years. Advances in device technology and broadband networks have changed how we consume audio-visual content. We are now able to access a wide range of content on our TV, and on a growing number of portable devices. While linear viewing has proved remarkably resilient (still accounting for 84.7%² of TV viewing) there is a clear pattern of substitution from linear to VoD services. Broadcasters consider VoD services as complementary to their linear services. They help audiences to find content and can cross promote first run and older content. They are particularly important for attracting younger demographics.

Lack of access to scarce spectrum or control over a TV distribution platform are no longer barriers to entry in the broadcasting sector. US-based broadcasters with large content budgets, who invest in data-driven, user-friendly VoD platforms, have been able to rapidly enter the sector and capture viewer share from existing linear broadcasters. New entrants with global media brands are expected to launch services in the coming years. The resulting competition clearly benefits consumers who have switched to these new services in significant numbers.

At the same time, boundaries between different forms of audio-visual entertainment have been eroded. We watch all forms of content on our smart TVs, just as we watch TV on our phones, tablets and other mobile devices. This means that the competition for our screen time involves not just other TV broadcasters but other types of audio-visual content whether short form video from video sharing sites (YouTube), social networking or gaming.

Furthermore, all commercially funded broadcasters must develop compelling digital offerings in order to face the challenges from uncertain TV advertising revenues. Not only is the volume of linear advertising declining as viewers migrate to VoD, YouTube and other forms of audio-visual entertainment, but advertising publishers have to compete in the digital space with the digital advertising giants such as Google and Facebook.

In this context, the BBC needs to ensure that its BBC iPlayer service is on a par with competitors in order to remain relevant to its users. The proposed changes to BBC iPlayer are an intrinsic part of its strategy.

There are a wide set of horizontal substitutes potentially affected by the BBC's proposed changes to BBC iPlayer

The audio-visual market is highly differentiated. Technological advances have enabled a degree of "convergence" across different forms of audio-visual content. On our TV set we watch a wide range of different types of content, all accessible at the push of a button via our remote control. At the same time, we increasingly

https://www.barb.co.uk/viewing-data/catch-up-and-live-tv-compared/: (as of 28 Jan, 2019). Accessed on 14/2/2019

watch TV content on our portable devices, whether at home, on the move, or out and about.

Conceptually, the analysis needs to identify the competitor set that BBC iPlayer competes with: where does incremental viewing to BBC iPlayer switch from as a result of the changes? In practice, given the differentiated market there are a wide set of potential substitutes with varying degrees of substitution for viewing of BBC iPlayer.

Measuring the degree of substitution to BBC iPlayer

An important part of the competition analysis is the assessment of the degree of substitution from competitors to BBC iPlayer. In a highly differentiated sector with heterogeneous consumers, measuring the relative degree of substitution is complex. There is no bright-line sector boundary which can define the set of products that are a substitute for BBC iPlayer, and those that are not. Instead there are a wide range of potential differentiated products which will be substitutes for BBC iPlayer to different degrees.

In practice, the degree of substitution relates to two factors.

First, it reflects the **strength of substitution**. This is the propensity of a consumer of a competitor service to substitute a minute of viewing of the competitor for BBC iPlayer. There are many factors that might influence the strength of substitution for different types of consumer.

- The characteristics of services: for example, competitor services which have a similar genre mix or volume of content to that found on BBC iPlayer are more likely to be stronger substitutes than those that do not.
- The behaviours and activities of consumers: for example, the choices of consumers in relation to substitutes for BBC iPlayer will depend on the device that the user watches BBC iPlayer on or how they navigate to BBC iPlayer³.
- The preferences and attitudes of users which can be discerned, for example, from surveys.

The second factor that will affect the degree of substitution is **the volume of consumption** of potential substitutes for BBC iPlayer. All else equal, if two potential services are equally considered to be a substitute, but are consumed at different volumes, then it would be expected that there would be a larger degree of substitution from the service that is consumed more.

The static horizontal impact of the changes to BBC iPlayer

The analysis presented in the Communications Chambers report found that the changes to BBC iPlayer would result in an incremental viewing of BBC iPlayer of

Many users navigate to BBC iPlayer via their TV EPG in which case their choice set is (i) bounded by range of services on the EPG, and (ii) affected by the prominence of the services on their EPG. For example it is likely that linear TV has a prominent position on a TV set's EPG, and that the PSBs have a prominent position on the linear EPG. However, the behaviours are likely to vary for different groups of users.

1.9 minutes per person per day⁴, with substitutes being affected as set out in Figure 1. Our analysis considers the differential impact of the changes to BBC iPlayer on different services within these categories.

Figure 1 Impact of BBC iPlayer changes on viewing (2024)

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	Counterfactual viewing (mins/indiv/day)	Impact of BBC iPlayer changes (mins/indiv/day)	% change
BBC iPlayer	6.3	1.9	29.5%
Commercially funded BVoD	6.7	-0.2	-3.4%
sVoD	40.1	-0.4	-1.0%
Linear (inc. PVR)	175.0	-0.7	-0.4%
Other (on a TV set or other device)	215.8	-0.5	-0.2%

Source: Communication Chambers

We estimate, where necessary, the impact of viewing reductions on revenues and profit margins.

Commercially funded BVoD

In relation to commercially funded BVoD providers, revenues relate to VoD advertising revenues. We note that the relationship between changes in viewing and advertising revenues may not be on a one for one basis. This is because a reduction in the supply of digital advertising can lead to an elasticity response: that is, a reduction in the supply of digital advertising may lead to an increase in the price of digital advertising which could offset the lost revenue from the lower volumes.

While in many cases digital advertising is sold alongside linear TV advertising the two are not necessarily perfect substitutes. Indeed, it is the stated strategy of broadcasters to develop their VoD services precisely to offer enhanced value for their advertising customers (whether through better targeting, or more engaging adverts) and differentiate their VoD advertising proposition from linear advertising. This can mean that customers are to a degree inelastic in their demand for VoD advertising, and that a reduction in supply of digital advertising does not lead to substitution to linear advertising.

Estimating the precise price elasticity response to changes in the volume of supply in VoD advertising is challenging. We have therefore used assumptions used previously by Ofcom⁵. Specifically, we assume in the central case that a 1% reduction in viewing leads to a 0.67% reduction in VoD advertising revenues.⁶

This equates to 7.5 minutes per day per BBC iPlayer user.

Ofcom (2018) BBC Scotland Competition Assessment, Final Determination Annex 3: Assessment of Market Impacts https://www.ofcom.org.uk/__data/assets/pdf_file/0024/115269/BBC-scotland-statement-annex-3-market-impacts.pdf

Ofcom in its previous assessments of the impact of BBC services on TV advertising has assumed that an increase in consumption of BBC leads to a reduction in consumption of commercial broadcasters' content, and thereby reduces the supply of TV advertising impacts. This in turn leads to an elasticity price response (i.e. the price per impact increases). As a result the impact of a reduction in the volume of advertising is offset by an increase in price. It notes that precisely estimating the scale of the elasticity response is empirically difficult and a number of studies have tried to estimate the impact, though the different studies produce a wide range of potential estimates. Therefore Ofcom chooses a low, medium and high estimate of

Figure 2 provides the estimated reductions in revenues as a result of the changes to the BBC iPlayer for commercially funded BVoD providers, based on these assumptions.

Figure 2 Annual impact of BBC iPlayer changes on BVoD revenues (£m)

	2019	2020	2021	2022	2023	2024
ITV Hub	-2.0	-4.7	-6.0	-7.3	-7.6	-8.7
All 4	-1.1	-2.4	-3.1	-3.8	-3.9	-4.5
My 5	-0.6	-1.3	-1.6	-2.0	-2.1	-2.4
Other	-0.7	-1.5	-1.9	-2.3	-2.4	-2.8

Source: Various annual reports; Ofcom; Frontier Economics calculations based on Communication Chambers modelling

Different BVoD suppliers may be differentially impacted depending on their degree of substitution with BBC iPlayer. Figure 3 shows the percentage reduction in revenues relative to counterfactual revenues. The impact of the changes to BBC iPlayer is proportionately larger on My5 relative to commercially funded BVoD services such as ITV Hub and All4. Revenues for My5 are expected to decline by 3.6% in 2024 whereas ITV Hub's are expected to fall by 2.1% and All4's by 2.5%.

Figure 3 Annual impact of BBC iPlayer changes on BVoD revenues (%)

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	2019	2020	2021	2022	2023	2024
ITV Hub	-0.8%	-1.6%	-1.8%	-1.9%	-2.1%	-2.1%
All4	-1.0%	-2.0%	-2.2%	-2.3%	-2.5%	-2.5%
My5	-1.5%	-2.8%	-3.0%	-3.3%	-3.5%	-3.6%
Other	-0.8%	-1.5%	-1.7%	-1.8%	-1.9%	-2.0%

Source: Various annual reports; Ofcom; Frontier Economics calculations based on Communication Chambers modelling

We use the change in revenues to calculate the impact on profit margins as shown in Figure 4.

Figure 4 Annual change in profit margins as a result of the changes to BBC iPlayer (percentage points)

	2019	2020	2021	2022	2023	2024
ITV Hub	-0.6pp	-1.2pp	-1.3pp	-1.4pp	-1.5pp	-1.6pp
All4	-1.1pp	-2.1pp	-2.3pp	-2.4pp	-2.6pp	-2.7pp
My5	-1.3pp	-2.5pp	-2.8pp	-3.0pp	-3.2pp	-3.3pp

Source: Various annual reports; Ofcom; Frontier Economics calculations based on Communication Chambers modelling

While My5 experiences the largest percentage point reduction in profit margins, its expected profit margin in 2024 (8.6%) is still expected to be larger than its profit margin in 2015 $(6.6\%)^7$.

the elasticity: a 1% reduction in industry supply of advertising reduces revenues by 0.67%, 0.5% and 0.33% respectively. In this analysis, our central case on the impact of a reduction in the volume of VoD advertising leads to 0.67% reduction in revenues (i.e. consistent with Ofcom's "low" assumption. The reason we use Ofcom's low elasticity assumption is that a reduction in the volume of VoD viewing will not reduce volume of TV advertising to the same degree since some (but not all) VoD advertisers will switch to linear advertising. Therefore we would expect the elasticity effect on *VoD advertising* to be lower than the elasticity of a reduction in *all TV* advertising.

Channel 5 Broadcasting Ltd Annual Report 2015

sVoD

In relation to sVoD providers, we note that a reduction in viewing of sVoD services would not necessarily lead to a reduction in subscriptions of sVoD services. There are many reasons why consumers subscribe to sVoD services⁸, and it is unlikely that a minor reduction in viewing would lead to a reduction in the propensity to subscribe. These reasons include:

- A significant number of subscribers to Netflix and Amazon Prime Video choose to do so because of the original content provided by these services.
- Customers also choose sVoD services because they offer content not available elsewhere. For example, NowTV's most expensive package is its Sports pass which costs £33.99 per month. Given that the incremental content is unlikely to focus on sport, it is unlikely that consumers would cancel their subscription to this service.
- Amazon Prime in particular offers a wide range of other benefits alongside its sVoD service (at least for its most popular subscription package) which make it unlikely that many customers will cancel their subscription.
- Consumers who subscribe to sVoD services typically watch a large volume of content and would have to replace their entire viewing of a sVoD service with BBC iPlayer or other sources of content.

The BBC commissioned MTM to survey consumers about their likely response to the BBC iPlayer changes. When prompted 6.8% of sVoD users noted that they would definitely cancel a subscription and 14.1% said they would consider cancelling a subscription. However, when asked which specific services they would cancel, only 1.5% sVoD users stated that they would definitely cancel and 6.7% stated that they would consider cancelling.

We note that the prompted responses are likely to overestimate the percentage of individuals who would actually cancel their subscription as a result of the changes for the following reasons:

- While consumers stated that they would definitely cancel their subscription, it is possible that a share of these consumers would not actually follow through with this and cancel their subscription. When consumers where asked what specific service they would definitely cancel, over half of the respondents didn't know and a proportion of those which did respond did not specify a specific subscription service.
- Many individual sVoD subscriptions are used by multiple people and multiple people are likely to watch a programme at once. Individual subscriptions will reflect household decisions (of all members of the household). Furthermore, services such as Netflix offer subscription packages where up to four users can use the subscription at once. As such, the decision to cancel the subscription may not belong to the individual responding to the question, but will instead be a household decision.
- Customers are increasingly multi-homing. MTM asked respondents if they
 would cancel a subscription service, not all of their subscription services. It is

⁸ The most popular reasons cited for choosing an sVoD subscriptions are access to exclusive content, access to shows that can't be seen elsewhere and free delivery in the case of Amazon.

likely that as a result of the changes subscribers would cancel their "marginal" service, for example the service they watch least, but maintain their valued services which they watch a lot.

Therefore we adjust the stated response of subscribers to estimate the proportion of *subscriptions* that would be cancelled as a result of the BBC iPlayer changes. Based on the adjustments, we anticipate that this would lead to a 1.9% reduction in subscriptions. Figure 5 shows the expected reduction in UK revenues for different sVoD suppliers as a result of the changes to BBC iPlayer.

Figure 5 Annual impact of BBC iPlayer changes on sVoD UK revenues (£m)

	2019	2020	2021	2022	2023	2024
Netflix	-7.4	-15.1	-18.8	-20.1	-21.5	-22.8
Amazon Prime	-5.3	-10.8	-13.5	-14.4	-15.4	-16.3
NowTV	-3.0	-6.1	-7.6	-8.1	-8.7	-9.2
ITV Hub+	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3

Source: BARB; annual reports (ITV); Frontier Economics calculations based on Communication Chambers modelling

Different sVoD suppliers may be differentially impacted depending on the degree of substitution with BBC iPlayer. Figure 6 shows the percentage reduction in the UK revenues of sVoD services relative to the counterfactual.

Figure 6 Annual impact of BBC iPlayer changes on sVoD UK revenues (%)

	2019	2020	2021	2022	2023	2024
Netflix	-0.8%	-1.4%	-1.6%	-1.6%	-1.6%	-1.6%
Amazon Prime	-1.1%	-2.1%	-2.3%	-2.3%	-2.3%	-2.3%
NowTV	-1.3%	-2.4%	-2.6%	-2.6%	-2.6%	-2.6%
ITV Hub+	-0.9%	-1.6%	-1.7%	-1.7%	-1.7%	-1.7%

Source: BARB; Annual Reports (ITV); Frontier Economics calculations based on Communication Chambers modelling

It is not possible to estimate the impact of the changes on profit margins using publicly available data, as the firms do not split out the costs and margins associated with their UK activities. We have therefore not estimated the impact on sVoD profit margins⁹.

Linear TV

In relation to linear TV providers, revenues primarily relate to advertising revenues. We assume that there is one to one relationship between viewing and linear advertising revenues.

Figure 7 shows the estimated reduction in linear TV revenues for ITV, Channel 4, Channel 5, Sky and other channels such as UKTV and Discovery.

We note that margins for Netflix and Amazon may be low or negative and hence it may be less relevant to consider the impact on margins. For example Amazon Prime TV is a loss leader to reduce customer churn in its retail business. Netflix is in a period of targeting customer growth over profit.

Figure 7 Annual Impact of BBC iPlayer changes on linear TV revenues (£m)

	2019	2020	2021	2022	2023	2024
ITV	-2.5	-4.5	-4.7	-4.8	-5.1	-5.2
Channel 4	-1.2	-2.3	-2.4	-2.4	-2.6	-2.6
Channel 5	-0.6	-1.1	-1.2	-1.2	-1.2	-1.3
Sky	-1.0	-1.8	-1.8	-1.9	-2.0	-2.0
Other	-1.3	-2.5	-2.6	-2.6	-2.8	-2.8

Source: Various annual reports; Ofcom; Frontier Economics calculations based on Communication Chambers modelling

Figure 8 shows the estimated reduction in linear TV revenues for the different groups of channels. By 2024 revenues are projected to be approximately 0.4% to 0.5% lower than in the counterfactual.

Figure 8 Annual impact of BBC iPlayer changes on linear TV revenues (%)

	2019	2020	2021	2022	2023	2024
ITV	-0.2%	-0.3%	-0.3%	-0.3%	-0.4%	-0.4%
Channel 4	-0.2%	-0.3%	-0.3%	-0.4%	-0.4%	-0.4%
Channel 5	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.5%
Sky	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.5%
Other	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.5%

Source: Various annual reports; Ofcom; Frontier Economics calculations based on Communication Chambers modelling

Combinatorial impacts across all segments

Broadcasters that offer services across different segments (BVoD, sVoD, linear and PayTV) will consider whether to invest and innovate by looking at their combined revenues. We therefore consider the impact of the BBC iPlayer changes on the combined revenues of ITV, Channel 4, Channel 5 and Sky.

Figure 9 shows the combined reduction in revenues for ITV, Channel 4, Channel 5 and Sky as a result of the changes to BBC iPlayer.

Figure 9 Annual impact of BBC iPlayer changes on combined revenues (£m)

	2019	2020	2021	2022	2023	2024
ITV	-4.5	-9.2	-10.7	-12.1	-12.7	-13.9
Channel 4	-2.3	-4.7	-5.4	-6.2	-6.5	-7.1
Channel 5	-1.2	-2.4	-2.8	-3.2	-3.3	-3.7
Sky	-3.9	-7.9	-9.4	-10.0	-10.7	-11.2

Source: Various annual reports; BARB; Ofcom; Frontier Economics calculations based on Communication Chambers modelling

Notes: We assume that Sky's PayTV revenues are not impacted by the changes to BBC iPlayer.

Figure 10 shows the percentage reduction in revenues as a result of the changes to BBC iPlayer. The percentage reduction in combined revenues is much smaller

than the percentage reduction in BVoD revenues, or in the case of Sky, sVoD revenues.

Figure 10 Annual percentage change in revenues as a result of the changes to BBC iPlayer (%)

	2019	2020	2021	2022	2023	2024
ITV	-0.3%	-0.5%	-0.6%	-0.7%	-0.7%	-0.8%
Channel 4	-0.3%	-0.6%	-0.7%	-0.7%	-0.8%	-0.9%
Channel 5	-0.3%	-0.7%	-0.8%	-0.9%	-1.0%	-1.0%
Sky	-0.1%	-0.2%	-0.2%	-0.3%	-0.3%	-0.3%

Source: Various annual reports; BARB; Ofcom; Frontier Economics calculations based on Communication Chambers modelling

Notes: Sky's PayTV revenues have been calculated using Ofcom data on the total value of subscription revenues for the broadcast TV industry, excluding estimated NowTV revenues. A portion of this revenue has been allocated to Sky based on its share of total PayTV household subscribers (including Sky, cable and TalkTalk TV, BTTV (and YouView)). This likely underestimates Sky's PayTV revenues as its revenue per subscriber is likely to be higher than, for example, YouView. We forecast future PayTV revenues change proportionately with linear viewing for Sky. We note Sky's 2018 direct to consumer revenues (which includes PayTV subscriptions, NowTV subscriptions, and other subscriptions such as for mobile services) in the UK and Ireland were £7.1bn, based on its 2018 annual report. We were unable to identify Sky's BVoD revenues though these revenues are included in Sky's total advertising revenues (which we have classed under linear).

Figure 11 shows the impact on the combined profits margins of ITV, Channel 4 and Channel 5 for their broadcasting operations (we do not have sufficient data on Sky's profit margins). The reduction in margins, when considered all types of revenues, is smaller than for BVoD alone, as we would expect.

Figure 11 Annual impact of BBC iPlayer changes on combined profit margins (percentage points)

	2019	2020	2021	2022	2023	2024
ITV	-0.2pp	-0.4pp	-0.4pp	-0.5pp	-0.5pp	-0.6pp
Channel 4	-0.3pp	-0.6pp	-0.7pp	-0.8pp	-0.8pp	-0.9pp
Channel 5	-0.3pp	-0.6pp	-0.7pp	-0.8pp	-0.9pp	-0.9pp

Source: Various annual reports; Frontier Economics calculations based on Communication Chambers modelling

The horizontal dynamic impact of the change to BBC iPlayer

The dynamic impact considers whether a change in revenues or profit margins would change the suppliers' incentives to invest and innovate in providing services; and, if so, whether suppliers could competitively respond. Where the modelling suggests that there is scope for an appreciable static impact we consider whether this in turn will lead to a dynamic impact. We consider the dynamic impact on sVoD and BVoD providers, given that we project a non-negligible static impact on their revenues. In the case of linear TV, we do not consider dynamic impacts since the static revenue impact of the BBC iPlayer changes is less than 1%¹⁰. The impact on other services (both on TV and on other devices) is also less than 1% in aggregate.

Where static changes are a small percentage of total revenues we assume that any impact on incentives to invest would be small. This is a conservative approach consistent with similar assumptions made by Ofcom's previous assessments of the impact of changes to BBC services on the commercial viability of

Incentives to invest in digital services such as sVoD and BVoD

We do not consider that a small change in margins will significantly impact suppliers' incentives to invest or innovate in their content or digital platform.

- Even taking the conservative assumptions of the impact on revenues, the impact on BVoD and sVoD suppliers' revenues is small (2.3% and -1.9% respectively). Furthermore, in the case of BVoD providers, given that content investments are monetised across both linear and VoD platforms the percentage change in total revenues is much smaller. For example, ITV's BVoD revenues will decline by 2.1% but its total revenues across linear and VoD are expected to decline by just 0.8%.
- The decline in revenues in should be seen in the context of growing digital revenues. For example, BVoD services' digital advertising revenues are expected to grow by 63% between 2018 and 2024¹¹.
- Netflix and Amazon's incentives to invest in content and technology are made on a global basis and the small change in UK revenues would only have a minor impact on global investment decisions. Similarly NowTV (now part of Comcast) is expected to monetise investments across Comcast's global customer base.
- As set out above there are a number of profound changes to the sector which are driven by changing consumer behaviours and advancing technologies. It is these changes which are driving all broadcasters (including the BBC) to invest in their digital offering. In particular,
 - audiences are migrating from linear to VoD, meaning that without a compelling digital service, broadcasters' content will be less relevant to viewers: the BBC's changes to BBC iPlayer are one example of a dynamic response to changing consumer tastes;
 - the rapid growth of sVoD providers has changed what consumers expect from their TV services;
 - broadband technologies have lowered barriers to entry and we expect a more competitive, less concentrated market in future as broadcasters that can leverage content (such as Disney or TimeWarner) enter the market;
 - □ broadcasters now compete with many more services for our screen time whether social media, short form video or gaming; and,
 - broadcasters have to ensure that their advertising can offer comparable value to other online digital advertising (in terms of targeting or engagement).

firms and their incentives to invest. For example in the Public Interest Test for the BBC Scotland channel Ofcom noted that a reduction in revenues in the base case of 1.67% to 1.77% was sufficiently small to conclude that there would be a limited impact on dynamic incentives. Ofcom concluded that the 2% decline in revenues "is not immaterial in absolute terms, it is relatively small as a percentage of STV's total advertising revenues ... thus do not consider that the BBC's proposal is likely to put STV's viability at risk or affect STV's incentives to invest and innovate ... We are more persuaded, however, that the percentage impact on STV revenues is small, suggesting that the impact on STV Group's incentives to invest in STV is likely to be quite small." See: Ofcom (2018) BBC Scotland Competition Assessment Consultation Annex 3: Assessment of Market impacts https://www.ofcom.org.uk/ data/assets/pdf file/0021/113187/annex-3-assessment-market-impacts.pdf.

Based on forecasts volume growth in the Communications Chambers model and assuming a proportionate increase in revenues.

VoD providers will have to innovate and invest in order to meet these challenges. Those that do not risk rapidly losing their positions to the myriad other competitors competing for viewer screen time. Therefore, even if the changes to the BBC's VoD offering have an impact on viewing, and hence potentially on revenues and profits, they are likely to play a minor contribution in the investment decisions of VoD providers.

Therefore we conclude that there is no scope for the horizontal effects of the BBC iPlayer changes to lead to an adverse impact on fair and effective competition.

Competitors' responses to the BBC iPlayer changes

We note that the BBC iPlayer changes mean that BBC iPlayer is able to catch up with market norms in order to retain its viewers. Therefore for some providers, mirroring BBC iPlayer's strategy is unlikely to be a viable strategy since broadcasters have generally adopted the model of offering large libraries of older titles alongside newer titles.

Nonetheless, even if the BBC iPlayer changes did affect the incentives to invest or innovate, there are potential strategies that competitors could use to respond to BBC iPlayer and differentiate their service from BBC iPlayer (and thereby mitigate any impacts). These include:

- changing how content is exploited across different distribution outlets; and
- aggregating content from different broadcasters on VoD platforms.

Vertical impacts

The BBC is vertically integrated with activities at a number of levels of the broadcasting value chain. While the creation of BBC Studios as a separate corporate entity means that there is a degree of separation (unlike ITV for example which is fully integrated), there is still scope for the upstream and downstream operators to coordinate their behaviour. Therefore, we consider whether the changes to BBC iPlayer affect the ability and/or incentive of the BBC to engage in vertical strategies using its control over supply of services at one level of the value chain to increase its market position at another part of the value chain in a way that adversely affects competition. In particular, we consider whether the changes to BBC iPlayer affect the BBC's ability and/or incentive to engage in input foreclosure or otherwise affect upstream producers.

Do the changes give BBC an incentive or ability to foreclose downstream rivals?

The BBC, as an owner and/or distributor of content rights, could hypothetically restrict supply of inputs to downstream rivals that it would have otherwise supplied absent the changes to BBC iPlayer. If this happened, downstream rivals to the BBC could in some circumstances be impeded from competing to the detriment of competition.

We recognise that the BBC faces mixed incentives as to whether to exploit its secondary rights exclusively on BBC iPlayer or to license them to competitors and earn incremental income. On the one hand, restricting the supply of its services

would simply reduce the revenues of BBC Studios (and hence the BBC). BBC Studios has been set up on an arm's length basis specifically to maximise revenues from the BBC's assets on behalf of the licence fee payers. Nonetheless, there could be incremental value to the BBC of exclusively exploiting Intellectual Property (IP) that it owns (i.e. restricting the supply of that IP to rivals) since it would increase the value of the BBC iPlayer "brand" in the eyes of viewers.

We conclude that the BBC does not have the ability to foreclose downstream rivals by restricting supply of secondary rights to content (i.e. by no longer selling BBC IP to competitors). The wholesale market, which includes the supply of secondary *TV rights*, is likely to be wide, including both UK and US secondary rights content. Therefore, even if the BBC were to restrict supply of secondary rights (and were to stop selling BBC IP to competitors), downstream competitors (e.g. Netflix or Amazon) could instead replace BBC programmes with other inputs from a wide range of sources or self-supply content. Furthermore, the BBC has limited ability to pursue such a strategy since it is constrained by regulation and contract from deliberately restricting access to rights.

Do the changes affect the ability of upstream producers to finance and produce content?

A further consideration is whether the changes to the BBC iPlayer window affects the ability of upstream producers to finance and produce content. Producers monetise their investments across a number of "windows" in very competitive markets (both the producer and commissioner markets are characterised by strong competition). In some cases, the majority of the cost of production is recovered from the primary commissioner (for example the BBC). The IP is subsequently exploited by the producer in a number of related secondary markets in the UK and internationally (for example, secondary TV and VoD rights, international TV rights, merchandising rights, and other sales)¹².

The BBC iPlayer changes could potentially affect the value that producers are able to monetise in secondary windows¹³. This is because the 12 month BBC iPlayer window will generate incremental viewing of the titles on BBC iPlayer (compared with a current 30 day window). Therefore, the value of the secondary window could be negatively affected in two ways: individual viewers might reduce their value of the title in the secondary window, and by implication this might affect the value that other retailers are willing to pay to acquire the secondary rights to the title (i.e. the "derived demand" of sVoD retailers is lower); or if content is simultaneously shown on BBC iPlayer and sVoD, then sVoD may have a lower value (compared to the case where the title was not on a FTA VoD platform).

In some cases the BBC (or any broadcaster) may jointly commission content with another broadcaster (for example a coproduction with an American broadcaster). In this case the two commissioners and the producer will jointly share the primary and secondary rights on a bespoke basis negotiated for each title. This approach allows commissioners to pool resources and share risks. For example in a BBC Netflix co production the BBC might have rights to broadcast within the 18 month window; Netflix could have international (non-UK) VoD rights and UK sVoD rights after the initial 18 month window and the producer would retain DVD and EST (Electronic Sell Through – such as transaction VoD).

We do not consider the impact on other revenues such as DVDs and merchandise. This is because these purchases are likely to be driven by other factors unrelated to the BBC iPlayer changes. For example, individuals may choose to gift a DVD or purchase it on impulse. Moreover, these revenues typically make up an even smaller share of revenues than secondary rights sales.

However, any effect is likely to be minimal since:

- The percentage of incremental viewing that occurs in the 12 month BBC iPlayer window compared to total viewing (across linear and VoD) is small most viewing still happens on linear TV, and any incremental viewing as a result of the changes would take place outside the current 30 day window after the linear transmission. Therefore we would not expect the value in the secondary window to fall significantly.
- The relationship between the exposure of content on BBC and the value of the secondary window is complex. Increased exposure of content on the BBC can increase value in the secondary UK windows and, where relevant, in international and merchandise rights. The incremental availability on BBC iPlayer allows increased social commentary (e.g. on social networks) on the content. This in turn provides a new opportunity for users to discover content from their online community which is less dependent on the marketing investment around the initial launch.
- Even if the value of the secondary window did decline (which is not certain) there would not be an impact on the production market since the value of the secondary TV window is small compared to producers' total revenues (though we recognise that impacts will not be felt uniformly). Therefore a change is unlikely to significantly affect outcomes in the production market (i.e. producers are unlikely to exit). Furthermore broadcasting and production markets are competitive. Producers will take their ideas to other broadcasters (PSBs, PayTV broadcasters, sVoD retailers) if they consider that the BBC does not recompense them sufficiently (after accounting for revenues from secondary windows, international etc.).

We conclude that there is unlikely to be a significant impact in the upstream market for the production of content.

Consideration of interactions between vertical and horizontal impacts

For completeness we have considered whether there is scope for vertical and horizontal impacts to *jointly* adversely affect competition. We do not believe that if the horizontal and vertical effects are taken together, they could have a greater adverse impact on competition than the sum of each impact. This is because the horizontal and vertical effects do not interact in such a way that one could exacerbate the other.

Furthermore while producers could *theoretically* be affected both (directly) via vertical impacts, and indirectly as a result horizontal impacts (if retail competitors faced lower incentives to invest in content) we do not believe that these direct and indirect impacts will affect producers in combination. This is because, as we note above, the static impact on retail competitors to BBC iPlayer is unlikely to affect competitors' incentives to invest in content and any vertical impact on producers (in secondary TV markets) is small, and potentially positive).

1 INTRODUCTION

The BBC plans to increase the volume of content available on BBC iPlayer.

Under its proposals, the BBC plans to make the following changes to BBC iPlayer. It will:

- Make all BBC commissioned programmes available on BBC iPlayer until at least 12 months from when the final episode in the current series is first published on BBC iPlayer, though there will be some exceptions to this 12 month availability policy.
- Make selected returning titles available as full box sets of all series, whilst the title is still being commissioned. For example, making all series of Our Girl available as a box set on BBC iPlayer whilst it is still a returning title.
- Make a selection of programmes available for longer. Where programmes are not returning but are still important to the overall content mix on BBC iPlayer, the BBC will select a limited number to keep up for a further 12 months, beyond their initial window.
- Bring back selected archive titles (i.e. titles that are no longer being commissioned).

That these changes will provide manifest public value is plain. Viewers who watch and enjoy a BBC show live, but have not seen an earlier series of the show, will gain obvious value from being able to view the BBC's series in narrative order rather than out of sequence, or having to pick up the narrative mid-way through. More generally, viewers have come to expect a range of content to consume ondemand when they access their VoD platforms. Indeed, consumer research commissioned by Ofcom in 2017 concluded that "Users felt that the BBC iPlayer needed to adapt by ... increasing access to back catalogues of TV content." 14

Ofcom has stated that the BBC's proposed changes amount to a material change and therefore it has stated that BBC should conduct a Public Interest Test (PIT). The purpose of this report is to assess whether the proposed changes have adverse impacts on competition to support the BBC's PIT.

1.1 Structure of this report

The rest of this report is structured as follows.

- Section 1 describes the proposed changes to BBC iPlayer.
- Section 2 sets out the framework for analysing the competitive impact of the BBC iPlayer changes and whether it will lead to an adverse impact on fair and effective competition.
- Section 3 describes how competition in audio-visual markets shapes incentives to invest and innovate.
- Section 4 identifies the products or services that are affected by the BBC iPlayer changes.

Ofcom (2017) BBC Distinctiveness Report prepared for Ofcom

- Section 5 describes the horizontal impacts on fair and effective competition.
- Section 6 describes the vertical impacts on fair and effective competition.

The report is supported by three annexes.

- Annex A sets out the qualitative evidence on the differences between different substitutes for BBC iPlayer.
- Annex B describes the evidence on the propensity to cancel sVoD services as a result of the changes.
- Annex C describes how content is commissioned and how secondary rights are exploited.

2 FRAMEWORK FOR ASSESSING THE IMPACT OF THE BBC IPLAYER CHANGES ON COMPETITION

2.1 Introduction

Both Ofcom and the BBC have responsibilities for assessing the impact of the proposed changes to BBC iPlayer on fair and effective competition. These responsibilities are defined by the BBC's Charter and Agreement. Ofcom has described the framework it would use in assessing whether any change to the BBC's services would have an adverse impact on fair and effective competition. In assessing the impact of the new channel, we use the framework that is set out by Ofcom and the BBC's policy on material changes. Importantly, the assessment considers the specific characteristics and features of the sector: audio-visual markets are dynamic, characterised by waves of change driven by technological advances; there are many differentiated providers; and consumers are highly differentiated.

In this section, we set out:

- A summary of the regulatory framework to assess changes to the BBC's services including Ofcom's guidance¹⁵ and the BBC's policy on material changes to the BBC's public service activities and commercial activities¹⁶ for assessing whether a change can have an adverse impact on fair and effective competition (Section 2.2).
- The analytical framework used to assess crowding out. An assessment of crowding out relies on understanding the scale of substitution to BBC iPlayer from competitor products. In this sector, where differentiated suppliers cater to heterogeneous customers, the assessment of substitution is complex. Our analysis considers the suppliers affected by the proposed change and the likely degree of substitution from each supplier (Section 2.3).
- The analytical framework used to assess impacts elsewhere in the value chain (Section 2.4).

2.2 Regulatory framework to assess changes to the BBC's services

The changing media landscape means that the BBC's services have to adapt to reflect changing viewer tastes and habits, changing technologies and a rapidly evolving competitive landscape. Ofcom notes that:

See https://www.ofcom.org.uk/__data/assets/pdf_file/0022/95422/Assessing-the-impact-of-proposed-changes-to-the-BBCs-public-service-activities.pdf.

BBC (2007) Policy on material changes to the BBC's public service activities and commercial activities. See: http://downloads.bbc.co.uk/aboutthebbc/insidethebbc/howwework/policiesandguidelines/pdf/policy_material_changes.pdf

"In order better to fulfil its remit, the public service activities that the BBC carries out and the way in which it carries them out will inevitably change over time".¹⁷

However, the unique funding mechanism means that the BBC must have regard to the impact that it has on competition.

Viewers' interests could be harmed if the BBC's activities were to lead to a reduction in innovation and investment from commercial operators who compete for viewers' attention. Therefore, in assessing the public value of the changed service, it is necessary to consider potential adverse impacts on fair and effective competition against potential public value. Furthermore, there could be offsetting positive impacts on fair and effective competition as a result of the new service (increased efficiency or greater scope for innovation). The net impact of the new service on competition would be the combination of both positive and negative impacts.

In this report, we assess the impact of changes to BBC iPlayer on fair and effective competition using the framework that is derived from the 2016 Charter and Agreement.

2.2.1 The BBC's PIT and Ofcom's assessment must consider whether the change could lead to an adverse impact on "fair and effective competition"

Before the BBC can make a material change to its services, the BBC must first be satisfied that:

- "(a) the proposed change to the UK Public Services contributes to the fulfilment of the Mission and the promotion of one or more of the Public Purposes;
- (b) it has taken reasonable steps to ensure that the proposed change has no adverse impact on fair and effective competition which is not necessary for the effective fulfilment of the Mission and the promotion of the Public Purposes; and
- (c) the public value of the proposed change justifies any adverse impact on fair and effective competition."18

In making its assessment, the BBC should assess the scale of market impacts associated with its proposals. This will require an understanding of how the proposals are likely to affect viewers, broadcasters who compete with BBC and other providers elsewhere in the value chain.

Following the BBC's assessment of the changes (in the PIT), Ofcom will make an assessment of the proposed change.

Ofcom (2017) Assessing the impact of proposed changes to the BBC's public service activities: a consultation on Ofcom's procedures and guidance. See https://www.ofcom.org.uk/ data/assets/pdf file/0022/95422/Assessing-the-impact-of-proposed-changes-to-the-BBCs-public-service-activities.pdf.

An Agreement Between Her Majesty's Secretary of State for Culture, Media and Sport and the British Broadcasting Corporation (2016). See 8(1) of https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/584329/57965_Cm_9366_Print_1.pdf.

Ofcom has published guidance¹⁹ that describes the framework it uses to assess whether a change can have an adverse impact on "fair and effective competition" in the context of the PIT and Ofcom's assessment. The BBC has also published its policy on material changes to the BBC's public service activities and commercial activities.²⁰

Ofcom²¹ identifies two potential adverse impacts on fair and effective competition and also considers the potential for beneficial impacts of a change, which are described below.

- First, there is a risk that the BBC may crowd-out commercial activity (such as investments or innovation).
- Second, there is a risk that the BBC may harm competition elsewhere in the supply chain.

In addition, Ofcom recognises that beneficial impacts may occur where the change is likely to increase efficiency or to induce more innovation.²²

Similarly, the BBC's policy in assessing the impact on fair and effective competition notes that

"Although [the] assessment will need to consider the short-term or static impact of the proposal on the revenues of individual market players, its focus will be on whether the proposal will likely harm the process of competition and therefore have a detrimental impact on consumers over time (for example, by slowing innovation). [...] There is a risk of the BBC crowding-out commercial activity or deterring others from investing or innovating if the proposal undermined their ability to develop profitable ventures. There is also a risk that how the BBC behaves could harm competition elsewhere in the supply chain."²³

2.2.2 Crowding-out commercial activity

Ofcom notes that where a new BBC service causes consumers to switch away from a rival's service it can lead to a reduction in revenues and profitability. This may not necessarily harm consumers. However, it may result in an adverse impact on fair and effective competition where this reduces a rival provider's willingness

- See https://www.ofcom.org.uk/ data/assets/pdf_file/0022/95422/Assessing-the-impact-of-proposed-changes-to-the-BBCs-public-service-activities.pdf.
- See http://downloads.bbc.co.uk/aboutthebbc/insidethebbc/howwework/policiesandguidelines/pdf/policy_material_changes.pdf.
- Ofcom (2017) Assessing the impact of proposed changes to the BBC's public service activities: a consultation on Ofcom's procedures and guidance, paragraphs 3.3–3.12 and 5.1–5.20. https://www.ofcom.org.uk/ data/assets/pdf file/0022/95422/Assessing-the-impact-of-proposed-changes-to-the-BBCs-public-service-activities.pdf.

 https://www.ofcom.org.uk/ data/assets/pdf file/0022/95422/Assessing-the-impact-of-proposed-changes-to-the-BBCs-public-service-activities.pdf.
- lbid. paragraph 5.25.
- BBC (2017) Policy on material changes to the BBC's public service activities and commercial activities. See http://downloads.bbc.co.uk/aboutthebbc/insidethebbc/howwework/policiesandguidelines/pdf/policy_material_changes.pdf.

to innovate or invest in new services, or causes providers to cease to provide services to an extent that is not in society's interest.

As noted by Ofcom, the launch of any new BBC service may:

"[...] reduce the profitability of its commercial rivals. This may undermine commercial operators' willingness to invest in new services or in improving the quality of their existing services. It may also result in some commercial operators ceasing to provide services or being deterred from entering the market, if it is no longer profitable to do so."²⁴

The potential scale of any adverse impact will depend on the degree to which:

- the new service is different from the services of commercial operators in particular, Ofcom notes that "adverse competition effects would tend to be larger where a commercial provider would need to charge a high price in order to cover the cost of a service, while the BBC instead provides its service for free"; and
- the new service is able to benefit from viewers' special affinity with the BBC.

The changes to BBC iPlayer may adversely affect the incentive of rival broadcasters to invest in programming or platform innovation.

In assessing whether the changes to BBC iPlayer lead to an adverse impact on competition, it is therefore necessary to consider:

- the static impact on rivals' (viewing or consumption of services), and the consequent static impact on rivals' revenues and gross margins;
- the consequent longer term dynamic impacts on rivals' incentives to invest and innovate as well as whether rivals can competitively respond (in which case consumers would benefit from increased range and variety of programming).

2.2.3 The risk that the BBC harms competition elsewhere in the supply chain

Ofcom also considers that a proposed change could lead to a risk that the BBC harms competition elsewhere in the supply chain.

This vertical effect could occur where changes affect the ability or incentives of the BBC either to restrict access to inputs for suppliers (input foreclosure) or to restrict rivals' access to customers (customer foreclosure). The guidance notes that it is difficult to generically describe the circumstances where this could be the case, but gives the following examples. Harm elsewhere in the value chain is more likely where:

 there are few alternative, credible input suppliers or where the change significantly raises users' costs and therefore places them at a competitive disadvantage;

Ofcom (2017) Assessing the impact of proposed changes to the BBC's public service activities: a consultation on Ofcom's procedures and guidance, paragraph 3.9. See https://www.ofcom.org.uk/ data/assets/pdf file/0022/95422/Assessing-the-impact-of-proposed-changes-to-the-BBCs-public-service-activities.pdf.

- the BBC's proposed change implies a strong restriction in the access to inputs: or
- the BBC's proposed change affects the supply of inputs, which are particularly important for rivals.

Section 6 considers the vertical impact elsewhere in the value chain. It considers, in turn, whether the changes to BBC iPlayer affects the incentives or scope for rivals to access key inputs, and for the BBC to prevent rival distribution platforms from accessing inputs controlled by the BBC.

2.2.4 Beneficial impacts, spillovers and cumulative impacts

The framework adopted by Ofcom and the BBC note that the assessment of impacts of fair and effective competition should consider the potential for beneficial²⁵ impacts on competition (for example market growing impacts or other net welfare enhancing impacts on competition) or spillovers (such as knowledge spillovers²⁶ benefiting competitors resulting from the BBC's investments).

We also consider whether different potential impacts could, in combination, adversely affect competition (even if they do not when considered in isolation). This may be the case where different impacts interact.

2.3 Analytical framework for the assessment of crowding out

In this section we set out the analytical framework for assessing whether the proposed changes crowd out investments or innovations of competitor suppliers. That the proposed change to the BBC's services will impact some competitors in some ways is uncontroversial. However, not all impacts will lead to adverse impacts on competition. Adverse impacts on competition might result where any of the BBC's proposed changes affect prices that consumers pay (for example, if suppliers exit the market), or if consumers are denied the benefits of competition or innovation. We consider impacts over a five year period, 2019-2024. In such a dynamic sector forecasting dynamic impacts over a longer period is unlikely to be accurate.

In assessing the scope for crowing out we use the framework as set out below.

- Step 1: Set out the market context which explains how suppliers compete for viewers
- Step 2: Identify the suppliers that (horizontally) compete with BBC iPlayer
- Step 3: Measure the degree of substitution between BBC iPlayer and other services
- Step 4: Assess the static impact on revenues and profit margins

Note that beneficial impacts on competition are clearly distinct from, and in addition to, beneficial impacts that result from Public Value.

²⁶ Spillovers in this case describe benefits that accrue to third parties as a result of the changes to BBC iPlayer. One potential "spillover" is the benefit that producers gain in exploiting IP in secondary markets as a result of increased exposure of content on BBC iPlayer (see section 6.3.2).

Step 5: Consider the dynamic impacts on competitors

2.3.1 Step 1: set out the market context which explains how suppliers compete for viewers

The changes to BBC iPlayer could affect competitors to BBC at the retail level, with incremental BBC iPlayer viewing coming from a wide range of differentiated substitutes.

Digital disruption observed in broadcasting sectors means that broadcasters now compete in an increasingly crowded marketplace, all battling for viewers' attention. Innovations in broadband networks mean that broadcasters can enter the market and distribute their content using Over The Top (OTT) apps and platforms to rapidly capture viewers from existing broadcasters. Furthermore, technological innovations have led to a convergence of different forms of audio-visual content, with all forms of content now available at the touch of a button on all our devices, all the time, and all competing for screen time attention.

This means that the competitor set with which BBC iPlayer competes is broad and competing across a different dimensions of competition (see Figure 12), rather than a tightly defined set of reasonably homogeneous competitors.

provides some ALL 4 e.g. sports sky one one amazon NETFLIX Linear VoD i b *i:Player* YouTube amazon Portable TV set device **ALL** 4 sky cinema facebook NETFLIX Player sky sports YouTube NETFLIX ▶ YouTube sky one amazon **sky** sports Advertising Subscription Funded / Funded Free

Figure 12 Different dimensions of competitive differentiation

Source: Frontier Economics

2.3.2 Step 2: Identify the suppliers that horizontally compete with BBC iPlayer

In practice, there are many interlinked factors that will affect the services that BBC iPlayer viewers will substitute for. The degree of substitution will depend on the specific characteristics of the viewer, the device the content is viewed on and the "moment" the viewing takes place (i.e. the specific context and experience of the

viewing, such as whether on the commute to work or on the sofa at the end of the day to relax).

The potential substitutes are likely to include the following:

- BVoD (e.g. ITV Hub, All 4, My5, PayTV on demand services);
- sVoD (e.g. Netflix, Amazon, NowTV²⁷, sVoD in YouTube);
- Linear TV (broadcasters) (e.g. ITV, Channel 4, Channel 5) and associated PayTV (e.g. Sky, Virgin Media); and
- Other²⁸ video content (e.g. short form video content from YouTube or social media), long form video available on Download to Own (DTO) and DVD, gaming, general internet browsing, social media etc.

2.3.3 Step 3: Measure the degree of substitution between BBC iPlayer and other services

An important part of the competition analysis is the assessment of degree of substitution from competitors to BBC iPlayer compared to a counterfactual where the BBC iPlayer changes did not take place.

In a highly differentiated market, with heterogeneous consumers, measuring the relative degree of substitution is complex²⁹. There is no bright-line market boundary which can define the set of relatively homogeneous products that are a substitute for BBC iPlayer, and those that are not. Instead, there are a wide range of potential differentiated products which are substitutes for BBC iPlayer to different degrees. It is therefore necessary to examine the impact on a competitor by competitor basis. Audience research conducted by the BBC indicates that consumers will switch from different providers in different degrees.

As a matter of practicality, and for modelling purposes, it is helpful to group the providers by comparing the characteristics of the different services; examining actual evidence on consumer behaviour (how audiences access and discover content across different services; how they consume content); and by looking at patterns of substitution (for example, in survey evidence on diversion). The dynamic nature of competition between the different services means that the degree of substitution may change over time and within different customer groups, though in practice this is difficult to forecast.

The degree of substitution relates to two factors.

First, it reflects the **strength of substitution**. This is the propensity of a consumer of a competitor service to substitute a minute of viewing of the competitor service for a minute of viewing of BBC iPlayer. Audio-visual services and screen activities

NowTV is a standalone sVoD service offered by Sky. It is distinct from its PayTV packages (which separately offer bundled VoD to PayTV subscribers). It is therefore treated as an sVoD service (similar to Netflix, Amazon).

The category of content labelled "other" is likely to encompass a wide range of potential content. Other on a TV is likely to relate to other forms of audiovisual content (largely YouTube) but potentially also gaming. Other on a device could include an even wider range of content such as gaming, and use of gaming apps on devices, or even general internet browsing.

²⁹ It is not for example possible to simply "define" an economic market and assume that all suppliers within the "market" are affected in proportion to their existing market share.

which are considered similar to BBC iPlayer in the eyes of consumers are likely to be relatively strong substitutes, and those that are not similar relatively weak substitutes. However, there are many factors that might influence the strength of substitution. These include the following.

- The characteristics of the services: for example, competitor services which have a similar genre mix or volume of content to that found on BBC iPlayer are more likely to be stronger substitutes than those that do not.
- The behaviours of consumers: for example the choices of consumers in relation to substituting for BBC iPlayer will depend on the device that the user watches BBC iPlayer on (whether a TV in the living room or smartphone on the bus). Similarly, many users navigate to BBC iPlayer via their TV EPG in which case their choice set is (i) bounded by range of services on the EPG, and (ii) affected by the prominence of the services on their EPG³⁰.
- The preferences and attitudes of users which can be discerned, for example, from surveys.

The second factor that will affect the degree of substitution is **the volume of consumption** of potential substitutes for BBC iPlayer. All else equal, if two potential services are equally considered to be a substitute, but are consumed at different volumes, then it would be expected that there would be more substitution from the service that is consumed more.

We note that different suppliers within each segment (whether BVoD, sVoD, linear TV or other) could be affected differentially depending on the relative degree of substitution between different providers.

The modelling conducted by Communications Chambers has forecast the change in volumes across different segments as a result of the BBC iPlayer changes, compared to a counterfactual of no change.

2.3.4 Step 4: Assess the static impact on revenues and profit margins

A new service offered by the BBC, or an improvement to an existing one, is likely to increase the volume of BBC viewing, and can substitute viewing for existing or potential commercial rivals. For each of the segments affected, we describe the segment-wide static impact on volumes of viewing of providers' services. For those segments and suppliers where there is a non-negligible volume impact, we then consider what the impact is likely to be on the revenues and profit margins of suppliers.

2.3.5 Step 5: Consider the dynamic impacts on competitors

For suppliers where there is a significant static impact, we consider what the dynamic impact of that change in revenues has on incentives to invest and

For example it is likely that linear TV has a prominent position on a TV set's EPG, and that the PSBs have a prominent position on the linear EPG. However, the behaviours are likely to vary for different groups of users.

innovate, and whether suppliers can competitively respond to the BBC's proposed changes.

If there are adverse impacts on competitors' incentives to invest or innovate, this could imply that the BBC's investments crowd out investments by commercial providers in a way that harms consumers. However, Ofcom's guidance is clear that a static impact on revenues of competitors does not necessarily imply an adverse impact on fair and effective competition. Rather adverse impacts are likely to result where competitors' willingness to innovate and invest declines; suppliers cease to provide existing services; or potential new services are not provided.

2.4 Analytical framework for the assessment of scope for harm to competition elsewhere in the supply chain

The changes to BBC iPlayer could lead to impacts elsewhere in the supply chain. In this report we consider two potential impacts.

- First, we consider whether the change affects the ability or incentive of the BBC to engage in a strategy which attempts to foreclose downstream rivals by restricting their access to BBC-controlled content.
- Second, we consider whether the change would affect the revenues that producers earn in producing content, such that they would be incentivised to produce less content or to exit the market.

2.4.1 Input foreclosure

Input foreclosure could relate to a strategic behaviour of the BBC, as a vertically integrated firm, to restrict supply of inputs to downstream rivals (and thereby forego wholesale revenues) that it would have otherwise supplied absent the changes to BBC iPlayer. If this happened, downstream rivals to the BBC could be impeded from competing to the detriment of consumers.

This analysis considers whether the BBC could foreclose by restricting access to "secondary" content rights³¹ by limiting the licensing of content over which it controls the IP to downstream rivals such as other VoD providers (e.g. BVoD, sVoD or PayTV retailers).

Secondary TV rights (described in Annex C) relate in this case to rights to exploit content whether via linear broadcasters, BVoD, sVoD or PayTV retailers. The rights are "secondary" in that they relate to rights to broadcast after the end of a "holdback" period which is typically 18 months after the first linear transmission. As noted in Annex C, secondary VoD / linear rights are typically licensed on a non-exclusive basis.

There are other types of secondary rights which we do not consider in the analysis of input foreclosure, such as rights to consumer products (e.g. DVD or merchandising), non-UK rights, or format rights.

In order to demonstrate that the changes to BBC iPlayer could adversely impact competition in the downstream market it would be necessary to consider two questions:

- Does the BBC have the ability to foreclose by restricting the supply of inputs? In doing so, this would consider whether BBC has control of inputs and importantly whether it has market power in the supply of inputs. It could also consider whether there are any legal or regulatory constraints which might prevent it from restricting supply of inputs.
- Does the BBC have the incentive to restrict supply of inputs? Even if the BBC had the ability to restrict supply this would only be a profitable strategy where it had an incentive to do so. It would be necessary to consider whether reductions in wholesale revenues as a result of restricting supply would be offset by increases in the value to downstream services such as BBC iPlayer or the BBC's linear services, (or distribution platforms such as Freeview or Freesat).

2.4.2 Impact on the ability of upstream providers to finance and produce content

A further consideration is whether the change to a 12 month BBC iPlayer window affects the ability of upstream producers to finance and produce content. This report considers:

- whether the BBC iPlayer changes affect the value of rights in the secondary TV window:
- if the changes to BBC iPlayer negatively affect the value of rights in the secondary TV window, whether this change is significant; and
- if there is a significant change in the value of rights in the secondary UK TV window, whether this would represent a net loss to producers, or whether there would be an offsetting increase in the value of the primary commission.

3 THE COMPETITIVE CONTEXT FOR THE PROPOSED CHANGES TO BBC IPLAYER

In order to assess the impact that the changes to BBC iPlayer have on its various competitors it is necessary to understand the dynamics which shape the competitive environment in which BBC iPlayer provides its Public Services.

In this section we explain some of the dynamics in how audio-visual suppliers compete for viewers' screen time. These trends include:

- the audio-visual sector is characterised by constant innovation;
- VoD competes with linear broadcasters, as well as newer audio-visual suppliers;
- technological advances have led to convergence between different forms of content; and
- entrant broadcasters have put pressure on broadcasters to compete and innovate.

3.1 The audio-visual sector is characterised by constant innovation

The current digital disruption in the audio-visual sector continues long term trends in technology driven changes within the sector. Advances in content distribution, creation and devices on which we consume content mean that all broadcasters are required to incrementally innovate and change to keep pace with consumer demand. In previous decades the growth of multichannel TV platforms (satellite and cable), the switch to digital, and the use of broadband networks to deliver content have all triggered waves of change in the sector. The current decade is characterised by sVoD entrants using Over the Top (OTT) platforms which have spurred the latest wave of innovation.

However, while it can be tempting to consider technology driven advances in TV services as a series of successive, but distinct waves of large scale change, it should in fact be considered more as a series of smaller incremental changes which over time compound and transform sector dynamics. For example, BBC iPlayer has changed incrementally over time to reflect the gradual advance in technology and changes in consumer demand³².

Similarly all broadcasters, including OTT entrants, innovate in the technological platforms (see section 3.4.3).

BBC IPLAYER HAS ITERATIVELY INNOVATED TO MEET CHANGING DEMAND AND TECHNOLOGICAL ADVANCES

The BBC iPlayer has played a growing part of the BBC's distribution strategy for its public services. It was launched in 2007, primarily as a catch up service accessed via desktop PCs. Since 2007 the audio-visual market has transformed and the BBC has invested to evolve BBC iPlayer into a service that offers 30 day catch up, access to some back catalogue, and live streaming. It is embedded into EPGs across a number of TV platforms, and is offered on 2,500 different TV devices and 10,000 devices overall. It offers services at different levels of resolution³³.

BBC iPlayer has naturally evolved over time as consumer demand has changed and technologies have advanced. For example:

- 2007: the platform was created and went live, offering a catch-up service for UK licence fee payers.
- 2008: a new feature was announced: series stacking, allowing viewers to watch previous programmes for selected series until the series has ended (limit: 13 weeks after first broadcast). This feature excluded news bulletins and review based programs.
- 2014: The BBC extended programme availability from 7 to 30 days.³⁴
- 2016: the BBC introduced mandatory sign in for BBC iPlayer which supports greater personalisation.

The BBC plays a role in innovating in the UK's broadcasting markets and thereby shaping the sector. However, more importantly, the BBC's strategy is also shaped by the innovations of competitors.

3.2 VoD competes with linear broadcasters, as well as newer audio-visual suppliers

BBC iPlayer competes with a wide range of broadcasters including linear Free to Air TV providers, VoD and PayTV players and it is incentivised to continually improve and develop its product in order to remain relevant and to continue to attract audiences in an increasingly competitive landscape. The proposed changes to BBC iPlayer should be seen in this context.

Viewers watch audio-visual content from a wide range of sources, though linear is still the most popular type of content across the general population. Figure 13 shows the time spent per day per user (in minutes) of different services. Live TV accounts for the majority of time spent watching audio-visual content though this varies between age groups. Other services, such as BVoD, sVoD and YouTube account for a smaller proportion of viewing.

Source: BBC (2018) The BBC's Distribution Strategy Published: 12 February 2018 http://downloads.bbc.co.uk/aboutthebbc/insidethebbc/howwework/accountability/consultations/bbc_distribution_strategy.pdf

Note that the extended programme availability depended on rights holders' agreement and was therefore not applied to all content broadcast on BBC iPlayer.

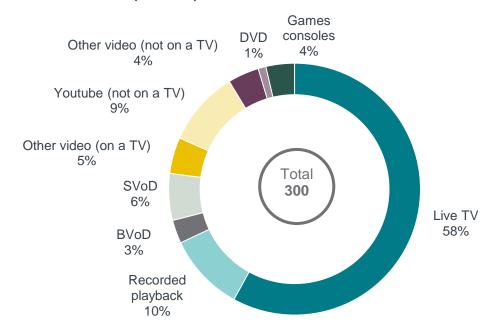


Figure 13 Total audio-visual viewing time spent per person per day, all devices (minutes)

Source: Ofcom Media Nations 2018, p21

Note: Original source: Ofcom/BARB/BARB TV Player (census data)/TouchPoints/ComScore – see detailed methodology section of how the sources are used to construct a total estimated view of video watched. XXX video is not included.

Over the next few years, the number of minutes watched on live broadcast will continue to fall while the minutes watched on non-live broadcaster, sVoD, YouTube and other online video will continue to grow (see Figure 14). As Figure 14 shows the average video viewing of live broadcast TV will fall from 168 minutes per day per person in 2017 to 142 in 2021; sVoD viewing will more than double from 13 minutes per day per person to 28 minutes; and YouTube viewing will increase from 24 minutes per day per person to 34 minutes.

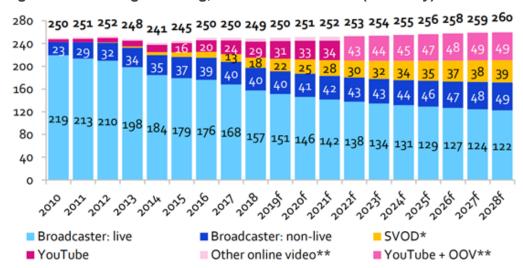


Figure 14 Average Viewing, all UK individuals 4+ (mins/day)

Source: Enders 2019, Enders Analysis, The future of video viewing: forecasts to 2028 [2019-023], as referenced in BBC iPlayer Public Interest Test (2019) Enders Analysis of BARB/AdvantEdge, ONS,

Comscore, and industry research. Broadcaster SVOD services (e.g. NOW TV) fall under 'Broadcaster'. Other Online Video (OOV) excludes adult content.

The BBC like all broadcasters has to adapt to these significant shifts in viewing habits which will inevitably change the competitor set with which BBC iPlayer competes in the coming years.

3.3 Technological advances have led to convergence between different forms of content

Technological advances have led to a convergence between different forms of audio-visual entertainment. Only just over a decade ago, when VoD platforms and devices such as smartphones were in their infancy, TV content was almost always watched on a TV. This had obvious implications for the competitor set with which TV broadcasters competed.

Technological advances and investments in broadband networks seen in the last ten years mean that audio-visual content can be viewed almost anywhere and on multiple devices including tablets and smartphones.

Moreover, while the TV is still the most common medium for consuming audiovisual content, many TVs are directly connected to the internet. This means that what we use our TV for is radically changing.

Indeed, viewers are increasingly heterogeneous in their consumption of audiovisual content. Older demographics are much more likely to watch linear content and watch on a TV set, whereas younger viewers are more likely to watch on demand and other forms of audio-visual content (YouTube or gaming) both on a TV set or on a device³⁵.

3.4 Entrant broadcasters have put pressure on broadcasters to compete and innovate

Competition from by entrants such as Netflix and Amazon Prime Video, which have large, global content budgets are increasingly challenging broadcasters. The sections below summarise how:

- sVoD services have rapidly captured market share;
- sVoD services compete with huge content budgets; and,
- sVoD services also compete on technological features.

3.4.1 sVoD services have rapidly captured market share

In a relatively short period since their entry in the UK TV sector sVoD services have rapidly captured market share. For example, by Q1 2018 Netflix had reached 9.1m subscribers in the UK, just six years after its launch. In comparison, it took Sky 21 years to reach to reach the same milestone. Now 40% of UK households have an

³⁵ See Ofcom's Media Nations Report 2018, p21

OTT broadcasting service³⁶. sVoD services have changed consumption habits such as "binge-watching"³⁷.

Against the backdrop of changing viewer tastes, the sVoD sector in the UK is dominated by three large global players: Netflix, Amazon Prime and NowTV. Figure 15 shows the estimated number of households owning a subscription, with subscriptions more than doubling since 2014. Netflix is the largest provider with c.60% of all subscriptions, followed by Amazon Prime c.30% and NowTV c.10%³⁸.

Another common feature of the sVoD sector is multi-homing, whereby viewers subscribe to and use multiple services. For example, 12% of sVoD users have subscription to Netflix, Amazon Prime Video and NowTV, with a further 39% subscribing to at least two of these services³⁹.

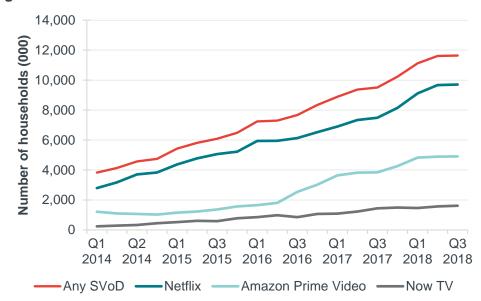


Figure 15 Number of UK sVoD households with an sVoD service

Source: BARB

3.4.2 sVoD services have significant content budgets with global reach

The old adage that "content is king" remains true, even in the digital era. There has been a general increase in the volume of high-quality audio-visual content as entrants such as Amazon and Netflix invest heavily in original content to attract subscribers. In 2018, Netflix expected to spend £5bn on content globally, while Amazon Prime Video expected to spend about £3bn⁴⁰.

³⁶ Source: BARB Q3 2018

In 2015 "binge-watching" was named word of the year by Collins Dictionaries. https://www.theguardian.com/books/2015/nov/05/binge-watch-2015-word-of-the-year-collins

³⁸ Source: BARB

³⁹ Source: Ofcom Media Nations 2018

⁴⁰ Source: Ofcom Media Nations 2018

Ofcom noted, "Companies like Netflix and Amazon with large production budgets present challenges to the UK PSBs as they compete for viewers of high-end TV drama."⁴¹

These investments are partly driven by scale: Netflix and Amazon (and potential entrants) can more easily spread the cost of production over their global subscriber base⁴². However, they are also driven by the business models of these companies which have deep pockets and investors willingly to accept losses in the short-term to achieve market share in the longer term. By creating "original" content, these firms will also be able to benefit from the commercial exploitation of this content in the future, unlike PSBs which are limited by the terms of trade in their commercial exploitation of programmes. Netflix has 700 originals in the pipeline, with 40 UK projects alone⁴³. Similarly, Amazon has 20 new projects in UK, Germany, India and Japan,⁴⁴ and Sky is set to release 6,500 hours of original content from Sky Original Productions and independent third parties.⁴⁵

3.4.3 sVoD services are investing in distribution and user interface technology

The digital disruption to TV caused by large, tech-savvy players is forcing the traditional broadcasters to be innovative in the way they compete along traditional dimensions of differentiation. The investments made by sVoD services, especially in technology, are also adding new dimensions on which they must compete: most notably, data. It is estimated that Netflix will spend \$1.3 on technology and development in 2018 alone, far exceeding the levels of investment that BBC iPlayer or commercially funded BVoD services can match⁴⁶.

3.5 Conclusion on sector wide trends

All broadcasters face strong incentives to innovate to meet evolving consumer demand. The changes to BBC iPlayer will not affect any of the sector wide trends which incentivise broadcasters to invest and innovate.

The changes to BBC iPlayer will enable the BBC to continue to distribute its content to meet the various disruptive challenges facing the sector: whether new sVoD entrants rapidly capturing market share, or the increasingly diverse consumption habits of younger users both on devices and on TV. Similarly, the incentives on other UK-based broadcasters to invest and innovate are conditioned by these structural changes that are sweeping the industry. Where broadcasters are slow to

- 41 Source: Ofcom Media Nations 2018.
- Firms which are expected to enter the sector (e.g. Apple, Disney) will similarly be able to take advantage of their global customer bases, as will companies which are part of larger companies (e.g. NowTV).
- 43 See David Wells Netflix CFO at Morgan Stanley Technology, Media & Telecom Conference 27 February 2018 https://s22.q4cdn.com/959853165/files/doc_events/2018/NFLX-USQ_Transcript_2018-02-27.pdf and Financial Times (2018), Netflix to ramp up productions in Europe in 2019, 28 November 2018 url: https://www.ft.com/content/924ce2f8-f312-11e8-ae55-df4bf40f9d0d
- 44 https://www.hollywoodreporter.com/live-feed/amazon-studios-jennifer-salke-details-global-content-strategy-1186475
- Sky Q4 18 Release, Sky Vision Website. We do not have figures by title.
- 46 https://www.theguardian.com/media/2018/oct/22/netflix-plans-to-raise-2bn-as-it-invests-in-new-content

respond to these trends, consumers will quickly substitute their screen time to other broadcasters, apps and services which are all now "just one click away".

4 SUPPLIERS AFFECTED BY THE CHANGES TO BBC IPLAYER

4.1 Introduction

This section identifies the suppliers affected by the changes to BBC iPlayer. The proposed changes will bring the range and availability of content on BBC iPlayer closer to market norms and viewer expectations. They are designed to ensure that BBC iPlayer continues to appeal to viewers such that it remains a relevant platform to support the BBC in delivering its public services.

This section:

- describes the BBC iPlayer's role in the wider value chain;
- identifies the suppliers of services which are likely to be horizontally affected by the BBC iPlayer changes; and
- identifies the suppliers of services which are likely to be vertically affected by the BBC iPlayer changes.

4.2 The BBC iPlayer's role in the TV value chain

In order to understand the impact of the changes to BBC iPlayer on competition it is necessary to understand the market context in which it operates. It competes for viewers in an increasingly crowded sector. In recent years technological advances have enabled new broadcasters to enter the market and compete with the BBC and others. They have incentivised all broadcasters to invest and innovate in how audio-visual content is supplied to consumers.

The BBC operates at multiple levels of the value chain which is summarised in Figure 16.

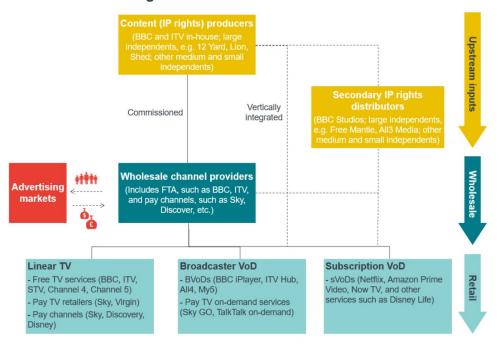


Figure 16 Broadcasting value chain

Source: Frontier Economics.

Notes: For simplicity in this stylised illustration of the value chain we have omitted providers of TV distribution services. TV distribution platforms include the Freeview platform on Digital Terrestrial TV, the Digital Satellite platforms supplied by Sky in the UK and FreeSat, and YouView. TV distribution platforms typically provide services to two groups of customers: end users (who buy set top boxes either directly from, or using IP licensed by, the TV distribution platform) and broadcasters who purchase transmission services and EPG services. This report does not consider downstream impacts on TV distribution platforms in detail because we assume that the additional content will be available on all versions of BBC iPlayer which is distributed in line with the BBC's Distribution Policy – see

http://downloads.bbc.co.uk/aboutthebbc/insidethebbc/howwework/policiesandguidelines/pdf/bbc_distribution_polici

4.2.1 Retail suppliers

At the **retail level**, broadcasters supply their services to viewers. Retail providers transmit this content via different distribution platforms, such as terrestrial, cable, satellite and broadband.

When considering the scope for "crowding out" to adversely affect competition it is necessary to consider the substitutes for BBC iPlayer. At the retail level these will include the following.

BVoD

Linear broadcaster's offer VoD services (e.g. BBC iPlayer, ITV Player, All4 and My5). These offer catch-up services provided by the main public broadcasters in the UK as well as library content. These services are accessed over IP and are available on a range of devices including smart TVs, mobiles, tablets or computers. With the exception of BBC iPlayer, which is funded through a licence fee, BVoD services are generally advertisement funded.

In this category we also include VoD services provided by PayTV providers as part of a PayTV subscription. PayTV retailers may bundle a video on demand (VoD)

service with their PayTV retail service and often provide access to catch-up and other VoD services to FTA channels and to PayTV channels' content⁴⁷ which enable subscribers to watch their on demand services on portable devices⁴⁸.

sVoD

There are many suppliers of audio-visual content in the UK via subscription OTT suppliers who distribute content such as Netflix, Amazon, NowTV⁴⁹ and Disney Life. These services are again accessed over IP on a range of devices and are funded through consumer subscriptions.

Linear TV channels

Linear free to air (FTA) channels via digital terrestrial television (DTT), satellite (Freesat or Sky's free-to-view satellite service), as well as via the Internet and OTT services. FTA is available free at the point of use and, with the exception of the BBC, is advertisement funded. In this report, we define FTA linear TV services as channels watched live at the time of broadcast, or recordings of programmes on these channels watched via personal video recorders (PVRs)⁵⁰.

PayTV retailers provide access to larger bundles of channels or access to niche genres (as well as to FTA channels). These are principally supplied in the UK by Sky via its satellite service and by Virgin Media via its cable TV service, but are increasingly available over IP (e.g. SkyQ⁵¹). Typically, Sky or Virgin may pay carriage revenues to the wholesale channels that are included within their different PayTV bundles, or they may self-provide channels (in the case of Sky), and retransmit FTA channels. PayTV broadcasters supply channels to PayTV retailers to include within TV bundles.

Other audio-visual content

There are many other forms of audio-visual content. The extent to which the incremental BBC iPlayer viewing will substitute for other content will depend on the specific behaviours of users. It is likely that viewing behaviour depends on a number of factors which include:

The age of viewers: younger viewers watch a wide range of content from different suppliers and of different formats. This could include short form content (for example content on video sharing sites such as YouTube); gaming on consoles; other forms of audio-visual content (for example, video content on social media).

51 https://www.sky.com/shop/tv/sky-q/

⁴⁷ See Sky TV on demand (https://www.sky.com/help/diagnostics/ondemand/ondemand-using-about) or Virgin Media on demand (https://my.virginmedia.com/your-tv-box/ondemand.html).

See Sky Go (https://www.sky.com/pages/sky-go/what-is-sky-go), or Virgin TV Anywhere (https://my.virginmedia.com/discover/tv/tvanywhere).

⁴⁹ NowTV is a standalone subscription VoD service offered on an Over the Top basis. It does not offer access to Sky's suite of linear channels included within its PayTV service.

This corresponds with BARB's 'Gold Standard' consolidated viewing (https://www.barb.co.uk/frequently-asked-questions/). https://www.barb.co.uk/frequently-asked-questions/.

- The device that content is viewed on: the likely substitutes for content when viewed on a TV set are likely to be different compared to the content when viewed on a portable device.
- The particular moment that content is watched: for example, watching on a portable device at home might lead to different viewing habits to those watching while travelling.
- The type of content that viewers want to watch: for example, viewers are more likely to watch news or current affairs services on live TV, but they may choose sVoD services to watch TV series and movies.

4.2.2 Upstream suppliers

There are a number of different upstream suppliers who supply inputs to broadcasters.

Advertisers

The publishing of **advertising** is a key source of revenue for commercial broadcasters (whether FTA or PayTV channels). Broadcasters supply content to viewers, and supply advertising "impacts" to advertisers who wish to reach viewers.

Content providers

Content producers create TV programmes to supply to broadcasters. Some broadcasters are vertically integrated and self-produce content, while others acquire content from independent producers. We therefore consider whether the new service could affect the supply of content.

Rights distributors

Secondary IP rights distributors act on behalf of the owners of the IP rights to exploit the rights to retailers who wish to acquire licences to broadcast the content. For example, rights can be licensed to linear and VoD retail content providers (both domestic and foreign). Some secondary IP rights distributors are also production companies (content producers), e.g. BBC Studios and All3Media.

4.3 Identifying suppliers affected horizontally by the changes

In the absence of the changes it is likely that BBC iPlayer audiences might instead watch other audio-visual content. The purpose of this section is to identify the providers of other audio-visual services that consumers would watch less of as a result of the incremental viewing of BBC iPlayer. In this report, we do not consider the development of potential entrants into the market such as Apple and Disney given the uncertainty and insufficient publicly available information on their plans. This also applies to BritBox, a paid-for video streaming service founded as a joint venture by the BBC and ITV.

As a result of the increase in content on BBC iPlayer (as described in section 1) the BBC expects that viewers will consume more BBC content compared to the counterfactual (i.e. where BBC iPlayer remains largely a catch up VoD platform). The questions for the PIT competition analysis are, first, what is the expected increase in BBC iPlayer viewing as a result of the changes, and second, where has incremental viewing to BBC iPlayer come from. In this section, we focus on the second question: where would the incremental viewing of BBC iPlayer come from.

Given that there is a continuum of services competing for a heterogeneous set of consumers, the closest substitute to BBC iPlayer will vary significantly across individuals. As noted in section 2.3, the degree of substitution will depend on the strength of substitution with BBC iPlayer, and the volume of consumption of the potential substitute.

In assessing the degree of substitution with BBC iPlayer there are two broad sources of evidence.

- First, we examine stated levels of diversion of substitutes with BBC iPlayer using survey data.
- Second, we consider the characteristics, attitudes and preferences of viewers when consuming BBC iPlayer and substitutes for it.

In order to make the modelling more tractable, we group the potential substitutes into four distinct segments as defined in section 4.2.1:

- BVoD;
- sVoD;
- Linear TV; and
- Other audio-visual content (YouTube or other sources of non-broadcast content including Facebook or games consoles).

In section 4.3.3, we consider whether the changes to BBC iPlayer will differentially affect providers *within* each category.

4.3.1 Quantitative assessment of stated actions in response to the BBC iPlayer changes

The BBC commissioned two surveys to understand the relative propensity to substitute BBC iPlayer for other services. We describe the two surveys below, then report the results on switching.

Description of the surveys

The BBC survey conducted by MTM ("the MTM survey")⁵² specifically asked respondents where they

The MTM survey was an online survey carried out in February 2019 with 2,000 participants. All respondents were aged 16+, and quotas were set on the following factors to ensure a representative sample of the British population: age; gender; ethnicity; region; BBC iPlayer usage; and BBC favourability.

would switch viewing from following the BBC iPlayer changes. An online self-selecting survey conducted by the BBC in December 2018⁵³ asked actual BBC iPlayer users, at time of consumption, what they would have watched had they not watched their BBC iPlayer show. These questions, while similar, are different: the MTM survey asks individuals which sources they would substitute viewing in order to watch BBC iPlayer content (which is a central question of this analysis); the online self-selecting survey asks individuals which sources they would substitute with instead of watching BBC iPlayer content if BBC iPlayer were unavailable. While the latter reveals important information on relative strength of substitution of different substitutes, it does not directly address the question of what viewers of incremental BBC iPlayer content would watch.

The two surveys have pros and cons.

Sample

The MTM results are weighted to provide a balanced sample reflective of the population. However, the MTM survey may understate the views of the subset of respondents *most likely* to watch BBC iPlayer, and understate the views of the subset of respondents who would watch a higher volume of content on BBC iPlayer (i.e. heavy BBC iPlayer users). Given that viewing of the BBC iPlayer content is likely to come disproportionately from heavy viewers of the BBC iPlayer, or those who otherwise have a strong affinity for BBC iPlayer, the responses from the MTM survey may under-weight reactions from these groups.

The "online self-selecting survey" explicitly captures those BBC iPlayer users who are *most* likely to use BBC iPlayer. However, it only captures BBC iPlayer users who watch on a device rather than on a TV set (around half of BBC iPlayer streams are on a device)⁵⁴. Given the survey required viewers to interrupt viewing in order to complete the survey, it potentially samples those *most* interested in BBC iPlayer. However, the online self-selecting survey would exclude new BBC iPlayer users who would switch to BBC iPlayer as a result of the changes.

Stated response

The MTM survey asks respondents for their hypothetical responses to the future changes to BBC iPlayer as described during the survey. While survey design and question formulation mitigate some biases, responses may still reflect hypothetical biases⁵⁵ and the respondents may not fully appreciate, understand or value the BBC iPlayer changes as described in the survey.

- The BBC ran an online pop up survey of over two and a half thousand people who used BBC iPlayer during the period 6th Dec 2018 to 20th Dec 2018. At the end of the programme they had viewed, users who agreed to take part were redirected to a separate browser tab to complete the survey.
- 54 BBC iPlayer Monthly Report, November 2018.
- Results of surveys which elicit respondents' hypothetical response to a described hypothetical future change should be treated with caution. Nonetheless, even if the magnitude of changes reported in state preference surveys should be treated with some caution, the relative impacts are likely to be reasonably accurate (i.e. any survey biases will equally effect all answers). For a number of reasons there are a number of potential biases that can overstate respondents propensity to act. These include: Acquiescence bias, where the customer thinks they should agree with a statement included in the question and therefore does so. Restrictive bias, where the question leads the customer to think only of certain options. Hypothetical bias, where a respondent may overstate their propensity to act. And Inertia bias where a consumer does not consider costs of changing their behaviour. See for example CMA (2018) Good practice in the design and presentation of customer survey evidence in merger cases.

The online self-selecting survey asks respondents to state their actions (albeit with a hypothetical statement of "what they would have done instead" at the time of the consumption). In this way it can be considered to be less susceptible to hypothetical biases than the MTM survey, though it did not specifically refer to the BBC iPlayer changes.

Survey results

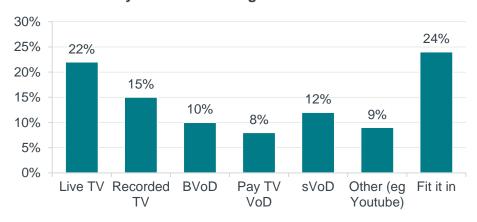
MTM Survey results

The MTM survey asked a number of questions related to viewers expected viewing habits as a result of the BBC iPlayer changes. The survey asked respondents if they would watch BBC iPlayer more after the changes, and if so, what one TV activity they would do less of.

Of the respondents who identified a specific category of TV service that they might substitute with to watch more BBC iPlayer, 22% said they would watch less linear TV, with a further 15% saying they would watch less recorded content. 12% of respondents would watch less sVoD⁵⁶, 10% said they would watch less BVoD and 9% said they would watch less of other content such as YouTube. The most common response was 'Something else – I'd just fit it in' (24%): this could reflect the fact that people would spend more time watching content, or that they could not think hypothetically what they would substitute their time away from.

Overall, the survey suggests that there will be a greater degree of substitution from linear TV than VoD.

Figure 17 What would viewers watch less of as a result of watching more BBC iPlayer after the changes?



Source: MTM Survey

Note: D7A. And if you had to choose ONE thing to do less of, which one would it be? Base: All who would use BBC iPlayer more/start using BBC iPlayer

BVoD includes BBC iPlayer, ITV Hub, All4, My5 and UKTV Play. PayTV VoD includes Sky On Demand, Virgin On Demand, BT TV On Demand and NowTV. sVoD includes Netflix and Amazon Prime Video.

The MTM survey also asked those individuals who said they would watch more BBC iPlayer as a result of the changes, what competitor service they would spend

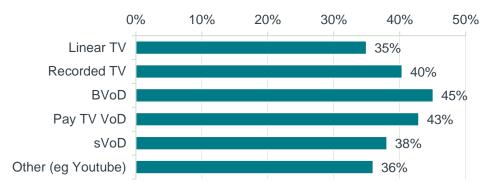
https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/708169/Survey_good_practice.pdf

The MTM survey included NowTV in the PayTV category.

less time watching (without having to specify one option). By comparing the number of individuals who spend less time watching a competitor service to the total number of individuals who watch the competitor service on a weekly basis, we can infer the categories of TV services which will be *proportionately* more impacted by the changes.

Figure 18 shows the percentage of individuals who would spend less time watching categories of TV services as a result of the BBC iPlayer changes divided by the number of people who watch it on a weekly basis. BVoD users are *proportionately* more likely to reduce their viewing as a result of the changes, than sVoD or linear TV. That is, BVoD will be *proportionately* more impacted by the changes.

Figure 18 Percentage of users who would watch less of a category as a result of the BBC iPlayer changes



Source: MTM Survey, 2019

Note:

D7. How likely would you be to find the time to use BBC iPlayer more by doing the following things? Base: All who would use BBC iPlayer more/start using BBC iPlayer

The value represents the number of individuals who would less of a category by the total number of individuals who watch it on a weekly basis.

BVoD includes BBC iPlayer, ITV Hub, All4, My5 and UKTV Play. PayTV VoD includes Sky On Demand, Virgin On Demand, BT TV On Demand and NowTV. sVoD includes Netflix and Amazon Prime Video.

Online self-selecting survey results

The online self-selecting survey asked respondents who used BBC iPlayer during the Christmas period, when additional boxset content was available, what they might have watched instead if their programme had not been available. The most popular response was to watch a different programme on BBC iPlayer (27%). Figure 19 shows the responses excluding BBC iPlayer cannibalisation. The most popular response (excluding BBC iPlayer cannibalisation) was to do something different other than watch TV/video (27%), followed by 'other online video (e.g. YouTube)' (13%). Linear, sVoD and BVoD also seem to be viewed as similarly substitutable, with sVoD slightly more substitutable. These findings differ from MTM and suggest that users are likely to view other non-TV online content such as YouTube, particularly those users who access BBC iPlayer on a device, though this may be a result of sample selection (for example it relates to viewers of iPlayer on a device).

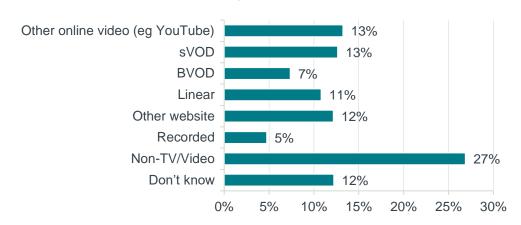


Figure 19 What would users have done if the TV programme they just watched on BBC iPlayer was not available?

Source: BBC online self-selecting survey, 2018

Note:

Q4.We would like you to imagine what you might have done instead if the TV programme that you just played in BBC iPlayer had not been available? (Respondents had to choose one option) We have excluded iPlayer cannibalisation (which was 27%) and scaled the answers up to sum to 100%.

'Other website' means trying to watch the same programme on another website. Linear includes all linear channels (e.g. BBC1, ITV1, Sky One). BVoD includes non-subscription catch-up services (e.g. ITV Hub, All4). sVoD includes subscription on-demand services (e.g. Amazon Prime Video, Netflix)

Conclusion

The responses to the surveys on the stated response to incremental viewing of BBC iPlayer were reasonably consistent in their *relative* impacts.

- The largest source of substitution would be linear TV (and recorded).
- sVoD would be the next largest source of substitution followed by BVoD and other.

However, as noted above, the degree of substitution depends on the strength of substitution and the volume of consumption.

Each minute of BVoD consumed might be more likely to switch to BBC iPlayer than each minute of linear or sVoD. The online self-selecting survey indicates that, for the 50% of BBC iPlayer streams that take place on a device, "other" content is the largest source of substitution.

4.3.2 Summary of the characteristics of, attitudes and preferences for BBC iPlayer and potential substitutes

We examined the characteristics of, and attitudes and preferences for BBC iPlayer, BVoD, sVoD, linear TV and other content. The purpose is to understand the strength of substitution (per minute of consumption of the substitute) or put another way the closeness of competition between BBC iPlayer and the potential substitute.

In this sector with many differentiated suppliers there are many different dimensions of competition and the strength of substitution (for individual suppliers relative to BBC iPlayer) will not necessarily go in the same direction across each

of the dimensions. Moreover, heterogeneous consumers mean that for each dimension of competition, the strength of substitution will vary considerably for individuals. This makes it difficult to rank the services in order of the strength of substitution.

Nonetheless, an assessment of the characteristics, attitudes and preferences can be informative in assessing the relative strength of substitution. We consider the following dimensions on which services could be differentiated.

- The commercial model / price
- Genre of content
- UK or non-UK focus
- Volume of VoD content
- Demographic behaviour
- Searching for content
- Cross substitution between BBC iPlayer and other services
- Attitudes of BBC iPlayer users
- Consumption of other AV content

We set out in full our analysis of these dimensions in Annex A, and provide a summary of our findings below.

Based on the qualitative analysis it is a possible to make a high level judgement on the relative strength of substitution between the different services. For obvious reasons, there is a degree of judgement in weighing evidence of the strength of substitution of different categories of substitutes, and of weighting the different types of evidence.

In practice, to estimate the relative impacts we place more weight on the stated substitutions (weighted by the current volume of actual consumption) and use the qualitative analysis to sense check this.

We have summarised the evidence below and attached a rating to illustrate the relative strength of substitution to BBC iPlayer for each category of evidence.

- Commercially funded BVoD is the closest substitute in terms of characteristics, though is consumed in relatively small volumes compared to sVoD, linear and other non-broadcast content. It is free at point of use like BBC iPlayer, however, it has adverts (unlike BBC iPlayer) and is primarily viewed as a catch up service. It is has similar content (mostly UK-originated), although the range is currently limited on ITV and My5. Younger viewers might substitute more from ITV or Channel 4, as they are proportionately more likely to use it. The evidence on cross consumption suggests a high degree of substitution.
- sVoD is a strong substitute (for the 40% of households that have access to sVoD). It has similar characteristics (in that it offers VoD) and the content is similar in some ways (with a strong focus on drama and comedy). It is similar to BBC iPlayer in that it does not show adverts. However, sVoD services are differentiated from BBC iPlayer in that they show largely US-originated content and have a much higher focus on movie content. There is a strong degree of

cross consumption (BBC iPlayer users are twice as likely to use sVoD than the general population). However, it is a subscription service, unlike BBC iPlayer (which is funded through a licence fee) and commercially funded BVoD which are free at point of use.

- While content available on PSB linear FTA channels is similar to BBC iPlayer (UK-originated with a mix of genres), it is not on-demand (though PVR enables time shifting of linear content). Linear TV's near universal reach means that it is available to all BBC iPlayer users. The evidence on searching for content on a TV finds that viewers often search first on linear before moving to VoD. However, for the proportion of BBC iPlayer content that takes place on a device, linear TV may be less of a substitute.
- Other audio-visual content (YouTube on a TV or device, other video on a TV or device and gaming on a console connected to a TV) is a relatively weaker substitute in terms of characteristics. However, it may be important for younger demographics who have shifted consumption from TV services to other audio-visual content over time. These groups are much more likely to navigate to other content on the TV and may therefore switch from "other" content to watch incremental BBC iPlayer content.

Figure 20 Summary of evidence on the strength of substitution ('*' indicate relative strength of substitution)

		,			
	BBC iPlayer	BVoD	sVoD	Linear	Other
Commercial VoD model /	Free at point of use	Advertising funded, free	Subscription	Advertising funded, free	N/A
price		****	***	****	
UK and non- UK focus	Mostly UK content	Mostly UK content, some US/international	Mostly US content	Mostly UK content	N/A
		***	**	***	
Genre of Mixed, drama and comedy focused, also entertainment and factual. Mostly TV	Mixed, factual and entertainment as well as drama and comedy. Mostly TV series	Mostly drama and comedy focused. More movie focused	Mixed, factual and entertainment as well as drama and comedy	Non-TV content	
	series	***	***	***	*
Volume of VoD content	Changes will bring to All4 or sVoD levels	All4 high volume, ITV Hub and My5 lower volume	High volume	N/A	N/A
		**	****		
Demographic behaviour	Appeals to all demographics	All4 and ITV Hub more popular among younger viewers	More popular among younger viewers	More popular among older viewers	More popular among younger users
		***	***	***	***
Cross consumption	What else do BBC iPlayer users consume?	Very high cross consumption of BVoD before and after choosing BBC iPlayer	High cross consumption of sVoD before and after choosing BBC iPlayer	Linear consumed less by younger age groups	Younger viewers have high consumption of YouTube
		****	***	***	***
Searching for content	How do BBC iPlayer users navigate to	Some consideration of BVoD	Some consideration of sVoD	High likelihood to consider live, pay or recorded TV	N/A
	content?	***	***	****	
Attitudes of BBC iPlayer users	How do changes affect attitudes to BBC iPlayer?	BVoD seen as primarily catch up	Changes position of BBC iPlayer closer to sVoD (a destination to find content)	N/A	N/A
		***	****		
Other types of AV content	Are other types AV content a substitute for BBC iPlayer?	N/A	N/A	N/A	Relatively weak substitution, though high volume
					^

Source: Frontier

Notes: As noted given it is difficult to weight the different categories of evidence it is not possible to simply add the weightings for different products. * indicates weak strength of substitution, ***** indicates evidence of very strong strength of substitution)

4.3.3 Differential impacts between BVoD, sVoD and linear TV providers

We consider the evidence of whether the changes to BBC iPlayer will differentially affect providers *within* each category. This considers whether the changes would proportionately affect ITV Hub, All4 or My5 differently; proportionately affect Netflix, Amazon Prime Video or NowTV differently; or proportionately affect groups of linear TV channels differently.

We have set out our approach to calculating the substitution from individual service providers as a result of the changes to BBC iPlayer in Figure 21. The degree of substitution will depend on the strength of substitution for an individual service relative to other services within the segment and the volume of consumption for an individual service. Our approach is as follows:

- First, for each segment we take the projected reduction in viewing as result of the changes to BBC iPlayer, (as forecast in the Communications Chambers model).
- Second, we estimate the reduction in viewing for each individual service within a segment based on its share of consumption⁵⁷, weighted by the strength of substitution index (discussed in detail below). Individual services (within each segment) which are relatively stronger substitutes for BBC iPlayer will be affected proportionately more than relatively weaker substitutes.

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We assume that consumption shares for individual service providers remain constant within a segment across the entire period. This means that any differential impact (i.e. a service provider being proportionately more impacted) is generated by differences in the strength of substitution. If we assumed that all services within a category were equally substitutable within a segment, then the *volume* of substitution would be determined by the consumption shares of the services. However, because of our assumptions (e.g. that consumptions shares remain constant across time) this would imply that each service is impacted *proportionately* the same (i.e. the reduction in viewing as a share of their total viewing would be the same).

Step 1: Take modelled substitution to BBC iPlayer Project consumption (shares) by service provider (e.g. Netflix, My5 by category etc.) in the counterfactual. Projects volume of substitution Take the total volume of from different providers given substitution to BBC iPlayer strength of substitution and by category from Step 3: Strength of substitution (from MTM survey) projected volume of consumption. Communication Chambers' model: (1) BVoD, (2) sVoD, (3) linear TV and (4) other. What proportion of each service's subscribers stated they would (e.g. Netflix, My5 etc.) switch to BBC iPlayer? evidence for consistency Do the results pass the sense check?

Figure 21 Approach to substitution by service provider

Source: Frontier Economics

Figure 22 shows the *strength of substitution* (proxied by the propensity of users who watch less of a service as a result of the changes to BBC iPlayer) for services within the BVoD, sVoD, and linear TV categories⁵⁸. Based on the survey results, we have derived an index weighting which reflects the relative strength of substitution between different individual services within a category. The index weighting shows the relative strength of substitution between different services. For example, ITV Hub is given an indexed weight of 0.8 relative to All4⁵⁹ which indicates that ITV Hub is less likely to be substituted with BBC iPlayer than All4⁶⁰.

They can be compared across segments, however, they do not directly relate to the expected total degree of substitution to BBC iPlayer. Since the degree of substitution to BBC iPlayer, as noted above, relates to the relative strength of substitution *and* the volume of consumption of substitutes.

⁵⁹ i.e. (46%/55%)

We have indexed BVoD services to All4; sVoD services to Amazon Prime Video; linear TV channels to Channel 5.

Figure 22 Strength of substitution within categories

	Share of users would use less of service as a result of the BBC iPlayer changes	•
BVoD		
ITV Hub	46	0.8
All4	55	5% 1.0
My5	78	1.4
Other BVoD	43	0.8
sVoD		
Netflix	35	5% 0.7
Amazon Prime Video	50	1.0
NowTV	57	7% 1.1
ITV Hub+	38	0.8
Linear TV		
ITV	17	0.8
Channel 4	18	0.9
Channel 5	20	1.0
Sky	20	1.0
Other channels	20	1.0

Source: MTM Survey; Frontier Economics analysis

Note:

Other BVoD relates to the percentage of viewers who would use less PayTV VoD, as data on other services is not available. ITV Hub+ relates to the percentage of viewers who would use less sVoD, as data on ITV Hub+ use is not available. While in theory it is possible to make inferences about the strength of substitution of, say, an sVoD service relative to a BVoD service or group of linear channels, our analysis does not consider this as we rely on the segment level estimates of substitution by Communication Chambers.

Among BVoD services, weekly My5 users are proportionately more likely to reduce viewing of My5 as a result of the changes than weekly users of other BVoD services. Therefore, we would expect the changes to have a proportionately larger impact on the viewing of My5 compared with ITV Hub or All4.

Similarly, according to the survey NowTV users are proportionately more likely to reduce their consumption of NowTV as a result of the changes relative to other sVoD services such as Netflix and Amazon Prime Video. We would therefore expect NowTV's viewing to be impacted proportionately more than other sVoD services.

The variation in the strength of substitution within linear TV is much smaller relative to BVoD and sVoD. However, within linear TV, viewers of Sky and 'other channels' (e.g. UKTV and Discovery) are proportionately more likely to reduce their viewing as a result of the changes to BBC iPlayer.

4.4 Identifying suppliers affected vertically by the changes

As noted in section 4.2 the BBC is vertically integrated across a number of levels of the value chain. We identify two potential sources of suppliers elsewhere in the value chain which could be affected by the BBC iPlayer changes:

- Downstream competitors impacted by input foreclosure; and
- The production sector impacted through a reduction in the value of secondary windows for content commissioned by BBC.

Downstream competitors impacted by input foreclosure

One potential hypothesis is that the BBC could engage in a form of input foreclosure. Input foreclosure could occur if a rights holder uses a position of market power in an upstream market to restrict (either fully or partially) the supply of content inputs to downstream competitors (see Figure 23).

As a rights holder, the BBC licenses UK secondary rights to other downstream broadcasters. Furthermore, it acts as the distributor for a number of third party producers who license UK secondary rights to downstream broadcasters.

Competition could be adversely affected by the changes to BBC iPlayer if the BBC had the ability and incentive to engage in input foreclosure, and the changes directly affect either the BBC's ability or incentive to do so.

Figure 23 Input foreclosure



Source: Frontier

In this case, the affected suppliers would be downstream competitors who acquire the licence to rights of secondary content in downstream markets. These include sVoD providers such as Netflix, Amazon or NowTV; PayTV providers such as Virgin Media and Sky (who acquire licences to exploit VoD content); FTA or PayTV linear channels such as UKTV.

The production sector affected by a reduction in the value of secondary windows for content commissioned by BBC

The content commissioned from third party producers by the BBC and shown on linear platforms and on BBC iPlayer is also exploited by the producers in other

windows and formats. A change in how the content is exploited by the BBC in its primary window could potentially affect the value of the content to third party producers⁶¹.

⁶¹ Third party producers include qualifying and non-qualifying independent production companies.

5 HORIZONTAL ASSESSMENT ON COMPETITION

5.1 Introduction

The changes proposed by the BBC are intended to attract audiences to its BBC iPlayer service which will enable it to meet its Mission and deliver its Public Purposes in the context of changing audience demand. In the absence of the changes the BBC expects that audiences will be less likely to watch the BBC's services, and reach of its public services will be diminished.

Section 4 has identified the suppliers that are horizontally affected by the BBC's proposed changes to BBC iPlayer. The framework for considering whether the changes to BBC iPlayer has adverse horizontal effects on competition considers static impacts, and where there are static impacts, then any consequent dynamic impacts.

In this section, we consider whether the changes would lead to an adverse impact on competition as a result of horizontal impacts.

This section is set out as follows.

- Section 5.2 summarises the horizontal static impacts on viewing of substitutes to BBC iPlayer.
- Section 5.3 summarises the horizontal static impacts on revenues and profit margins of substitutes to BBC iPlayer.
- Section 5.4 summarises the combinatorial horizontal static impacts on revenues and profit margins for providers who supply in a number of different segments.
- Section 5.5 summarises the dynamic impacts.

5.2 Summary of the static impact on volumes

A separate report considers the static impact on volumes for different suppliers. The analysis considers four categories of content. These are:

- Commercially funded BVoD including ITV Hub, All4 and My5;
- sVoD including Netflix, Amazon and NowTV (as well as ITV Hub+);
- Linear TV (inc. PVR); and
- Other content viewed on a TV set or on other devices, including audio-visual content (for example, short form videos) and non-audio-visual content (for example, commenting on social media).

For each we set out below⁶²:

Counterfactual forecasts of viewing; and

We do not calculate counterfactual revenues for other content on TV and other devices because the category encompasses such a wide range of activities and suppliers.

Counterfactual revenues.

5.2.1 Counterfactual forecasts of viewing

In order to measure the impact of the BBC iPlayer changes on the viewing of other services, we need to identify the counterfactual. This shows how time spent on BBC iPlayer, commercially funded BVoD, sVoD, linear TV and other viewing on TV and other devices is likely to change absent the proposed changes to BBC iPlayer. We have used the Communication Chambers forecasts of viewing of BBC iPlayer, commercially funded BVoD, sVoD and linear TV services and viewing on the TV set and other devices over the period 2019-2024 as the baseline. The full set of assumptions that underpin the counterfactual volume of viewing are set out in Communications Chambers' report.

Figure 24 sets out the viewing per individual per day in the counterfactual of no change.

Figure 24 Viewing in the counterfactual (mins / individ / day)

	2019	2020	2021	2022	2023	2024
BBC iPlayer	5.2	5.4	5.7	5.9	6.1	6.3
Commercially funded BVOD	3.8	4.6	5.3	6.1	5.9	6.7
sVoD	26.0	29.5	33.0	35.4	37.8	40.1
Linear TV (inc. PVR)	191.0	187.0	184.0	181.0	177.0	175.0
Other (on a TV set or other device)	177.0	184.6	192.1	199.7	208.2	215.8
Total	402.9	411.1	420.2	428.1	435.0	443.9

Source: Communication Chambers

5.2.2 Counterfactual revenue forecasts

Based on the increased volumes forecast in the counterfactual we forecast counterfactual revenues for BVoD, sVoD and linear TV.

Figure 25 Counterfactual revenues (£m)

	2019	2020	2021	2022	2023	2024
Commercially funded BVoD	464	553	644	737	710	807
sVoD	1,632	1,854	2,077	2,225	2,373	2,521
Linear advertising (inc. PVR)	3,663	3,586	3,529	3,471	3,395	3,356

Source: Frontier Economics analysis

There is a degree of uncertainty in relation to revenue forecasts. For simplicity we assume that:

- revenues increase in proportion with volumes;
- shares within categories (e.g. sVoD) are static.

We note that there is an asymmetry in the assumption used to forecast counterfactual revenues (where for simplicity we assume that counterfactual

revenues increase linearly with volumes) and the impact of a marginal change in viewing (where we in addition consider whether there is an elasticity impact on the price of advertising) in the factual. However, while there is a degree of uncertainty in the counterfactual estimates, the results are not significantly sensitive to the precise counterfactual assumptions⁶³.

5.2.3 Static impact on viewing

Conceptually, the analysis needs to identify the competitor set that BBC iPlayer competes with: where do incremental viewers to BBC iPlayer switch from as a result of the changes to BBC iPlayer?

As noted in section 2.3 the degree of substitution to BBC iPlayer from other services will depend on (i) the volume of consumption of other substitutes (which as noted in Figure 24 varies over time); and (ii) the strength of substitution of other substitutes. The static impact analysis indicated that an additional 1.9 minutes per day per individual of BBC iPlayer would be viewed as a result of the changes by 2024 (Figure 26).

Figure 26 Annual change in viewing per individual (mins/individual/day)

	2019	2020	2021	2022	2023	2024
BBC iPlayer	0.8	1.5	1.6	1.7	1.8	1.9
Commercially funded BVOD	-0.1	-0.1	-0.2	-0.2	-0.2	-0.2
sVoD	-0.1	-0.3	-0.3	-0.4	-0.4	-0.4
Linear TV (inc. PVR)	-0.4	-0.6	-0.7	-0.7	-0.7	-0.7
Other (on a TV set or other device)	-0.2	-0.4	-0.4	-0.5	-0.5	-0.5
Total	0.0	0.0	0.0	0.0	0.0	0.0

Source: Communication Chambers

The absolute change in viewing implies the percentage change in viewing relative to the counterfactual set out in Figure 27.

Figure 27 Annual percentage change in viewing compared to counterfactual

0001110110	•••••					
	2019	2020	2021	2022	2023	2024
BBC iPlayer	15.0%	27.0%	27.9%	28.6%	29.2%	29.5%
Commercially funded BVOD	-1.4%	-2.6%	-2.9%	-3.1%	-3.4%	-3.4%
sVoD	-0.5%	-0.9%	-1.0%	-1.0%	-1.0%	-1.0%
Linear TV (inc. PVR)	-0.2%	-0.3%	-0.4%	-0.4%	-0.4%	-0.4%
Other (on a TV set or other device)	-0.1%	-0.2%	-0.2%	-0.2%	-0.2%	-0.2%

Source: Communication Chambers

This is because the key result that we report is the percentage impact on revenues, compared to the counterfactual as a result of the BBC iPlayer changes. The impact of BBC iPlayer (expressed as a percentage change) does not vary with changes in the level of counterfactual revenues.

5.2.4 The impact of increased children's content on BBC iPlayer

Approximately a quarter of the uplift in BBC iPlayer consumption is as a result of increased viewing of children's programming on BBC iPlayer. Children's content on BBC iPlayer is a substitute for children's programmes and programmes not specifically for children (but are nevertheless watched by children) on commercially funded BVoD, sVoD, linear TV services and other content available on TV sets and other devices.

We have therefore considered whether the degree of substitution between BBC iPlayer and each category of substitute is similar for aged 4-16 demographic compared with the 16+ demographic.

There is limited information on the propensity of aged 4-16 to substitute to alternative inputs as a result of the BBC iPlayer changes. This reflects the greater difficulty and complexity of surveying children⁶⁴. However, analysis of internal BBC data on weekly time spent by children watching different BVoD and sVoD services suggests that children's shares of viewing for each BVoD and sVoD service are similar to that of adults. Children's viewing of commercially funded linear TV services is highly fragmented across many different channels and so time spent viewing any one service is small.

We therefore assume that inclusion of increased children's content on BBC iPlayer is reflected in the results set out in this section.

5.3 Static impacts on revenues and profit margins

We set out the impact on revenues and profit margins for suppliers in different segments which are affected by the changes to BBC iPlayer. We consider the impacts on suppliers of ⁶⁵:

- Commercially funded BVoD services;
- sVoD services:
- Linear TV services; and
- PayTV services.

For each of these groups of suppliers, we first consider the impact on viewing of their services. Where there is a non-negligible impact (greater than 1%), we further consider, where possible, the impact on revenues and profit margins.

5.3.1 Commercially funded BVoD

The modelling suggests that the incremental content on BBC iPlayer would lead to a reduction in the volume of viewing of commercially funded BVoD services (excluding BBC iPlayer) of 1.4% in 2019, growing to 3.4% by 2024. The commercially funded BVoD providers include ITV Hub, All4 and My5 and ondemand services from PayTV providers such as Sky, Virgin or TalkTalk.

⁶⁴ For example surveys which seek to ask children to complete diaries are more prone to error or bias.

We do not consider other services, such as DVDs or other online video services, as we expect the impacts to be small and spread over a wide range of services such that the impact is minimal.

Figure 28 shows the reduction in viewing for ITV Hub, All4, My5 and 'other' (which includes all other commercially funded BVoD services). Our model assumes that the reduction in viewing for commercially funded BVoD providers depends on the strength of substitution and the volume of consumption. As a result, the viewing for My5, whose users are more likely to reduce their consumption as a result of the BBC iPlayer changes, experiences a proportionately greater reduction in viewing than ITV Hub, All4 or 'other'.

Figure 28 Annual impact of BBC iPlayer changes on BVoD volumes (mins/individual/day)

	2019	2020	2021	2022	2023	2024
ITV Hub	-1.3%	-2.4%	-2.7%	-2.8%	-3.1%	-3.1%
All 4	-1.5%	-2.9%	-3.2%	-3.5%	-3.7%	-3.8%
My 5	-2.2%	-4.2%	-4.6%	-4.9%	-5.3%	-5.3%
Other	-1.2%	-2.3%	-2.5%	-2.7%	-2.9%	-2.9%

Source: Frontier Economics calculations based on Communication Chambers modelling

Counterfactual revenues

The commercial model of BVoD providers relies on attracting viewers to sell digital advertising, as well as sponsorship revenues related to programming broadcast on BVoD. Figure 29 shows the counterfactual revenues we have calculated for each of the commercial BVoD providers.

Figure 29 Counterfactual revenues of BVoD providers (£m)

	2019	2020	2021	2022	2023	2024
ITV Hub	241.5	288.2	335.5	383.8	369.9	420.3
All 4	102.0	121.8	141.8	162.1	156.3	177.6
My 5	38.3	45.7	53.2	60.8	58.6	66.6
Other	81.9	97.7	113.8	130.1	125.4	142.5

Source: Various annual reports; Ofcom; Frontier Economics calculations based on Communication Chambers modelling

Notes: Revenue data from the latest year available for each of the different BVoD providers. We estimate the revenues for the different BVoD providers as follows: ITV Hub: we subtract total advertising revenue in 2017 from net advertising revenues (i.e. linear TV advertising). We then calculate 2018 digital advertising, as ITV reported the growth in digital advertising revenues (34%) between 2017 and 2018. All 4: we use the digital revenues stated in Channel 4's 2017 annual report. We note that this includes other revenues such as syndication on third party platforms which may not be digital advertising. My 5: we use revenue data for 2016 and 2017 from Channel 5 Broadcasting Ltd, available on Companies House. We note that these revenues include advertising sales, as well as sales of programme rights and premium rate telephone services and may therefore overestimate advertising revenues. As digital revenues cannot be identified, we assume that the share of digital to linear revenues for ITV and Channel 4. Other: we subtract the revenues for ITV Hub, All4, and My5 from total BVoD online advertising revenues, as reported by Ofcom⁶⁶. We assume commercially funded BVoD revenues grow proportionately with viewing of commercially funded BVoD services.

Impact of changes on revenues

To assess the impact of the BBC iPlayer changes on revenues, we use the reduction in volumes to estimate the expected decline in revenues. We note that the relationship between changes in viewing and advertising revenues may not be

⁶⁶ Ofcom Communications Market Report 2018, p79

on a one for one basis. This is because the decline in viewing leads to a reduction in the supply of VoD advertising, which in turn can lead to an offsetting elasticity response in prices.

While in many cases VoD advertising is sold alongside linear TV advertising the two are not necessarily perfect substitutes. Indeed, it is the stated strategy of broadcasters to develop their VoD services precisely to offer enhanced value for their advertising customers (whether through better targeting, or more engaging adverts) and differentiate their VoD advertising proposition from linear advertising.

This can mean that customers are to a degree inelastic in their demand for VoD advertising, and that a reduction in supply of digital advertising does not lead to substitution to linear advertising.

Estimating the precise price elasticity response to changes in the volume of supply in VoD advertising is challenging (see box below on Ofcom's approach to estimating the elasticity impact of reduction in supply of advertising impacts on all TV).

ESTIMATING THE ELASTICITY RESPONSE TO A REDUCTION IN THE SUPPLY OF ADVERTISING

Ofcom, in its previous assessments of the impact of BBC services on TV advertising of assumed that a reduction in the supply of TV advertising impacts leads to an elasticity price response (i.e. the price per impact increases). Therefore the impact of a reduction in the volume of advertising is offset by an increase in price. It notes that precisely estimating the scale of the elasticity response is empirically difficult and a number of analyses have tried to estimate the impact, though the different studies produce a wide range of potential estimates.

Therefore Ofcom chose a low, medium and high estimate of the elasticity: a 1% reduction in industry supply of advertising reduces revenues by 0.67%, 0.5% and 0.33% respectively.

We have therefore used assumptions used previously by Ofcom⁶⁸. Specifically we assume that a 1% reduction in viewing leads to a 0.67% reduction in VoD advertising revenues (i.e. consistent with Ofcom's "low" assumption for total TV revenues). The reason we use Ofcom's "low" elasticity assumption is that a reduction in the volume of viewing to VoD will reduce supply of VoD advertising impacts, but will also reduce *demand* for VoD advertising impacts since some (but not all) VoD advertisers will switch to linear advertising (i.e. there would be a limited reduction in demand of VoD advertising as a result of the increase in price). Therefore we would expect the elasticity effect to be lower than the case of a similar reduction in supply of *all* TV advertising (where there is no offsetting reduction in demand).

Ofcom (2018) BBC Scotland Competition Assessment, Final Determination Annex 3: Assessment of Market Impacts https://www.ofcom.org.uk/ data/assets/pdf file/0024/115269/BBC-scotland-statement-annex-3-market-impacts.pdf.

Ofcom (2018) BBC Scotland Competition Assessment, Final Determination Annex 3: Assessment of Market Impacts https://www.ofcom.org.uk/ data/assets/pdf file/0024/115269/BBC-scotland-statement-annex-3-market-impacts.pdf

Figure 30 shows the estimated change in revenues as a result of the changes to BBC iPlayer. The largest reduction in revenues is for ITV Hub, for which revenues decline by £2.0m in 2019, increasing to £8.7m in 2024. All4 and My5, which have lower digital revenues, have smaller absolute declines in revenues.

Figure 30 Annual impact of BBC iPlayer changes on BVoD revenues (£m)

	2019	2020	2021	2022	2023	2024
ITV Hub	-2.0	-4.7	-6.0	-7.3	-7.6	-8.7
All 4	-1.1	-2.4	-3.1	-3.8	-3.9	-4.5
My 5	-0.6	-1.3	-1.6	-2.0	-2.1	-2.4
Other	-0.7	-1.5	-1.9	-2.3	-2.4	-2.8

Source: Various annual reports; Ofcom; Frontier Economics calculations based on Communication Chambers modelling

Figure 31 shows the annual percentage reduction in revenues for BVoD services as a result of the changes to BBC iPlayer. My5 is forecast to experience the largest percentage reduction in revenues as users of My5 are more likely to reduce their consumption as a result of the changes to BBC iPlayer.

Figure 31 Annual impact of BBC iPlayer changes on BVoD revenues (%)

	2019	2020	2021	2022	2023	2024
ITV Hub	-0.8%	-1.6%	-1.8%	-1.9%	-2.1%	-2.1%
All 4	-1.0%	-2.0%	-2.2%	-2.3%	-2.5%	-2.5%
My 5	-1.5%	-2.8%	-3.0%	-3.3%	-3.5%	-3.6%
Other	-0.8%	-1.5%	-1.7%	-1.8%	-1.9%	-2.0%

Source: Various annual reports; Ofcom; Frontier Economics calculations based on Communication Chambers modelling

Impact of changes on profit margins

We estimate the impact of the changes to BBC iPlayer on profit margins for ITV, Channel 4 and Channel 5.69 In calculating the 2017 (or 2018) profit margins we make the following assumptions:

- We do not include any revenues or costs related to the production activities of for ITV (i.e. ITV Studios).
- We assume that the profit margin is the same between TV and digital, as it is not possible to separate the TV and digital costs.

In the counterfactual, we assume that profit margins remain at their 2017 level for Channel 4 and Channel 5 and at their 2018 level for ITV. There has been no significant variation in profit margins within the past three years: there has been a slight downward trend in profit margins for ITV and Channel 4, and an overall increase for Channel 5.

The annual report of ITV sets out the profit (EBIDTA) margins for 2017 and 2018 financial year, the Channel 4 annual report sets out the operating surplus/deficit for the 2017 financial year and the Channel 5 Broadcasting Ltd annual reports set out the operating margin for the 2017 financial year. ITV's margin in 2017 was 28.6% and in 2018 26.5%; Channel 4's margin in 2017 was -2.6%; and Channel 5's operating margin was 11.8% for 2017.

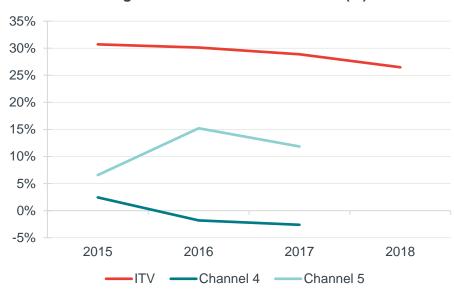


Figure 32 Profit margins of selected BVoD services (%)

Source: Companies' annual reports

Note: For ITV, we use the Broadcast and Online adjusted EBITA. For Channel 4, we use the operating surplus/deficit margin. For Channel 5, we use the operating margin.

We estimate costs by using the counterfactual revenues and the counterfactual profit margins. We then assume these costs are fixed regardless of whether the BBC iPlayer changes occur, though we note that this is a conservative assumption. 70

Figure 35 shows the percentage point change in the profit margin that would occur as a result of the BBC iPlayer changes. While My5 experiences the largest percentage point reduction in profit margins, its expected profit margin in 2024 (8.6%) is still expected to be larger than its profit margin in 2015 (6.6%)⁷¹.

Figure 33 BVoD profit margins in the counterfactual (%)

	2019	2020	2021	2022	2023	2024
ITV Hub	26.5%	26.5%	26.5%	26.5%	26.5%	26.5%
All4	-2.6%	-2.6%	-2.6%	-2.6%	-2.6%	-2.6%
My5	11.8%	11.8%	11.8%	11.8%	11.8%	11.8%

Source: Various annual reports; Frontier Economics calculations based on Communication Chambers modelling

Figure 34 BVoD profit margins in the factual (%)

	2019	2020	2021	2022	2023	2024
ITV Hub	25.8%	25.3%	25.1%	25.1%	24.9%	24.9%
All4	-3.7%	-4.7%	-4.9%	-5.0%	-5.2%	-5.3%
My5	10.5%	9.3%	9.1%	8.9%	8.6%	8.6%

Source: Various annual reports; Frontier Economics calculations based on Communication Chambers modelling

We assume costs are variable with viewing time in the counterfactual (i.e. in the counterfactual margins are constant in each year). But in assessing the impact of the changes to BBC iPlayer we assume that that costs are fixed.

Channel 5 Broadcasting Ltd Annual Report 2015

Figure 35 Annual change in BVoD profit margins as a result of the changes to the BBC iPlayer (percentage points)

	2019	2020	2021	2022	2023	2024
ITV Hub	-0.6pp	-1.2pp	-1.3pp	-1.4pp	-1.5pp	-1.6pp
All4	-1.1pp	-2.1pp	-2.3pp	-2.4pp	-2.6pp	-2.7pp
My5	-1.3pp	-2.5pp	-2.8pp	-3.0pp	-3.2pp	-3.3pp

Source: Various annual reports; Frontier Economics calculations based on Communication Chambers modelling

Conclusion on static impacts for BVoD

Our analysis shows that the proposed changes to BBC iPlayer would reduce revenues by £8.7m for ITV, £4.5m for Channel 4 and £2.4m for Channel 5. Section 5.5 considers whether the estimated static impact would lead to an adverse impact on competition (for example by crowding out investment or innovation).

5.3.2 sVoD

The modelling suggests that the proposed changes to BBC iPlayer would lead to a reduction in the volume of viewing of sVoD services of 0.5% in 2019, growing to 1.0% by 2024. The sVoD providers include Netflix, Amazon Prime Video, NowTV, ITV Hub+ and others such as Disney Life.

We expect that in coming years new providers who control substantial volumes of high value media assets (such as Apple, Disney or Time Warner) will enter the sVoD market. Given there is a degree of uncertainty over the precise plans and content offerings we have not factored these entrants into our modelling. However, we would expect that, given the value proposition that these new providers can offer, their decision to enter would not be affected by the proposed changes to the BBC iPlayer. Moreover, these services would provide a much more pressing challenge to current sVoD services given the similarity of content and potential to exclusively exploit vast and high valuable existing content catalogues.

Would a decline in viewing of sVoD affect the propensity to subscribe?

The change in sVoD volumes indicates that viewing of sVoD services could be 1.0% lower per year from 2024 as a result of the increase in content on BBC iPlayer. The relationship between sVoD revenues and viewing depends on the relationship between viewing and the propensity to subscribe.

There are many reasons why viewers choose to subscribe to an sVoD service and these would remain, irrespective of whether the BBC went ahead with its proposed changes.

A significant number of subscribers to Netflix and Amazon Prime Video choose to do so because of the original content provided by these services. 38% of Netflix subscribers and 19% of Amazon Prime Video subscribers stated in Q1 2018 that 'to watch original series made by the provider' was a reason for signing up⁷². Given the continued levels of high investment by Netflix and

GfK SVoD Tracker, Q1 2018 (through Ofcom - Media Nations Report, 2018)

Amazon in original content, it is likely that these factors will continue to drive the growth and retention of their subscriber base, irrespective of the incremental content offered on BBC iPlayer.

- Customers also choose sVoD services because they offer content not available elsewhere. 32% of Netflix subscribers, and 18% of NowTV subscribers stated that reason for signing up was 'to watch exclusive content not available elsewhere'⁷³. For example, NowTV's most expensive package is its Sports pass which costs £33.99 per month. Given that the incremental content is unlikely to focus on sport, it is unlikely that consumers would cancel their subscription to this service.
- Amazon Prime in particular offers a wide range of other benefits alongside its sVoD service (at least for its most popular subscription package) which make it unlikely that customers will cancel their subscription. These services, especially its one-day delivery service, are often cited as the most important reasons for subscribing to it: 51% of Amazon Prime Video subscribers said that 'to obtain free shipping' was the reason for signing up⁷⁴.
- Consumers are increasingly choosing to multi-home, subscribing to multiple sVoD services as well as PayTV. 51% of sVoD subscribers have more than one subscription, and 71% of sVoD subscribers have a PayTV subscription⁷⁵. As products are increasingly seen as complementary (i.e. consumers enjoy accessing multiple sources of content), it is likely that, to the extent that BBC iPlayer does encourage additional viewing, this will not encourage people to cancel their subscription.
- Consumers who subscribe to sVoD services typically watch a large volume of content. For example, Netflix users watch, on average, 7 hours and 20 minutes of TV content per week⁷⁶. For a consumer to cancel their subscription because of the changes to BBC iPlayer, they would have to replace their entire viewing of a sVoD service with BBC iPlayer or other sources of content.

Nonetheless some marginal viewers of sVoD services would consider switching. Therefore we explore below survey evidence on the propensity of switching.

Survey evidence

The BBC's MTM survey asked respondents whether they would cancel their subscription. This is discussed in Annex B and summarised below.

In particular, the survey asked all respondents that who stated that they would watch less paid-for catch-up/on demand TV whether they would cancel a VoD service. The survey asked respondents to choose from a list of four (prompted, and unrandomised) options⁷⁷.

⁷³ GfK SVoD Tracker, Q1 2018 (through Ofcom - Media Nations Report, 2018)

⁷⁴ GfK SVoD Tracker, Q1 2018 (through Ofcom - Media Nations Report, 2018)

Ofcom Media Nations Report 2018

⁷⁶ GfK SVoD Tracker Q2 2018

⁷⁷ D10. You've said that you might spend less time watching TV programmes and films accessed on-demand through a pay-TV or online subscription service. Which of these statements best describes you? DO NOT RANDOMISE. SINGLE CODE ANSWER LIST. 1. I'd consider cancelling a subscription service if BBC iPlayer made these changes 2. I'd definitely cancel a subscription service if BBC iPlayer made these changes 3.I wouldn't cancel any of my current subscriptions to TV services, I'd just spend less time watching them 4. Don't know

Figure 36 Percentage of sVoD users that would cancel subscriptions (prompted)

	Definitely cancel	Consider cancelling
Total sVoD users	6.8%	14.1%
Single-person households	5.3%	9.0%
Multi-person households	7.1%	15.0%

Source: MTM

Additionally, the survey asked unprompted, those who said they would consider cancelling a service which service they would consider cancelling (though these figures should be treated with care given the small sample sizes involved).

Figure 37 Percentage of sVoD users that would cancel subscriptions (unprompted)

	Definitely cancel	Consider cancelling
Amazon	1.0%	3.8%
Netflix	0.8%	5.2%
NowTV	0.3%	2.4%
Any sVoD	1.5%	6.7%

Source: MTM

Notes: These results should be interpreted with caution since the base is very low. Weighted number of unprompted responses for would definitely cancel: Netflix (13), APV(7), NowTV(2). Weighted number of unprompted responses for would consider cancelling: Netflix (45), APV(48), NowTV(15)

When prompted 6.8% of sVoD users noted that they would definitely cancel a subscription and 14.1% said they would consider cancelling a subscription. However, when asked which specific services they would cancel, only 1.5% sVoD users stated that they would definitely cancel and 6.7% stated that they would consider cancelling.

In order to understand the impact on subscription revenues given the reported actions of subscribers we make three adjustments. We adjust the results from the survey to:

- account for response bias in survey responses;
- account for the fact that in multi-person households the decision to cancel a subscription would depend on the attitudes of all members of the household, not just the individual answering the survey; and,
- consider the impact that many households hold multiple subscriptions and are likely to consider cancelling the "marginal" subscription.

Interpreting the results given response bias

All surveys are necessarily imperfect mechanisms to understand future outcomes. Survey respondents are subject to a number of biases⁷⁸. In some cases there are

See for example CMA (2018) Good practice in the design and presentation of customer survey evidence in merger cases.

https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/708169/Survey_good_practice.pdf

techniques that can be used to minimise scope for over overstatement bias⁷⁹. This does not mean that they do not provide valuable evidence on views of consumers, rather that the results should be interpreted appropriately⁸⁰.

- The described BBC iPlayer changes are necessarily a "double hypothetical" question. The survey asks consumers to posit what their hypothetical response would be to a number of hypothetical changes that could be made to a service that they use⁸¹.
- Consumer stated hypothetical reactions can be framed by the survey design.
 For example, the questions immediately preceding the questions on stated response asked consumers about their favourability for the proposed changes.
- More generally, survey results which ask about specific actions can be subject to overstatement bias. Typically spontaneous, unprompted results are more appropriate where consumers are likely to recall the specific actions that they may undertake. There is a potential for prompted responses to lead to response biases (where consumers overstate their propensity to act).
- In addition to a general overstatement bias, some services can specifically be subject to inertia bias. This is a tendency to understate the costs or barriers of changing existing behaviours.

Based on the above reasons and past Ofcom reports, we apply a 75% weight to "definitely would buy" and do not include responses of those that would "consider" cancelling⁸².

Accounting for subscription decisions of those that live in multi-person households

The BBC survey asked respondents about their personal views on their hypothetical action (whether they personally would watch more BBC iPlayer, and if so, whether they would therefore cancel a subscription service). However, subscription decisions to household services (such as TV) are *household* decisions involving the whole household. Furthermore, services such as Netflix offer subscription packages where up to four users can use the subscription at once. As such, the decision to cancel the subscription may not belong to the individual responding to the question. Therefore we have made an adjustment to the responses to account for the fact that different members of a household would have heterogeneous preferences⁸³.

- For example some surveys use revealed preference techniques to understand preferences (for example by asking consumers to rank pairs of options which have a limited number of differentiating features). Surveys can ask consumers hypothetical questions but about goods and services that they know and understand (for example willingness to pay surveys might take an existing product and ask consumers iteratively for their value of it at ever higher prices).
- While we recognise that some of these adjustments can be applied to other results in the MTM survey, these are unlikely to impact the results. In other sections of this report, specifically section 4.3, we are more interested in the relative impacts of the results. As any adjustments would be likely to apply to all services, it is unlikely that the relative impact would change.
- This is in contrast to surveys designed to understand the impact of a price increase where it is assumed that the service remains the same and therefore respondents only have to consider a single hypothetical aspect in the question. For example, with a survey designed to understand the impact of a price increase (such as a SSNIP survey in market definition for competition analysis) where it is assumed that the service remains the same but increases in price by 10%.
- We discuss in greater detail the reasoning behind this value (and the Ofcom reports we consider) in Annex B.3.
- Note that this adjustment is different to the inertia bias that is inevitable in purchase decisions which reflect more than person, i.e. the "costs" and frictions involved in making a decision where more than one person is involved, which are not present when a purchase decision is taken unilaterally.

In order to down weight the cancellation decisions to reflect the fact that many subscribers live in multi-person households with individuals who would **not** cancel their subscription we apply a weighting of 61%.

Accounting for multi-homing subscriptions

Finally, we make an adjustment to account for the fact that half of sVoD households subscribe to more than one sVoD service. This means that it is likely when a subscriber notes that they would cancel a subscription, where the subscriber has more than one subscription service that they would only cancel one service.

sVoD subscribers are likely to have a "hierarchy" of sVoD services (i.e. each incremental service provides diminishing utility). They would cancel their subscription with the service that is watched least.

Therefore, assuming that 6.8% of households would cancel, but that multi-homing households would only cancel one service as a result of substitution of some viewing to BBC iPlayer, this would imply that only 4.1% of subscriptions would be cancelled⁸⁴. This implies an adjustment of 61% (i.e. 4.1% / 6.8%).

Total forecast impact on subscriptions

Based on the adjustments set out above, we anticipate this would lead to a 1.9% reduction in subscriptions.

Counterfactual revenues

We have estimated 2018 revenues for each subscription service separately, based on the number of subscribers to that service multiplied by the average price of a subscription (excluding VAT), taking into account the different packages people subscribe to (e.g. Netflix's Basic, Standard, and Premium subscription packages)⁸⁵. This is likely to overestimate revenues given that sVoD services may not receive all the revenues if they have been purchased through an external platform (such as Apple) or if a customer received special discounts.

We have extrapolated future revenues based on the forecasted increase in viewing.86

Figure 38 shows the estimated revenues for the three largest sVoD providers in the UK (Netflix, Amazon Prime Video and NowTV) and ITV Hub+.

⁸⁴ The number of cancelled services = 6.8%*13.4m = 800k cancellations. 800k expressed as a percentage of total subscriptions = 800k / 21.9m = 4.1%.

For example, based on GfK SVOD Tracker Q2 2018, we know that 25% of Netflix subscribers have a Basic subscription which costs £5.99 per month; 46% had a Standard subscription which costs £7.99 per month; 26% had a Premium subscription which costs £9.99 per month; and we have assumed the 3% which didn't know what subscription they have, have a Standard subscription. Note that for NowTV we did not know the breakdown so have assumed an equal share of viewers use each subscription package.

We remain agnostic on whether the increase in revenues is driven by an increase in subscribers or an increase in price, though given that there is likely to be a cap on the proportion of the population that would subscribe to sVoDs, we expect a non-negligible portion of revenues would be generated from price increases.

Figure 38 Counterfactual UK revenues of sVoD providers (£m)

	2019	2020	2021	2022	2023	2024
Netflix	929.4	1056.1	1182.8	1267.3	1351.8	1436.3
Amazon Prime	462.0	525.0	587.9	629.9	671.9	713.9
NowTV	227.3	258.3	289.3	309.9	330.6	351.3
ITV Hub+	12.9	14.7	16.4	17.6	18.8	20.0

Source: BARB; annual reports (ITV); Frontier Economics calculations based on Communication Chambers modelling

We have estimated the loss in revenues that these sVoD services would experience because of the reduction in viewing time caused by the changes to BBC iPlayer, shown in Figure 39.

Figure 39 Annual impact of BBC iPlayer changes on sVoD UK revenues (£m)

	2019	2020	2021	2022	2023	2024
Netflix	-7.4	-15.1	-18.8	-20.1	-21.5	-22.8
Amazon Prime	-5.3	-10.8	-13.5	-14.4	-15.4	-16.3
NowTV	-3.0	-6.1	-7.6	-8.1	-8.7	-9.2
ITV Hub+	-0.1	-0.2	-0.3	-0.3	-0.3	-0.3
	011	0.2	0.0	0.0	0.0	0.0

Source: BARB; annual reports (ITV); Frontier Economics calculations based on Communication Chambers modelling

We note that, for NowTV especially, these estimates are conservative as we would not expect all of the content available (eg premium sports) to be substitutable with BBC iPlayer. In the case of NowTV, if we assume an equal distribution of users among its different packages, then its sports package (which is its most expensive) would account for 20% of subscriptions but 57% of revenues. Given that the additional content on BBC iPlayer is unlikely to be related to sports, it is possible that the reduction in revenues calculated for NowTV could be much lower than we have estimated.

Figure 40 shows the percentage reduction in revenues relative to the counterfactual.

Figure 40 Annual impact of BBC iPlayer changes on sVoD UK revenues (%)

	2019	2020	2021	2022	2023	2024
Netflix	-0.8%	-1.4%	-1.6%	-1.6%	-1.6%	-1.6%
Amazon Prime	-1.1%	-2.1%	-2.3%	-2.3%	-2.3%	-2.3%
NowTV	-1.3%	-2.4%	-2.6%	-2.6%	-2.6%	-2.6%
ITV Hub+	-0.9%	-1.6%	-1.7%	-1.7%	-1.7%	-1.7%

Source: BARB; annual reports (ITV); Frontier Economics calculations based on Communication Chambers modelling

We were unable to identify the margins associated with the subscription services' UK activities. However, we note that margins for Netflix and Amazon may be low or negative and hence it may be less relevant to consider the impact on margins. For example, Amazon Prime TV is a loss leader to reduce customer churn in its retail business. Netflix is in a period of targeting customer growth over profit.

Conclusion on static impacts

We conclude that there is a small static impact on sVoD broadcasters viewing. For the reasons set out above, a small change in viewing of sVoD services is unlikely to have a linear relation in subscription revenues as the choice of content is only one of reasons consumers subscribe to sVoD services.

Taking the survey data on the proportion of subscribers that would cancel their subscription we note that (based on prompted responses) 6.8% of sVoD subscribers would definitely cancel their subscription, and unprompted 0.8% of subscribers would definitely cancel their subscription. Conservatively taking the higher of these estimates and adjusting it to account for bias, multiple occupancy and multi-homing, this equates to a 1.9% reduction in subscription revenues for sVoD services as a whole.

5.3.3 Linear broadcasters

The modelling suggests that the incremental content on BBC iPlayer would lead to a reduction in the volume of viewing on linear TV services of about 0.4% by 2024. Linear TV services include the channels of ITV, Channel 4, Channel 5, Sky and others such as UKTV and Discovery.

Figure 28 shows the reduction in viewing broken down by year for ITV, Channel 4, Channel 5, Sky and 'other' (which includes all other linear TV channels). Our model assumes that the reduction in viewing for linear TV providers depends on the volume of consumption and the strength of substitution. As a result, the viewing for Sky, whose users are more likely to reduce their consumption as a result of the BBC iPlayer changes, experiences a proportionately greater reduction in viewing than ITV and Channel 4 though this differential impact is small.

Figure 41 Annual impact of BBC iPlayer changes on linear TV volumes (mins/individual/day)

	2019	2020	2021	2022	2023	2024
ITV	-0.2%	-0.3%	-0.3%	-0.3%	-0.4%	-0.4%
Channel 4	-0.2%	-0.3%	-0.3%	-0.4%	-0.4%	-0.4%
Channel 5	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.5%
Sky	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.5%
Other	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.5%

Source: Communication Chambers

Counterfactual revenues

The commercial model of linear TV providers relies on attracting viewers to sell advertising, as well as sponsorship revenues related to programming broadcast on linear TV.

Figure 42 shows the counterfactual revenues we have calculated for each of the linear TV providers.

Figure 42 Counterfactual revenues of linear TV providers (£m)

	2019	2020	2021	2022	2023	2024
ITV	1489.8	1458.6	1435.2	1411.8	1380.6	1365.0
Channel 4	709.8	695.0	683.8	672.7	657.8	650.4
Channel 5	306.0	299.5	294.7	289.9	283.5	280.3
Sky	486.7	476.5	468.8	461.2	451.0	445.9
Other	670.9	656.8	646.3	635.8	621.7	614.7

Source: Various annual reports; Ofcom; Frontier Economics calculations based on Communication Chambers modelling

We use revenue data from the latest year available for each of the linear TV providers. We estimate the revenues as follows: ITV: we subtract digital advertising revenues calculated above from total advertising revenues in 2017 and 2018; Channel 4: we use the linear advertising revenues stated in Channel 4's 2017 annual report. Channel 5: we subtract the digital advertising revenues calculated above from total revenues in 2017. Sky: we use the advertising revenue stated in Sky's annual reports, adjusting the revenues to remove the revenues for Ireland. We note that this may overestimate linear revenues as this may include digital advertising revenues (we have not been able to separate out digital and linear revenues for Sky). Other: we subtract the revenues for ITV, Channel 4, Channel 5, and Sky from total linear TV advertising revenues, as reported by Ofcom.

Impact of changes on revenues

To assess the impact of the BBC iPlayer changes on linear TV revenues, we do not make a specific elasticity adjustment given the (conservative) assumption. Ofcom applied a 50% offset in the central case when considering the impact of a change in supply in advertising impacts on revenues. However, in this case, the change in supply is de minimis and therefore too low to make an appreciable impact on prices. We therefore assume revenues change one to one with changes in viewing.

Figure 43 Annual impact of BBC iPlayer changes on linear TV revenues (£m)

	2019	2020	2021	2022	2023	2024
ITV	-2.5	-4.5	-4.7	-4.8	-5.1	-5.2
Channel 4	-1.2	-2.3	-2.4	-2.4	-2.6	-2.6
Channel 5	-0.6	-1.1	-1.2	-1.2	-1.2	-1.3
Sky	-1.0	-1.8	-1.8	-1.9	-2.0	-2.0
Other	-1.3	-2.5	-2.6	-2.6	-2.8	-2.8

Source: Various annual reports; Ofcom; Frontier Economics calculations based on Communication Chambers modelling

Figure 43 shows the estimated change in revenues as a result of the changes to BBC iPlayer. The largest reduction in revenues is for ITV, for which revenues decline by £5.2m in 2024. Even though linear revenues are significantly larger than BVoD revenues, the absolute reduction in linear revenues is significantly lower than the reduction in BVoD revenues.

Figure 44 Annual impact of BBC iPlayer changes on linear TV revenues (%)

	2019	2020	2021	2022	2023	2024
ITV	-0.2%	-0.3%	-0.3%	-0.3%	-0.4%	-0.4%
Channel 4	-0.2%	-0.3%	-0.3%	-0.4%	-0.4%	-0.4%
Channel 5	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.5%
Sky	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.5%
Other	-0.2%	-0.4%	-0.4%	-0.4%	-0.4%	-0.5%

Source: Various annual reports; Ofcom; Frontier Economics calculations based on Communication Chambers modelling

We have estimated the change in profit margins, using the same methodology as BVoD revenues. We could not identify the profit margins for Sky's linear advertising revenues. The impact is proportionately higher for Channel 5, though the absolute changes for all broadcasters are small.

Figure 45 Annual change in BVoD profit margins as a result of the changes to the BBC iPlayer (percentage points)

	2019	2020	2021	2022	2023	2024
ITV	-0.1pp	-0.2pp	-0.2pp	-0.3pp	-0.3pp	-0.3pp
Channel 4	-0.2pp	-0.3pp	-0.4pp	-0.4pp	-0.4pp	-0.4pp
Channel 5	-0.2pp	-0.3pp	-0.3pp	-0.4pp	-0.4pp	-0.4pp

Source: Various annual reports; Frontier Economics calculations based on Communication Chambers modelling

Conclusion on static impacts

We conclude that there are minimal static impacts on linear broadcasters. Given the likely change in viewing, revenues and profit margins is de minimis, we do not further consider the dynamic impacts.

5.3.4 PayTV retailers

Assuming that viewing of linear PayTV channels declined then it is possible that some subscribers may choose to discontinue their PayTV subscription as a result of the incremental viewing of BBC iPlayer.

However, we note that it is unlikely that a significant number of subscribers would cancel their subscriptions given:

- There would be only a small decline in viewing caused by the changes to BBC iPlayer. As with other linear services, a decline of 0.4% in viewing would be insignificant.
- PayTV subscribers value aspects of their subscription other than the content which will be unaffected by the changes to BBC iPlayer. PayTV providers offer access to a broad range of content including many channels and premium content, and have high quality, user friendly interfaces which are some of the key reasons for subscribing⁸⁷.

⁸⁷ Kantar Media: Linear vs non-linear viewing (2016)

- Similar to Amazon Prime Video, many PayTV subscriptions are part of wider package of services making decisions to subscribe not solely determined by the PayTV service itself. Sky and Virgin for example both offer combined TV, broadband and phone packages to customers.
- PayTV services, such as Sky and Virgin, offer the catch-up services of BVoD services, including BBC iPlayer, as well as some sVoD services. Any additional viewing on BBC iPlayer may still be viewed through the PayTV provider, perhaps even enhancing the value of the PayTV service.

Conclusion on static impacts

We conclude that there are minimal static impacts on PayTV providers. Given the likely change in viewing is de minimis we do not further consider the dynamic impacts.

5.4 Combinatorial impacts across all segments

Broadcasters that offer services across different segments (BVoD, sVoD, linear TV and PayTV) will consider whether to invest and innovate by looking at their combined revenues. We therefore consider the impact of the BBC iPlayer changes on the combined revenues and profits of ITV, Channel 4, Channel 5 and Sky. This combined revenue includes digital and linear TV advertising revenues, estimated sVoD revenues (in the case of Sky and ITV) and estimated PayTV revenues (in the case of Sky). Figure 46 shows the combined counterfactual revenues for ITV, Channel 4, Channel 5 and Sky.

Figure 46 Counterfactual combined revenues (£m)

	2019	2020	2021	2022	2023	2024
ITV	1731.3	1746.8	1770.7	1795.6	1750.5	1785.3
Channel 4	811.8	816.7	825.6	834.8	814.1	827.9
Channel 5	344.2	345.2	347.9	350.7	342.1	346.9
Sky	4065.7	4016.3	3987.1	3947.4	3887.7	3868.2

Source: Various annual reports; BARB; Ofcom; Frontier Economics calculations based on Communication Chambers modelling

Notes: Sky's PayTV revenues have been calculated using Ofcom data on the total value of subscription revenues for the broadcast TV industry, excluding estimated NowTV revenues. A portion of this revenue has been allocated to Sky based on its share of total PayTV household subscribers (including Sky, cable and TalkTalk TV, BTTV (and YouView)). This likely underestimates Sky's PayTV revenues as its revenue per subscriber is likely to be higher than, for example, YouView. We forecast future PayTV revenues change proportionately with linear viewing for Sky. We note Sky's 2018 direct to consumer revenues (which includes PayTV subscriptions, NowTV subscriptions, and other subscriptions such as for mobile services) in the UK and Ireland were £7.1bn, based on its 2018 annual report. We were unable to identify Sky's BVoD revenues though these revenues are included in Sky's total advertising revenues (which we have classed under linear).

Figure 47 shows the combined reduction in revenues for ITV, Channel 4, Channel 5 and Sky as a result of the changes to BBC iPlayer.

Figure 47 Annual impact of BBC iPlayer changes on combined revenues (£m)

	2019	2020	2021	2022	2023	2024
ITV	-4.5	-9.2	-10.7	-12.1	-12.7	-13.9
Channel 4	-2.3	-4.7	-5.4	-6.2	-6.5	-7.1
Channel 5	-1.2	-2.4	-2.8	-3.2	-3.3	-3.7
Sky	-3.9	-7.9	-9.4	-10.0	-10.7	-11.2

Source: Various annual reports; BARB; Ofcom; Frontier Economics calculations based on Communication Chambers modelling

We assume that Sky's PayTV revenues are unaffected by the changes to BBC iPlayer.

Figure 48 shows the percentage reduction in revenues as a result of the changes to BBC iPlayer. The percentage reduction in combined revenues is smaller than the percentage reduction in BVoD revenues, or in the case of Sky, sVoD revenues. For Sky in particular, which also has PayTV revenues, the reduction in total revenues is only 0.3% compared to 2.6% for NowTV.

As both Channel 5 linear viewers and My5 viewers are more likely to reduce their consumption than services offered by ITV or Channel 4, their revenues reduce by proportionately more than those of ITV and Channel 4.

Figure 48 Annual percentage change in revenues as a result of the changes to BBC iPlayer (%)

	_	-					
	2019	2020	2021	2022	2023	2024	
ITV	-0.3%	-0.5%	-0.6%	-0.7%	-0.7%	-0.8%	
Channel 4	-0.3%	-0.6%	-0.7%	-0.7%	-0.8%	-0.9%	
Channel 5	-0.3%	-0.7%	-0.8%	-0.9%	-1.0%	-1.0%	
Sky	-0.1%	-0.2%	-0.2%	-0.3%	-0.3%	-0.3%	

Source: Various annual reports; BARB; Ofcom; Frontier Economics calculations based on Communication Chambers modelling

Notes: We assume that Sky's PayTV revenues are unaffected by the changes to BBC iPlayer.

Figure 49 shows the impact on the combined profit margins of ITV, Channel 4 and Channel 5 (we do not have data on Sky's margins). The reduction in margins, when considering all types of revenues, is smaller than for BVoD alone, as we would expect.

Figure 49 Annual impact of BBC iPlayer changes on combined profit margins (percentage points)

	2019	2020	2021	2022	2023	2024
ITV	-0.2pp	-0.4pp	-0.4pp	-0.5pp	-0.5pp	-0.6pp
Channel 4	-0.3pp	-0.6pp	-0.7pp	-0.8pp	-0.8pp	-0.9pp
Channel 5	-0.3pp	-0.6pp	-0.7pp	-0.8pp	-0.9pp	-0.9pp

Source: Various annual reports; BARB; Frontier Economics calculations based on Communication Chambers modelling

Broadcasters' investment decisions should also be placed in context of their wider revenues, especially ITV. ITV's group external revenue in 2018 was £3.1bn, making the percentage reduction in revenues and margins even lower⁸⁸.

⁸⁸ ITV Annual Report 2018.

5.5 Dynamic impacts

Dynamic impacts relate to the longer term impacts of the BBC's changes. They include both:

- the impact of the change on competitor's incentives to invest and innovate; and
- any related competitor responses.

In this section, we focus on the categories for which we found a significant impact on revenues (a reduction in revenues of more than 1%89); namely, BVoD and sVoD.

5.5.1 Incentives to invest and innovate in provision of audiovisual services

As noted in section 2, changes in technologies and consumer behaviours have radically changed how audio-visual content is distributed and consumed. Developments in telecommunications networks, coupled with advances in device technology have meant that VoD services are now an important and growing way for audio-visual content to be consumed. Existing broadcasters have incorporated VoD into their offering.

Therefore we consider below, in the context of these industry-wide changes which are transforming the sector, whether the changes to BBC iPlayer and the associated static impacts, affect competitors' incentives to invest and innovate in their VoD offerings.

First, looking at the impact on commercially funded BVoD providers, we consider that the static impacts on VoD alone are unlikely to have a significant impact on the investment decisions of broadcasters. This is because these decisions will be made across all of their distribution outlets, whether BVoD or linear TV. Therefore, while the impact on BVoD revenues is proportionately larger than on broadcasters' linear TV revenues, the relatively small share that digital revenues contribute to the *combined* revenues and profits across their linear and VoD operations means that overall impact on broadcasters is much smaller. As investment decisions are likely to be taken across all of their distribution platforms, it seems unlikely that the changes to BBC iPlayer are likely to impact on their incentives to invest and innovate.

Even if there was a perceived impact on broadcasters, the wider changes to the industry are much more likely to drive investment decisions than the changes to

Where static changes are a small percentage of total revenues we assume that any impact on incentives to invest would be small. This is a conservative approach consistent with similar assumptions made by Ofcom's previous assessments of the impact of changes to BBC services on the commercial viability of firms and their incentives to invest. For example in the Public Interest Test for the BBC Scotland channel Ofcom noted that a reduction in revenues in the base case of 1.67% to 1.77% was sufficiently small to conclude that there would be a limited impact on dynamic incentives. Ofcom concluded that the 2% decline in revenues "is not immaterial in absolute terms, it is relatively small as a percentage of STV's total advertising revenues ... thus do not consider that the BBC's proposal is likely to put STV's viability at risk or affect STV's incentives to invest and innovate ... We are more persuaded, however, that the percentage impact on STV revenues is small, suggesting that the impact on STV Group's incentives to invest in STV is likely to be quite small." See: Ofcom (2018) BBC Scotland Competition Assessment Consultation Annex 3: Assessment of Market impacts https://www.ofcom.org.uk/ data/assets/pdf file/0021/113187/annex-3-assessment-market-impacts.pdf.

BBC iPlayer. All broadcasters need to invest and innovate in their VoD services to keep up with a fast-changing and competitive industry:

- All broadcasters (whether the BBC or commercial broadcasters) have to adapt to the wave of digital disruption facing the sector which has lowered barriers to entry and changed the way individual consume audio-visual content. Advances in device technology and telecommunication network availability mean that all consumers expect to be able to watch their favoured TV content anytime, anyplace, anywhere unconstrained by the linear schedule. This is especially true of younger audiences. ITV have said the ITV Hub helps it 'reach valuable younger audiences' 90.
- Moreover, all broadcasters are developing their digital services (including VoD) to meet the challenge of digital advertising. As consumers migrate to VoD services, advertising funded linear broadcasters' revenues are declining. In 2017 TV advertising revenues declined by 7.5%91. The rise of digital advertising offers opportunities to potential advertisers: as well as sophisticated targeting, digital advertising offers interactivity and "click through features". By offering advertising funded VoD services, broadcasters can compete with the digital advertising, combining the audience engagement of TV advertising with the technical and targeting features of digital advertising. For example ITV noted: "We are using the insight we gain from our registered users to develop more targeted advertising solutions and to increasingly drive viewing through personalisation. In the year, we launched personalised ITV Hub home pages for our audiences and have introduced data-driven recommendations and mobile notifications to registered users."92
- The increasing prevalence of sVoD services, and the expected entrants to the market, will continue to incentivise broadcasters to innovate and this competitive environment, more than the changes made to BBC iPlayer, will continue to drive investment decisions made by broadcasters. Indeed, rather than BBC iPlayer crowding out investments, the broadcasters are likely to respond in the same way in response to sVoD services by investing in their digital offering.
- Furthermore, PSBs are under a number of other regulatory obligations which affect their incentives to invest and innovate.

Second, looking at sVoD providers, Netflix and Amazon's incentives to invest in content and technology are made on a global basis and the small change in UK revenues would only have a minor impact on global investment decisions. In 2018, Netflix expected to spend £5bn on content globally, while Amazon Prime Video expected to spend about £3bn⁹³.

These investments are partly driven by scale – Netflix and Amazon (and potential entrants) can more easily spread the cost of production over their global subscriber base. However, they are also driven by the business models of these companies which have deep pockets and investors willingly to accept losses in the short-term to achieve market share in the longer term. By creating and investing in "original"

⁹⁰ ITV Annual Report 2017, p25

⁹¹ Ofcom Media Nations 2018, p34

⁹² ITV Annual Report 2017, p26

⁹³ Source: Ofcom Media Nations 2018.

content, these firms will also be able to benefit from the commercial exploitation of this content in the future unlike PSBs which are limited by the terms of trade in their commercial exploitation of programmes. Netflix alone has 700 originals in the pipeline, with 40 UK projects alone⁹⁴. Similarly, Amazon has 20 new projects in UK, Germany, India and Japan,⁹⁵ and Sky is set to release 6,500 hours of original content from Sky Original Productions and independent third parties.⁹⁶

The decline in viewing may at the margin impact on the incentives of international sVoD broadcasters to invest in local UK content. However, UK content allows them to appeal to specific demographics who favour UK content. Therefore they may be relatively insensitive to minor changes in subscriptions in order to grow their share with harder to reach demographics who have a lower preference for US-originated content. Furthermore, UK content (whether The Queen on Netflix or The Grand Tour or Outlander on Amazon) will continue to have wider international value in a way that is unaffected by the BBC iPlayer changes.

The change is unlikely to impact NowTV's incentives to invest in content or its platform. NowTV does not commission in isolation, but as part of the wider Sky commissioning. Furthermore NowTV (as part of Sky) is now owned by Comcast, the global vertically integrated media brand (owner of NBC Universal and DreamWorks Studios) following the merger in 2018. Comcast has plans to integrate NowTV within its wider media distribution strategy⁹⁷. As such, NowTV's incentives to invest may also be driven by global considerations.

Finally, we note that the incentives of broadcasters to invest in their linear or PayTV providers are unlikely to be negatively impacted by the changes to BBC iPlayer given that the static revenue impact on these broadcasters is less than 1%.

5.5.2 Competitor responses

The assessment of the dynamic impact considers the responses that are possible as a result of the changes to the BBC's services. Predicting competitor responses is for obvious reasons uncertain. However, there are a number of competitor responses that could be observed.

Changing how content is exploited across different distribution outlets

Broadcasters that compete on linear, BVoD and sVoD models (such as ITV), can alter their strategy in exploiting content. As noted above, a key reason that motivates consumers to subscribe to VoD services is exclusive content. Therefore a broadcaster could offer its content on its sVoD services on an exclusive basis. This could potentially increase the attractiveness of its VoD services, at the expense of its linear service. It may also use its linear service to raise awareness of a programme by showing the first episode on linear and the remainder on VoD

- See David Wells Netflix CFO at Morgan Stanley Technology, Media & Telecom Conference 27 February 2018 https://s22.q4cdn.com/959853165/files/doc_events/2018/NFLX-USQ_Transcript_2018-02-27.pdf and Financial Times (2018), Netflix to ramp up productions in Europe in 2019, 28 November 2018 url: https://www.ft.com/content/924ce2f8-f312-11e8-ae55-df4bf40f9d0d
- https://www.hollywoodreporter.com/live-feed/amazon-studios-jennifer-salke-details-global-content-strategy-1186475
- 96 Sky Q4 18 Release, Sky Vision Website. We do not have figures by title.
- 97 See for example: https://www.ibc.org/delivery/comcast-set-to-rollout-now-tv-globally-/3552.article

(as Channel 4 has done with its 'Stunt' launches where it broadcasts the first episode of its show on its linear service, and makes the remaining episodes available online⁹⁸).

Similarly where the broadcaster owns the IP to content it could limit the exploitation on other VoD services such that the value of the content on its own service is enhanced.

Aggregating content from different broadcasters on VoD platforms

Broadcasters could respond to the changes to BBC iPlayer by consolidating their content. This could provide a way to access a greater range of content.

Summary of competitor responses

It is of course difficult to predict the competitor responses to the changes to BBC iPlayer. As noted, there are a number of potential responses which could mitigate the impacts to a degree.

5.5.3 Conclusion on dynamic impacts

Changes to BBC services will have some static impact on competitors. Where the change is intended to improve BBC services then it is likely that some consumers will substitute from competitors' services to BBC services (compared to a counterfactual of no change). However, substitution of viewing from competitors to the BBC does not necessarily imply an adverse impact on competition. Therefore we consider whether the changes to BBC iPlayer (and a consequent small static impact) affects incentives of BVoD or sVoD suppliers to invest and innovate in the supply of VoD services.

We do not consider that a small change in revenues (and margins) will significantly impact suppliers' incentives to invest or innovate in their content or digital platform.

- Even taking the conservative assumptions on the impact on revenues, the impact on BVoD and sVoD suppliers' revenues is small (2.3% and 1.9% respectively by 2024).
- Moreover, in the case of BVoD providers, given that content investments are monetised across both linear and VoD platforms the percentage change in total revenues across linear and VoD is much smaller. For example, ITV's BVoD revenues will decline by 2.1% but its total revenues across linear and VoD are expected to decline by just 0.8%. Its investment decisions will be made across both linear and VoD. Similarly, for Channel 4 and Channel 5, BVoD revenues are expected to decline by 2.5% and 3.6% whereas total revenues are expected to decline by only 0.9% and 1.0%. Moreover, the decline in the revenues should be seen in the context of growing digital revenues. For example, BVoD services' digital advertising revenues are expected to grow by 63% between 2018 and 2024⁹⁹.

⁹⁸ Channel 4 Annual Report 2017

⁹⁹ Based on forecasts of volume growth in the Communication Chambers report and assuming a proportionate increase in revenues.

- Netflix and Amazon's incentives to invest in content and technology are made on a global basis and the small change in UK revenues would only have a minor impact on global investment decisions. NowTV's incentives to commission content will be based on the impact across Sky's wider PayTV and sVoD platforms, for which revenues only decline by 0.3%. Furthermore the merger between Sky and Comcast, the global vertically integrated media brand, means that NowTV will be integrated across Comcasts wider TV assets globally.
- As set out above there are a number of profound changes to the sector which are driven by changing consumer behaviours and advancing technologies. It is these changes which are driving all broadcasters (including the BBC) to invest in their digital offering. In particular,
 - audiences are migrating from linear to VoD, meaning that without a compelling digital service, broadcasters' content will be less relevant to viewers: the BBC's changes to BBC iPlayer are one example of a dynamic response to changing consumer tastes;
 - broadband technologies have lowered barriers to entry and we expect a more competitive less concentrated market in future as broadcasters that can leverage a content (such as Disney or TimeWarner) enter the market;
 - broadcasters now compete with many more services for our screen time whether social media, short form video or gaming; and,
 - broadcasters have to ensure that their advertising can offer comparable value to other online digital advertising (in terms of targeting or engagement).

All broadcasters, including the BBC and its competitors, face strong incentives to invest in digital VoD services as a result of clear, long term fundamental changes to the industry. Existing broadcasters that fail to adapt will see their revenues decline, squeezed by declining linear audiences, the challenge of digital advertising (offered by Google and Facebook and others) and the increasingly crowded (and competitive) market segment. Not only have new VoD based broadcasters recently entered and rapidly captured market share from existing broadcasters, new entrants are also expected in the coming years.

Therefore a change in VoD related revenues (whether advertising or subscription) seems unlikely to significantly limit the incentives to invest in VoD.

6 VERTICAL ASSESSMENT OF SCOPE FOR ADVERSE IMPACTS ON COMPETITION

6.1 Introduction

The BBC is vertically integrated with activities at a number of levels of the broadcasting value chain (albeit that BBC Studios operates as a separate corporate entity means that there is a degree of separation). Therefore, this section considers whether the changes to BBC iPlayer affect the ability and/or incentive of the BBC to engage in vertical strategies by using its control over the supply of assets at one level of the value chain to increase its market position at another part of the value chain in a way that adversely affects competition.

In particular, we consider whether the changes to BBC iPlayer affect the BBC's ability and/or incentive to engage in input foreclosure.

- Section 6.2 considers whether the changes to BBC iPlayer affect the ability of BBC to foreclose competitors by restricting supply of essential inputs.
- Section 6.3 considers whether the changes affect the ability of upstream producers to finance and produce content.
- Section 6.4 concludes on the vertical impacts.
- Section 6.5 considers whether there is scope for combinatorial horizontal and vertical impacts.

6.2 Do the changes affect the ability of BBC to foreclose competitors by restricting supply of essential inputs?

The BBC, as an owner and or distributor of content rights, could restrict supply of inputs to downstream rivals, that it would have otherwise supplied absent the changes to the BBC iPlayer. If this were to happen, and downstream rivals were unable to source alternative content to the BBC's (where the BBC supplies essential inputs and has market power in their supply), then the BBC's downstream rivals could be impeded from competing to the detriment of competition. The BBC currently supplies secondary TV rights to providers of sVoD services and to linear broadcasters that directly compete with BBC's linear and BBC iPlayer retail services. The BBC also supplies secondary rights in a range of other markets that do not directly compete with retail UK TV markets (for example international TV rights, or DVD sales¹⁰⁰).

Therefore, in order to demonstrate that the changes to BBC iPlayer could adversely impact competition in the downstream market it would be necessary to consider the following questions:

We would not expect these revenues to be impacted by a foreclosure strategy since the BBC's UK iPlayer services do not directly compete with other services such as DVD, international TV or merchandise.

- Does the BBC have the ability to foreclose by restricting supply of wholesale inputs to retail competitors such as sVoD or linear broadcasters?
- Does the BBC have the incentive to restrict supply of inputs?

While the creation of BBC Studios as a separate corporate entity means that there is a degree of separation (unlike ITV for example which is fully integrated), there could potentially be scope for the upstream and downstream operators to coordinate their behaviour in a way that could have an adverse impact on fair and effective competition.

6.2.1 Summary of framework to assess whether the BBC has the ability to foreclose by restricting supply of inputs to competitors such as sVoD or linear broadcasters

Input foreclosure refers to a situation where an owner of content rights (such as the BBC), would use a position of market power in the upstream market of content rights, to restrict (either fully or partially) the supply of content inputs to downstream competitors such that they are unable to access content inputs elsewhere under similar conditions (i.e. they would be foreclosed) (see Figure 23).

Competitors are "foreclosed" anti-competitively where they are unable to compete for customers (either at all or in part) and consumers are as a result harmed by higher prices (or lower choice or foregone innovation) as a result of the softening of competition. Therefore it would be necessary for competitors to both rely on the input to attract customers, and that lack of supply of the input harmed consumers as competitors exited the market or did not invest to innovate.

The ability to restrict supply of inputs to competitors such as suppliers of sVoD services or linear broadcasters, such that they are foreclosed, requires a number of conditions to be met.

- First, the BBC would need to have market power in the supply of programming inputs to rivals. If it did not have market power, any attempt to foreclose by restricting supply would be unsuccessful since rivals would simply acquire content inputs from other suppliers. Section 6.2.2 below explains why the BBC does not have "market power" in the supply of secondary rights,
- Second, there would be no legal, regulatory and other constraints which would prevent the BBC from restricting supply of inputs. Section 6.2.3 notes that the BBC is constrained by legal, regulatory and other constraints from acting on an incentive to restrict supply.

However, as noted in section 6.2.4, the BBC faces mixed commercial incentives to restrict supply of its content: by forgoing wholesale revenues of IP that it owns, it could potentially increase the brand value of BBC iPlayer.

6.2.2 The BBC does not have "market power" in the supply of secondary rights

An input foreclosure strategy may be profitable where the BBC had market power in the supply of content to retailers.

We have not formally defined wholesale markets for secondary rights as part of this analysis. Content is highly differentiated therefore formally assessing market power in such markets is complex. However, we note that there are a number of features which suggests that BBC would not have market power in any potential wholesale market. These are:

- Secondary UK TV rights are part of a wide wholesale content market.
- The BBC's share of secondary rights to sVoD retailers would not imply market power.
- sVoD providers self-supply significant quantities of content.

Secondary UK TV rights are part of a wide wholesale content market

Secondary rights that BBC Studios supplies are an input acquired to support VoD services and linear programming. sVoD providers that acquire rights to BBC owned secondary rights acquire a wide range of content to bundle into their retail services. These include UK- and US-based content, across a mix of genres, focusing on drama, comedy and films. The content offered on sVoD includes "secondary rights" as well as sVoD "originals" 101 .Typically, viewers of sVoD or PayTV platforms might subscribe for a number of reasons, for example, to access exclusive content. However, they also are attracted to a greater volume and range of content (i.e. non-specific, more generic content).

The more generic nature of UK TV secondary rights (compared to primary commissions) is for example observed in the way that it is generally licensed on a non-exclusive basis (i.e. it can be available on multiple platforms). Were specific secondary rights considered to have high value, and be less substitutable with each other, then it would be expected that distributors would license them on an *exclusive* basis to maximise the value of the rights on behalf of the owner of the IP.

For retailers that acquire and exploit UK secondary rights (sVoD services, PayTV retailers, and some linear broadcasters) UK-based rights are only a small part of the content. sVoD providers and PayTV retailers (such as Sky, Virgin, TalkTalkTV or BT TV) rely on a large volume of US-based content as well as exclusively commissioned content.

The BBC's share of secondary rights to sVoD retailers would not imply market power

BBC Studios distributes secondary rights on behalf of BBC, as well as distributing the rights on behalf of third party producers including those whose content was commissioned by the BBC. In supplying rights BBC Studios competes with a range of other distributors including: ITV, Fremantle and other distributors.

We do not have access to data on the value of secondary rights licensed by BBC Studios to sVoD retailers. However, BBC Studio's share of secondary rights could

¹⁰¹ Amazon and Netflix both offer Amazon Originals and Netflix Originals. These are typically programming where the sVoD provider has acquired an exclusive licence in the territory in question. This may be the result of the broadcaster either being the primary commissioner or being a co-producer (such as with the Bodyguard co-produced with BBC).

be proxied by the share of viewing (of TV content) on sVoD services (see Figure 50). As the figure shows, the BBC has a relative minor share of viewing on sVoD platforms: BBC Studios' rights account for 8% of viewing on Netflix, 1% of viewing on Amazon and 1% of viewing on NowTV. By far the biggest categories of viewing by rights holder on each of Netflix and Amazon is content where the broadcaster has the exclusive UK rights to the content. Other notable providers of secondary rights include NBC Universal and Fox.

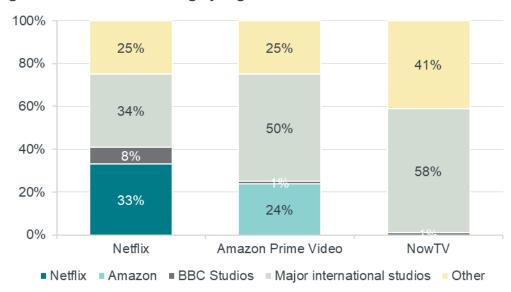
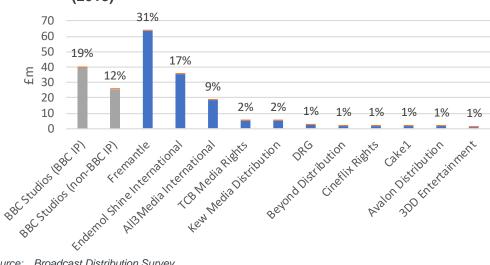


Figure 50 Share of viewing by Rights Holder - all content streams consumed

Source: GfK SVOD Content Consumption Tracker: UK BBC Studios Mid-Year Review February 2019 Notes: Data for Q3 2018 shown. Major international studios include Warner Bros, Viacom, Sony, NBC Universal, MGM, Lionsgate, HBO, Fox, Disney/ABC, and CBS

The fact that downstream retailers can access content from a wide range of distributors implies that, even if BBC Studios were to restrict the supply of BBC controlled IP to downstream broadcasters, retailers could access content from a wide range of other distributors.

Even on the narrowest conceivable market (UK-produced secondary rights), BBC IP's share is likely to be a low. For example, based on a sub-set of distributors, where data was available, BBC IP's share of the value of domestic programme sales to April 2018 is estimated at 19%. However, this only relates to selected distributors where data was available (for example, it excludes sales by eOne Television (the second largest distributor), ITV Studios (the fifth largest distributor) and Sky Vision (the seventh largest distributor)). Were data available for these distributors, the BBC's share of secondary rights would be even lower.



Share of UK distribution revenues for selected distributors Figure 51 (2018)

Source: Broadcast Distribution Survey

Note:

Note value of BBC IP is proxied by proportion of the catalogue that is distributed by BBC Studios that relates to BBC IP and not third party IP. All figures are for year ending 31 March 2018 unless otherwise stated. 1 Turnover for All3Media International, Cake, DLT Entertainment, DRG, Drive, Endemol Shine International, Fremantle, Hat Trick International, ITV Studios Global Entertainment and Kew Media Distribution is to 31 December 2017 (previous year is to 31 December 2016); 2 Turnover for Sky Vision is to 30 June 2018; 3 Turnover for Cineflix Rights is to 30 September 2017; 4 Turnover for Passion Distribution is a forecast to 30 September 2018; 5 Turnover for Avalon Distribution is to 30 June 2017

sVoD providers self-supply significant quantities of content

Even if BBC had a very high share of sales of rights to content on sVoD platforms or on linear TV channels, any effects could be mitigated if the broadcasters who acquire content could either self-supply content or commission content. As noted above, the American sVoD providers have large content budgets. In 2018, Netflix expected to spend £5bn on content globally, while Amazon Prime Video expected to spend about £3bn¹⁰². As can be seen from Figure 50, a significant proportion of the viewing (and therefore value) on sVoD services is from self- produced content (Amazon Originals or Netflix Originals).

Indeed, unlike PSBs, the strategic focus of sVoD providers such as Amazon and Netflix is to commission content from production companies and retain the primary and secondary rights to exploitation or otherwise acquire exclusive rights in a particular territory. By doing so they are able to associate the value created by the content to the broadcaster's brand. Netflix noted that such a strategy would "strengthen title-brand-love and franchise value" 103.

Conclusion on market power

For the above reasons it is unlikely that BBC Studios could have or exploit market power in the supply of secondary rights. This is likely to be borne out in the

¹⁰² Source: Ofcom Media Nations 2018.

Netflix Q3 Results and Q4 Forecast shareholder letter.

bargaining dynamics between BBC Studios as a distributor, and retailers such as Netflix, Amazon or Sky. If BBC Studios attempted to exploit a strong bargaining position by imposing terms it is likely that retailer would "walk away".

6.2.3 The BBC has limited ability to pursue a strategy based on restriction of supply

There are a number of factors which practically limit the BBC's ability to act strategically to restrict supply to support wider goals.

BBC Studios is a distinct corporate entity

An input foreclosure strategy relies on the BBC acting strategically in forgoing wholesale income from exploiting secondary rights in order to promote its downstream services (linear channels or BBC iPlayer). Given that BBC Studios (who is the distributor for secondary rights) is a distinct corporate entity, whose management are incentivised to maximise the value of secondary rights on behalf of the BBC and third party producers, it is more difficult for the BBC to implement a foreclosure strategy than if the BBC were fully integrated like ITV. ¹⁰⁴

Furthermore, where BBC Studios acts as a distributor for rights owned by third party producers, it has much less ability to pursue a strategy based on restriction of supply since it is contractually committed to maximise the value of the rights on behalf of the rights holder. For example, approximately 38% of the catalogue distributed by BBC Studios is IP owned by third parties¹⁰⁵.

There are a number of regulatory constraints on how the BBC exploits rights

The BBC is constrained by Ofcom's guidance on the commissioning of television programmes by PSBs which states in relation to the exploitation of secondary rights:

"38. Where there are categories of rights which are subject to holdback arrangements, the Codes should make it clear that the PSB will put in place a formal holdback/early release policy which sets out in a meaningful way the principles that the PSB will apply when considering requests to waive its exclusive holdback to allow for early secondary exploitation by the producer. The formal policies do not need to form part of the Codes themselves but an underlying principle should be that such policies should be intended to enable rather than restrict early exploitation."

"40. Ofcom recognises that broadcasters are concerned that the exploitation of new media rights by producers might have the potential to affect their ability to maintain and develop their brand and channel proposition. Ofcom also recognises that broadcasters are concerned that, where exploitation of new media rights in independent productions they have originally

¹⁰⁴ In addition, BBC Studios has a regulatory obligation to deliver a commercial rate of return.

¹⁰⁵ Source: Broadcast Distribution Survey

commissioned takes place outside their control, there could be important implications for their underlying business models. Broadcasters therefore have a legitimate right to seek to protect the value of their brand and are entitled to a degree of exclusivity in relation to the rights that they acquire. However, broadcasters should not use this to foreclose the development of new markets by producers and third parties." [emphasis added]

This is translated in to the BBC's Code of Practice for the commissioning of independent producers (as approved by Ofcom) which states:

"3.2f. The principles which the BBC will apply when considering requests for the BBC's consent to allow such early exploitation shall be published by the BBC in a Programme Release Policy which may be updated from time to time. This Programme Release Policy shall reflect that exploitation will only be permitted in circumstances where the BBC considers further exploitation of the programme in the UK programme market would not conflict with the exclusive rights it has acquired."

6.2.4 In practice, the BBC faces mixed incentives to restrict supply of its content

If the BBC had the ability to restrict supply (of BBC owned IP) this would only be a profitable strategy where it had an *incentive* to do so. In doing so it would be necessary to consider whether the loss in wholesale revenues as a result of restricting supply would be offset by increases in the value to downstream retail services such as BBC iPlayer or the BBC's linear services.

It is notable that there is an increasing trend for commercial sVoD providers (for example Netflix and Amazon) to commission content and acquire rights in the primary and secondary window in totality. The commissioning broadcaster therefore would retain the rights to exploit the content in some or all secondary markets. Where this is the case, the commissioning broadcaster pays the production company more at the point of commission to reflect the fact that the production company will not retain and exploit the secondary rights.

We recognise that the BBC faces mixed incentives on whether to exploit its secondary rights (for the BBC owned IP) exclusively on BBC iPlayer or to license them to competitors and earn incremental income. On the one hand, restricting the supply of its content would simply reduce the wholesale revenues of BBC Studios (and hence the BBC). BBC Studios has been set up at an arm's length basis specifically to maximise revenues from the BBC's assets on behalf of the licence fee payers, which it can then reinvest in its public services for UK audiences. Nonetheless, there could be incremental value to the BBC of exclusively exploiting IP that it owns (i.e. restricting the supply of that IP to rivals) since it would increase the value of the BBC iPlayer "brand" in the eyes of viewers. As noted, such a strategy is consistent with current practices of commercial broadcasters.

6.3 Do the changes affect the ability of upstream producers to finance and produce content?

A further consideration is whether the changes to the BBC iPlayer window affect the ability of upstream producers to finance and produce content. Producers monetise their investments across a number of "windows" in competitive markets (the analysis below indicates that both the producer and commissioner markets are characterised by strong competition).

Typically, where commissions are not fully funded, the majority of the cost of production is recovered from the primary commissioner (for example the BBC). The IP is subsequently exploited by the producer in a number of related secondary markets in the UK and, in some cases, internationally. Additional sources of revenue include merchandising rights, and format sales¹⁰⁶.

We consider it unlikely that the BBC iPlayer changes would significantly impact the revenues of producers. This is for a number of reasons.

- UK secondary TV rights revenues make up only a small share of total revenues (section 6.3.1);
- It is not clear that the BBC iPlayer changes would negatively affect the value of the secondary TV window (section 6.3.2); and
- In competitive markets, we would expect that a reduction in the value of the secondary window would increase prices for primary commissions (section 6.3.3).

6.3.1 UK secondary TV rights revenues make up only a small share of total revenues

Primary UK commissions made up the largest share of producers' TV-related revenues in 2017, followed by primary international commissions (see Figure 52 for example). UK secondary TV sales made up only £57.6m (2.2%) of total TV-related revenues in 2017. Only a proportion of this revenue will be content that is commissioned by the BBC. As such, even if there were a reduction in UK secondary TV sales of BBC titles (which it is not certain), the impact on total revenues would be minimal.

We do not consider the impact on other revenues such as DVDs and merchandise. This is because these purchases are likely to be driven by other factors unrelated to the BBC iPlayer changes. For example, individuals may choose to gift a DVD or purchase it on impulse. Moreover, these revenues typically make up an even smaller share of revenues than secondary rights sales.

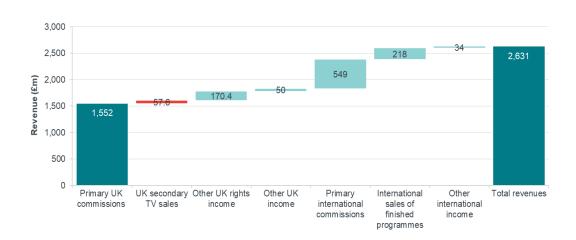


Figure 52 Revenues from TV contents rights (£m), by category and source (2017)

Source: Pact UK Television Production consensus, Oliver and Ohlbaum analysis

Note: 'Other UK rights income' – merchandising, formats, home entertainment etc.; 'Other UK income' – preproduction and other TV-related revenue; 'Other int'l income' – international rights (excluding finished programme sales), pre-production and other TV-related revenue

Any potential impact will only affect the producers of content that rely on secondary UK TV revenues in order to finance the production. The relationship between the share of revenues recovered from the primary commission and any other market segments will vary depending on the type of content, and the agreements negotiated with the commissioner¹⁰⁷.

- Content which is fully funded by the commissioner: for example, production of "local interest" news may have relatively little interest in international markets, will not yield value in physical sales, for example DVDs or merchandise, and will have little ongoing interest which will generate value in secondary UK TV rights. In this case, the costs of the production will be fully borne by the primary commissioner. This content will not be impacted by the changes to BBC iPlayer. According to the BBC approximately half of all BBC commissions are fully funded.
- Content which is partly funded by the commissioner but only generates revenues in the UK: for example, mid-range scripted drama or comedy which may generate some value in a number of different markets, including physical sales (DVDs or merchandise) and the secondary UK TV market. In this case, the revenues from the primary commission will only reflect a share of the costs of production, and the producer will finance the remainder of the costs (whether by debt, equity or internal cash investment) premised on the future expected earnings from the various secondary markets. These commissions are more

In addition to the commissioner-producer relationships described (which relate to BBC commissions) in the case of some sVoD content the sVoD commissioner may wish to retain and exploit all the television rights (including secondary rights). For example, in the case of some Netflix or Amazon commissions, Amazon and Netflix retain the secondary TV rights, though pay more for the commission, compared to the case where the producer was subsequently able to exploit rights. We do not think the changes to BBC iPlayer will impact decisions by these companies to commission this type of content.

likely than other funding models to be impacted by the changes to BBC iPlayer as they are more dependent on secondary UK rights to fund the production.

- Content which is partly funded by the commissioner and generates revenues in the UK and in international markets: for example, high-end scripted drama or comedy which may generate some value in a number of different markets, including physical sales (DVDs or merchandise), the secondary UK TV market as well as international markets. As value is generated in the international market, the producer is less reliant on revenues generated in the UK and therefore is less likely to be significantly impacted by changes to BBC iPlayer.
- Content which is funded by multiple commissioners (i.e. co-productions): a small number of BBC commissions are co-productions, where the co-producer, often an sVoD provider, also funds the production in return for certain rights. These typically generate value in both the UK and international markets (where the co-producer would have access to the domestic sVoD and international rights). According to the BBC these make a relatively small number of BBC commissions. International sVoD providers are still likely to be attracted to co-productions (even where the content continues to be exploited in the UK by the BBC) since a significant proportion of the value to the sVoD provider will be derived by its exploitation in international markets.

We would expect that if there was an impact on UK secondary rights revenues, the producers whose funding models rely on revenues generated in the UK from the sale of TV rights would be most likely to be impacted. However, as we show below, the impact for these producers is low, and they will have other options to fund their productions available to them.

6.3.2 It is not clear that the BBC iPlayer changes would negatively affect the value of the secondary TV window

The changes to BBC iPlayer could potentially impact the value that producers are able to monetise in the secondary window in the UK, and therefore their revenues. There are two reasons for this. First, there will be fewer "first time potential viewers" in the UK secondary window following the change. Second, the changes may mean that some titles will be shown contemporaneously in the UK on both BBC iPlayer and other outlets such as sVoD and PayTV.

However, the relationship between the availability on BBC iPlayer and revenues is complex. The availability of the content on BBC iPlayer enables the content to have a greater reach than might otherwise be possible and thereby generate wider interest. This wider interest (expressed as higher levels of discussion on social media for example) might *increase* the value of the secondary window.

There will be fewer "first time potential viewers" in the secondary window, though the impact of this will be low

The 12 month BBC iPlayer window will generate more viewing of the titles on BBC iPlayer (compared with a current 30 day window). Therefore, the value of the secondary window could be negatively affected: individual viewers *might* reduce

their value of the title in the secondary window, and by implication this might affect the price that other sVoD retailers are willing to pay to acquire the secondary rights to the title (i.e. the "derived demand" of sVoD retailers is lower). The degree to which the value declines will vary by content genre (for example, viewers may be unwilling to watch sports or news more than once, but may be more interested in watching films or drama more than once).

However, the impact of incremental viewing that occurs in the 12 month BBC iPlayer window will have a marginal impact on the volume of "first time potential viewers" who could watch the content on sVoD for the first time. The value of the secondary rights window to sVoD retailers will reflect the available market for the content which can be proxied by the percentage of its subscribers who have not previously viewed the title. Extending the window to 12 months would increase the number of viewers who have watched the programme prior to the holdback period when it would be available to sVoD or other sources. While the BBC iPlayer changes will lead to a material increase in *BBC iPlayer* viewing, the change in total viewing (across all BBC outlets including linear channels) will be proportionately significantly lower, as even at the end of the forecast period linear viewing will continue to make up the majority of viewing to BBC services. Therefore, the proportion of sVoD users which have not seen the secondary content will not reduce significantly.

There is an increased likelihood of programmes being shown on BBC iPlayer and sVoD at the same time

If content is simultaneously shown on BBC iPlayer and sVoD, then sVoD may have a lower value for the content (compared to the case where the title was not on a FTA VoD platform) as licence fee viewers could watch the programme free at the point of use on BBC iPlayer instead of on the sVoD service. For example, this may occur if BBC iPlayer shows previous series of a returning series, and the returning series are also available on a sVoD or PayTV VoD.

However, the relationship between the exposure of content on the BBC and the value of the secondary window is complex

The relationship between the exposure of content on BBC and the value of the secondary window is complex. The increased exposure of content on the BBC can *increase* value in the secondary UK windows and in international and merchandise rights. For example, the incremental availability on BBC iPlayer allows for increased social commentary (e.g. on social networks) on the content which may enhance its value in other markets. Changes in use of social media mean viewers may find out about content that reflects their specific preferences less from advertising or the EPG, and instead via personal "word of mouth" recommendations (on their social networks). Importantly viewers' use of social media to gain information about TV content is likely to play a role in generating interest in the content since social media enables much larger networks of communication (even international networks).

A period of longer availability could generate wider interest for specific content among viewers. This in turn could *increase* the value in secondary UK TV markets. It effectively grows the potential secondary market and potentially leads to benefits

to those content producers that rely on deficit funding. Furthermore it provides more information to broadcasters on the likely value in secondary markets making them more willing to invest.

As a spillover the increased interest in the content in the UK (for example as observed in press or social media) provides international broadcasters with important information on likely value of the content in international markets making them more willing to invest in the content (by effectively lowering risk).

Analysis conducted by Frontier Economics and based on BBC data has estimated the impact that increasing the availability of content on BBC iPlayer has on revenues earned in secondary markets. The analysis found, after allowing for the genre of content, the popularity and quality of the content, and other factors (such as whether it was a new or returning series), that availability of BBC iPlayer had a positive "spillover" impact on the revenues earned in related markets.

Specifically we find that longer availability on BBC iPlayer leads to higher cumulative revenue being generated across the UK and Rest of World (ROW). While care should be taken in interpreting the results, the corresponding average elasticities 108 for the UK and ROW are positive, statistically significant and robust.

6.3.3 In competitive markets, we would expect that a reduction in the value of a secondary window would affect prices for primary commissions

Even if the value of the secondary window did decline (which is not certain), there would not be an impact on the production market since theoretically the value of the primary window should increase to offset any potential reduction in the secondary window.

The production market is competitive and there are high levels of entry into the market

While a small group of firms account for a large share of industry revenues, there are still many firms competing in the industry and these continue to account for an increasing share of revenues. The increase in revenues for smaller firms has partly been driven by PSB broadcasters who are spending a growing share of their budgets on smaller production companies¹⁰⁹.

¹⁰⁸ This measures the percentage change in the number of days with percentage change in revenue.

¹⁰⁹ PACT census 2018.

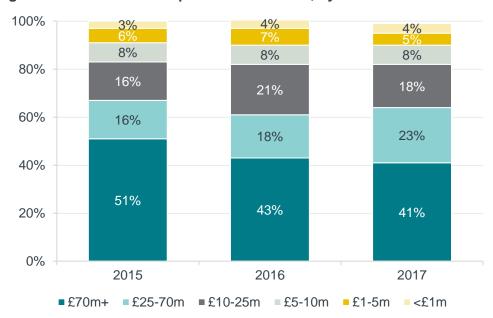


Figure 53 Share of total producer revenues, by turnover bracket

Source: Pact UK Television Production Census 2018, Oliver & Ohlbaum analysis
Note: Due to round error, the numbers may not sum exactly to 100%.

Pact estimates that there were 451 independent UK production companies in 2017, a *net* increase of 13 companies from 2016. Indeed, the market has typically experienced high levels of market entry (see Figure 54 for evidence prior to 2015). This suggests that barriers to entry are not significant: even small production companies with an appealing programme idea can easily scale up the production. 111

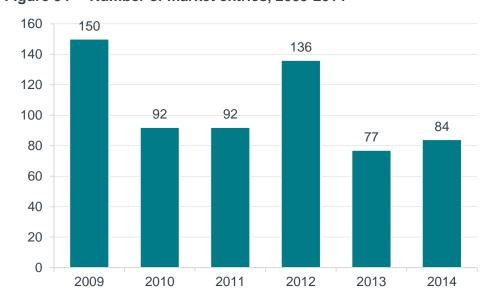


Figure 54 Number of market entries, 2009-2014

Source: Attentional, Oliver and Ohlbaum analysis

¹¹⁰ Note that this refers to gross entry, and not net entry.

https://www.theguardian.com/media/2018/apr/17/netflixs-new-world-order-a-streaming-giant-on-the-brink-of-global-domination

Note: New refers to companies that have not been active in any previous year

Production companies can take their ideas to a wide range of broadcasters

In this competitive market with many producers and many broadcasters the price paid for primary commissions and secondary commissions will in theory be competed to the competitive level. As set out above, the "price" that a commissioner pays for a primary commission will be negotiated on a bespoke basis for each individual commission.

The "price" negotiated for the primary commission will depend on the producer's (and broadcaster's) expectation of incremental revenues from related secondary markets (UK secondary TV rights, DVD sales, international sales).

In practice, producers pitch their ideas to a range of broadcasters (PSBs, PayTV, sVoD services) and if they believe that the revenues from the primary commission are insufficient to recoup their costs (including a return on capital), they will supply their services to other broadcasters (in an increasingly competitive downstream broadcasting market).

One illustration of how the price of the commission varies depending on a producer's value of any secondary rights is where a commissioner (for example Amazon and Netflix) acquires <u>all</u> the primary and secondary rights. In this case, the producer does not retain any value in the secondary TV rights. The "price" of the commission which is commercially negotiated between the commissioner and broadcaster will therefore fully fund the costs of the production.

6.3.4 Conclusion

The BBC iPlayer changes may affect the value that sVoD services are willing to pay for secondary UK rights. However, the impact is likely to be relatively small. The incremental viewing will have a relatively small negative impact on the available market for viewers of the content for sVoD providers (i.e. "potential first time viewers"). And research conducted by the Frontier Economics indicates that there could be a positive relationship between the time available on BBC iPlayer and the revenues earned in secondary windows. In aggregate the secondary rights make a small proportion of producers' revenues (though this will vary by title and producer). Further, where there is a significant impact on the value of secondary rights we would expect this to be reflected in the value of primary commissions which are negotiated between broadcasters and producers¹¹².

Therefore, the BBC iPlayer changes are unlikely to significantly affect outcomes in the production market. Producers are still likely to produce content for the BBC and if they consider that revenues in related markets are affected the price negotiated in the primary window will reflect this.

For example, as is observed when Amazon or Netflix commission a producer but retain all primary and secondary rights the cost of commission is higher than would be the case if the producer retained secondary rights.

6.4 Conclusion on vertical impacts

We conclude that the BBC does not have the ability to restrict supply of secondary rights to content (by "ability" we mean whether it could foreclose rivals (e.g. Netflix) by restricting supply to its content). The market for secondary rights to content is likely to be wide, including both UK and US secondary rights content. Therefore if BBC restricted supply of secondary rights, downstream retailers could instead substitute BBC content for other inputs from a wide range of sources. Furthermore in practice the BBC has limited ability to pursue such a strategy since it is constrained by regulation and contract from deliberately restricting access to rights.

We also conclude that the potential impact on the value of secondary rights to production companies in aggregate is likely to be relatively small.

6.5 Consideration of interactions between vertical and horizontal impacts

It is theoretically possible that if the horizontal and vertical effects are taken together, they could have a greater adverse impact on competition than the sum of each impact. This is possible where horizontal effects are exacerbated by vertical effects or vice versa. For example, this could occur if the increase in the BBC's share of the retail market increased its ability to engage in foreclosure, or if any potential vertical impacts elsewhere in the supply chain impacted on the horizontal impacts in the retail market.

We do not believe that such an effect is likely because the horizontal and vertical effects do not interact in such a way that one could exacerbate the other.

Any potential adverse horizontal impacts do not affect the scope for vertical impacts

Any small change in the BBC's retail market share as a result of horizontal impacts would not have an impact on observed vertical effects. This is principally because the change in viewing to the BBC would be very small overall, therefore the consequent change in retail market share (on any plausible market definition) would be negligible. Furthermore, the BBC iPlayer changes would not affect the BBC's position in upstream markets for content (where the BBC does not have market power).

Moreover any erosion of commercial revenues related to secondary rights because content is available on BBC iPlayer for longer does not interact with any reduction in competitors' retail revenues.

No realistic scope for producers to be adversely affected by horizontal and vertical impacts

It is theoretically possible that producers could be in combination (indirectly) impacted by horizontal impacts, and by vertical impacts as a result of the BBC iPlayer changes. For example marginal reductions in BBC's retail competitors' revenues (as a result of horizontal impacts) could in turn reduce revenues to third

party producers who supply to competitors. However, for the reasons set out in section 5.5 we consider that it is unlikely that small changes in retail revenues would lead to a noticeable impact on incentives to produce content. In relation to vertical impacts, we consider that the relationship between availability of content on BBC iPlayer and revenues in secondary markets is complex and may even be small. At any rate any potential impact would be small.

Furthermore, one effect does not exacerbate the other. Similarly, any potential harm arising from the BBC restricting supply of its content does not interact with the reduction in competitors' revenues. While both could potentially harm competitors, there is no cumulative effect.

In any case, given that the impact of the proposals is likely to be small, any possible cumulative effect would not be expected to result in a significant adverse impact on fair and effective competition.

ANNEX A QUALITATIVE ASSESSMENT OF CHARACTERISTICS OF, AND PREFERENCES AND ATTITUDES FOR BBC IPLAYER AND POTENTIAL SUBSTITUTES

A.1 Introduction

We have examined the characteristics of, and attitudes and preferences for BBC iPlayer, BVoD, sVoD, linear and other content services to understand the extent to which different services are substitutes for BBC iPlayer. These can be informative in assessing the relative strength of substitution between different service providers.

The section expands upon the summary in section 4.3.2. We consider in turn:

- The commercial model / price
- Genre of content
- UK or non-UK focus
- Volume of VoD content
- Demographic behaviour
- Cross substitution between BBC iPlayer and other services
- Searching for content
- Attitudes of BBC iPlayer users
- Consumption of other audio-visual content

A.2 The commercial model / price

BBC iPlayer

BBC iPlayer is free at the point of use to licence fee payers.

BVoD

ITV Hub, All4 and My5 all offer free, non-subscription VoD players which are supported by advertising revenues.

sVoD

There are three main sVoD services available in the UK.

Netflix offers three subscription tariffs (£5.99, £7.99, and £9.99) based on the viewing quality (HD, Ultra HD) and the number of users which can use it.

- Amazon charges one fee to access Amazon Prime Video, and a similar fee to access the wider benefits of Amazon Prime (such as free delivery). Amazon also allows access to channels such as Eurosport through its platforms, which come at an additional cost. Amazon Prime Video is seen as a loss leader to entice customers to subscribe to Amazon's suite of services.
- NowTV offers a variety of packages based on Sky channels (Entertainment, Sky Cinema, Sky Sports, Kids and Hayu).

In addition, ITV Hub+ is a subscription-based VoD service provided by ITV which offers the same content as ITV Hub, but with no advertising and the ability to download content on iOS. It charges £3.99 per month.

A number of entrants are expected to enter the UK in 2019 (e.g. Apple, Disney and Warner Media), though it is not clear what their commercial model or price will be.

Linear TV (broadcasters)

Linear free to air (FTA) channels via digital terrestrial television (DTT), satellite (Freesat or Sky's free-to-view satellite service), as well as via the Internet and OTT services. FTA is available free at the point of use and, with the exception of the BBC, is advertisement funded.

PayTV retailers provide access to larger bundles of channels or access to niche genres (as well as to FTA channels).

Conclusion

BBC iPlayer is provided for free to licence fee payers like commercial advertising funded BVoD services (ITV Hub, All 4, My5) and differentiated from sVoD. However, (to those existing sVoD subscribers) it is provided without adverts like sVoD services such as Amazon Prime Video and Netflix. Therefore, for viewers who have already subscribed to an sVoD (Amazon Prime Video, Netflix, ITV Hub+) the BBC iPlayer viewing experience might be considered more similar to sVoD than BVoD.

A.3 Genre of content

BBC iPlayer

The majority of titles on BBC iPlayer are TV series, with only a small number of movies available. The changes to BBC iPlayer will focus predominantly on TV series.

BBC iPlayer covers a wide range of genres such as drama, entertainment, comedy, sport and factual content (see Figure 55 which considers the most popular recent programming).

Figure 55 BBC iPlayer Top 20 TV episodes (October 2018) – most requested episode per series

requested episode per series							
Programme	Genre	Total requests per episode					
Killing Eve Series 1 Episode 1	Drama	3,555,000					
Doctor Who Series 11 Episode 1	Drama	2,962,000					
The Cry Series 1 Episode 1	Drama	2,924,000					
The Apprentice Series 14 Episode 1	Entertainment	2,263,000					
Informer Series 1 Episode 1	Drama	1,793,000					
Strictly Come Dancing Series 16 Episode 5	Entertainment	1,395,000					
Bodyguard Series 1 Episode 6	Drama	1,360,000					
EastEnders - 09/10/2018	Drama	1,071,000					
This Country - 13/10/2018	Comedy	859,000					
Match of the Day 2018/19 - 20/10/2018	Sport	753,000					
Wanderlust Series 1 - Episode 5	Drama	713,000					
Stacey Dooley Investigates - 08/10/2018	Factual	672,000					
Have I Got News for You Series 56 Episode 2	Comedy	663,000					
The Little Drummer Girl Series 1 Episode 1	Drama	626,000					
The Graham Norton Show Series 24 Episode 2	Entertainment	614,000					
Casualty Series 33 Episode 8	Drama	603,000					
Press Series 1 Episode 5	Drama	577,000					
Peter Kay's Comedy Shuffle Series 3 Episode 1	Comedy	554,000					
Drowning in Plastic - 01/10/2018	Factual	546,000					
Would I Lie to You? Series 12 Episode 2	Comedy	503,000					

Source: BBC iPlayer Performance Report, October 2018

BVoD

BVoD has similar content to BBC iPlayer (i.e. a mix of genres), though the range is currently limited on ITV and My5. All4 gives prominence to boxset content on its website, and shows a range of content including large volumes of drama, comedy, factual and entertainment. My5's content focuses predominantly on factual and entertainment programmes¹¹³. ITV Hub similarly focuses on factual and entertainment programmes¹¹⁴, but also gives some prominence on its website to other genres such as comedy and drama. However, ITV Hub and My5 may change the content offered on their BVoD platforms. Similar to BBC iPlayer, BVoD services focus predominantly on TV series and offer only a small number of movie titles.

sVoD

sVoD services offers a broad range of genres¹¹⁵, through the majority of viewing is of drama and comedy, as can be seen in Figure 56.

¹¹³ We searched the My5 site and the content offered in the 'Entertainment' and 'Documentary' categories is much greater than for other categories such as 'Drama' and 'Soaps'.

¹¹⁴ BBC iPlayer proposals: Public Interest Test consultation, 2019

BBC iPlayer proposals: Public Interest Test consultation, 2019

Figure 56 Top 20 sVoD programmes in the UK, Q1 2018

Rank	Programme	Genre	Sub Genre	Commission Type	Service	Origin	Total Streams
1	Friends	Comedy	Sitcom	Acquisition	Netflix	USA	1985
2	The Grand Tour	Entertainment	Magazine	Original	Amazon	UK	911
3	The Crown	Drama	History	Original	Netflix	UK	651
4	Stranger Things	Drama	Sci-Fi/Fantasy	Original	Netflix	USA	628
5	Peaky Blinders	Drama	Crime	Acquisition	Netflix	UK	519
6	Black Mirror	Drama	Sci-Fi/Fantasy	Original	Netflix	UK	504
7	The Big Bang Theory	Comedy	Sitcom	Acquisition	Netflix	USA	485
8	Brooklyn Nine-Nine	Comedy	Sitcom	Acquisition	Netflix	USA	369
9	The Good Place	Comedy	Sci-Fi/Fantasy	Original	Netflix	USA	343
10	Vikings	Drama	History & War	Acquisition	Amazon	Ireland/Canada	335
11	Lucifer	Drama	Sci-Fi/Fantasy	Acquisition	Amazon	USA	330
12	Altered Carbon	Drama	Sci-Fi/Fantasy	Original	Netflix	USA	312
13	Orange is the New Black	Drama	Comedy	Original	Netflix	USA	310
14	Designated Survivor	Drama	Thriller	Original	Netflix	USA	302
15	Grey's Anatomy	Drama	Medical	Acquisition	NOW TV	USA	298
16	Breaking Bad	Drama	Crime	Acquisition	Netflix	USA	290
17	Homeland	Drama	Crime	Acquisition	Netflix	USA	288
18	Paw Patrol	Animation	Children's	Acquisition	Netflix	Canada	278
19	Riverdale	Drama	Mystery	Acquisition	NOW TV	USA	256
20	Peppa Pig	Animation	Children's	Acquisition	Netflix/Amazon	UK	244

Source: Ofcom Media Nations 2018, p51

Note: GfK programme data, Q1 2018 January – March. Notes: All users of Netflix, Amazon Prime Video and NOW TV at least once a fortnight. Rankings are based on total streams.

In comparison to BBC iPlayer, they also show a large volume of movies and therefore do not rely as much on TV series.

Conclusion

We would expect that the incremental content would more aligned with the large amount of drama and comedy found on Netflix, Amazon and to a lesser degree NowTV and All4. ITV Hub and My5 are less likely to be substitutes as they currently focus on factual and entertainment programmes, though we recognise that there is a degree of uncertainty given the scope for ITV to develop its advertising and sVoD services.

A.4 UK or non-UK focus

BBC iPlayer

BBC iPlayer shows predominantly UK-originated content.

BVoD

Commercially funded BVoD services such as ITV Hub, All4 and My5 similarly show large amounts of UK content. All4 shows some non-English language content through their 'Walter Presents' section, and My5 shows some US content through channels such as 5USA and PBS America.

sVoD

The content of sVoD services is heavily skewed towards US-originated content (see Figure 56), though there are several programmes which are UK-originated. It

is also worth noting that sVoD services such as Netflix are looking to increase the number of UK productions, which would make them more similar to BBC iPlayer¹¹⁶.

Conclusion

We would expect the incremental content to be predominantly UK-originated and as such more aligned with the content currently found on BVoD services.

A.5 Volume of VoD content

There is significant variation in the volume of content offered by different VoD services. Figure 57 shows the total hours across the main five genres in October 2018.

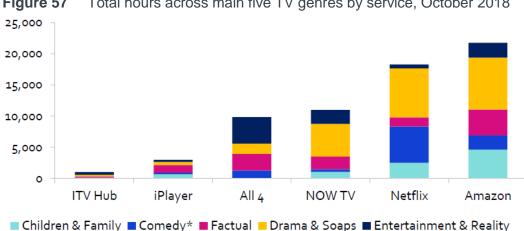


Figure 57 Total hours across main five TV genres by service, October 2018

Source: Enders (sourced from BBC iPlayer proposals: Public Interest Test consultation, 2019) Note: *includes standup chat shows for Netflix

BBC iPlayer

In October 2018, the volume of content available on BBC iPlayer was relatively low, at less than 4,000 hours. However, the change to BBC iPlayer will significantly increase the volume of content available on BBC iPlayer.

BVoD

BBC iPlayer offers a significantly higher volume of TV content than ITV Hub (which offers less than 2,500 hours) but less content than All4 (which offers over 10,000 hours) (see Figure 57).

ITV Hub (which shows the same content as ITV Hub+) has committed to expanding its content offering on ITV Hub¹¹⁷. It has also recently concluded a deal with PACT to allow it to offer a period of six months extended availability for all singles and

Netflix hunts long-term UK production base amid race for studios, Guardian, 24 September 2018

¹¹⁷ ITV plc, Annual Report and Accounts for the year ended 31 December 2017, p27; ITV plc, Interim results statement for the six months to 30 June 2018, page 5; and ITV plc, Interim results report for the six months to 30 June 2018, page 14.

one off series. Under the terms of the deal, ITV will also be able to provide full series box sets for current returning titles¹¹⁸.

Channel 4 already has a sizeable box set offer on All4, including commissions and acquired content, with content available for several years. Channel 5 has 12 months VoD exclusivity for all one off and returning series 119.

sVoD

sVoD services have larger catalogues of content than BBC iPlayer, with Amazon Prime Video and Netflix offering over 15,000 hours each of TV (in addition to movies) and NowTV offering over 10,000 hours (in addition to movies).

Conclusions

The increased volume of content on BBC iPlayer will position it much closer to the volume of TV content on sVoD services and All4, and will distance it from ITV Hub and ITV Hub+.

A.6 Demographic behaviour

It is possible to look at a number of different demographic groups where we may expect groups to behave differently. In this section, we focus on age as there is a large variation between service users. While there are other demographic groups, for example by gender, there is little variation between services based on these demographic groups.

BBC iPlayer

BBC iPlayer has a relatively uniform age profile, with the percentage of people using BBC iPlayer on a weekly basis similar across different age groups. Ofcom's Technology Tracker finds that about 20% of each age group watch BBC iPlayer on a weekly basis, with the MTM survey reporting a similar finding (though the average is higher)¹²⁰.

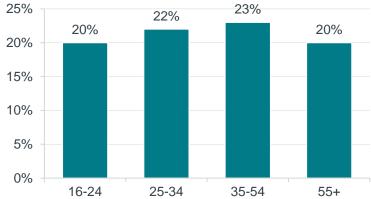
¹¹⁸ ITV and PACT Memorandum of Understanding, September 2018

¹¹⁹ Channel 5 and PACT Memorandum of Understanding, September 2018

For this section, we focus on Ofcom data, as the MTM survey found a higher level of BVoD and BBC iPlayer usage than Ofcom.

Figure 58 Percentage of respondents who have watched BBC iPlayer in the last week (%)

25% 23%



Source: Ofcom Technology Tracker, H1 2018

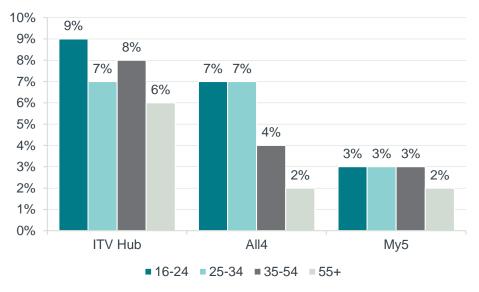
Note: QH16 (QH78). SHOWCARD And which of these services, if any, have you used in the past week?

(MULTI CODE). Base: All respondents

BVoD

ITV Hub and All4 are more likely to be used by younger users, whereas My5 displays a relative uniform age profile, similar to BBC iPlayer.

Figure 59 Percentage of weekly users of BVoD services, by age group (%)



Source: Ofcom Technology Tracker, H1 2018

Note: QH16 (QH78). SHOWCARD And which of these services, if any, have you used in the past

week? (MULTI CODE). Base: All respondents

sVoD

In general, sVoD services are much more likely to be used by younger individuals. This is especially true for Netflix, with over a third of 16-34s using it on a weekly basis. Amazon Prime has a slightly more uniform age profile, with only the 55+ age group being less likely to use it. Younger users are more likely to use NowTV.

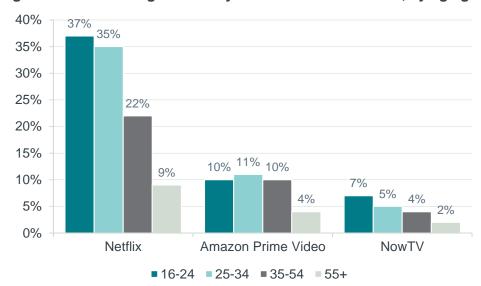


Figure 60 Percentage of weekly users of BVoD services, by age group (%)

Source: Ofcom Technology Tracker, H1 2018

Note: QH16 (QH78). SHOWCARD And which of these services, if any, have you used in the past week?

(MULTI CODE). Base: All respondents

Other services, including linear and pay TV

Pay TV is more likely to be used by the 35-54 age group, whereas free TV and hybrid TV are more likely to be used by older viewers.

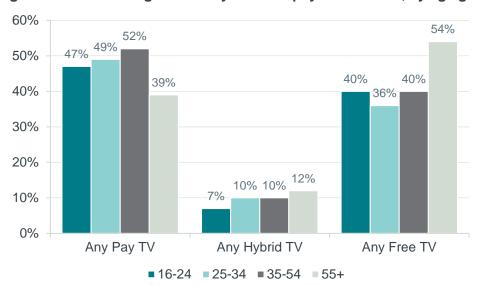


Figure 61 Percentage of weekly users of pay TV services, by age group (%)

Source: Ofcom Technology Tracker, H1 2018

Note: HOUSEHOLD TV SERVICES - OPTION 2 - NOW TV INCLUDED IN OTT, NOT PAY TV

Pay TV includes Sky and Virgin, Hybrid TV includes BT TV, TAlkTAlk TV, EE TV and YouView; Free

TV includes Freeview and free satellite

YouTube is much more likely to be used by younger demographics. 22% of 16-24s use it on a weekly basis, versus 11% for the population generally 121. YouTube is much more likely to be used by males (13% of males use YouTube, compared to 8% of females).

Conclusion

Younger demographics might be more likely to substitute to BBC iPlayer from BVoD, sVoD, and other types of content such as YouTube or games consoles. Older demographics that use BBC iPlayer might be more likely to substitute to BBC iPlayer from linear TV.

A.7 Cross consumption between BBC iPlayer and other services

Substitution from a content provider to BBC iPlayer is most likely to occur where there is a higher degree of overlap between the use of both services. Figure 62 shows the percentage of weekly BBC iPlayer users which use other content providers on a weekly basis (compared to all users).

For BBC iPlayer users, Netflix is the most popular sVoD service used by 42% of BBC iPlayer users, followed by Amazon Prime Video (19%) and NowTV (7%).

Among BVoD services, ITV is the most popular service (though still behind Netflix). A quarter (26%) of BBC iPlayer viewers watch ITV Hub, and only 15% and 11% of BBC iPlayer viewers watch All4 and My5 respectively. YouTube is also a popular service with 23% of weekly BBC iPlayer users using it, compared to the population average of 11%.

50% 0% 10% 20% 30% 40% 7% ITV Hub or STV Player 26% 4% All 4 15% 3% My 5 11%

19%

■ iPlayer users

22%

23%

42%

8%

All adults

11%

Figure 62 Percentage of weekly users, split by all adults and BBC iPlayer users (%)



Netflix

NOW TV

YouTube

Amazon Prime Video

¹²¹ Ofcom Technology Tracker, H1 2018

Note: QH16 (QH78). SHOWCARD And which of these services, if any, have you used in the past week? (MULTI CODE). BBC iPlayer and Linear TV not included because of high values.

On average, BBC iPlayer users are four times more likely to also use other forms of VoD compared to the general population. Specifically, BBC iPlayer users are:

- Four times more likely to use a BVoD service than the general population.
- Twice as likely to use an sVoD service than the general population.
- Twice as likely to use YouTube than the general population.
- As likely to use linear TV services as the general population (though this reflects the close to universal reach of linear).

Figure 63 Strength of cross consumption for BBC iPlayer users

Strength of cross consumption for iPlayer users

0.0 1.0 4.0 ITV Hub or STV Player 3.8 All 4 BVoD My 5 Amazon Prime Video b 4 Netflix sVoD NOW TV 1.9 YouTube YouTube 2.1 Linear Linear TV 1.0

Source: Ofcom Technology Tracker, H1 2018.

Note: QH16 (QH78). SHOWCARD And which of these services, if any, have you used in the past week? (MULTI CODE). BBC iPlayer and Linear TV not included because of high values.

Taken on its own, the data on cross consumption would therefore suggest that BBC iPlayer users have a higher *strength of substitution* for BVoD services, compared to sVoD services. One explanation might be that sVoD households (around half of households) are equally likely to rely on sVoD and BVoD, whereas households that do not subscribe to sVoD are more likely to instead rely on BVoD.

Conclusion

Overall, this suggests BVoD has a higher strength of substitution with BBC iPlayer than sVoD. Linear TV and services such as YouTube might be more distant substitutes for users.

A.8 Searching for content

Viewers' choices will be conditioned by their approach to navigating to content. When viewers actively watch content¹²², they can either go straight to what they want to watch or they can search for content. It is possible that substitution between

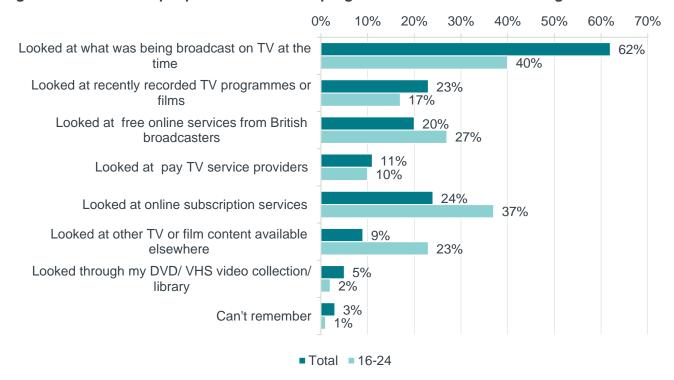
Passive watching is when people watch TV but only because someone else is watching it or it is on in the background.

a service and BBC iPlayer can occur at either of these stages: viewers can choose to navigate straight to BBC iPlayer more often as a result of the changes or can navigate to BBC iPlayer more often during a search. The MTM survey suggests that 46% of viewers go straight to what they want to watch, while 42% of viewers search for content. This varies by age, with older viewers more likely to go straight to what they want to watch.

The TV remains the most common destination for searching for content. According to the MTM survey, 62% of viewers who search for content look at what is being broadcast on TV at that time compared to 20% and 24% of viewers who looked at BVoD and sVoD respectively. As a result, 47% of people ended up watching live TV after searching for content. This is partly due to the TV guide being the most prominently displayed option on TV platforms, often appearing first (e.g. on the home page)¹²³. It is also easily reached using the remote control which typically has a button directing viewers directly to the TV guide.

However, while the majority of people continue to discover content on live TV, this masks differences across age groups with younger demographics increasingly less likely to begin a search with live TV and more likely to search for content on BVoD, sVoD or elsewhere, such as online video. Indeed, after searching for content only 18% of 16-24 year olds watched linear TV, compared to 47% for sVoD services. While viewers are as likely to search for content on BVoD as sVoD, the preference for watching content on sVoD as a result of the search suggests there are features of sVoD (e.g. range of content) which make sVoD more appealing than BVoD.

Figure 64 Where do people search for a TV programme or film before deciding what to watch?



Source: MTM Survey

Note: B6. While looking around for a TV programme or film you might like to watch, but before you finally decided, which of the following, if any, did you do? Base: All who looked around for content

¹²³ EPG Prominence: A report on the discoverability of PSB and local TV services, Ofcom 2018

If older viewers begin their search with live TV and don't find what they are looking for, they are likely to search on recorded TV. By contrast, younger viewers are much less likely to begin a search with live TV, and when searching a second time are likely to search on different online or VoD platforms.

Search journeys by platform Figure 65

	Adults		55+			16-24			
Platform	1st search	2 nd search	3* search	1st search	2 nd search	3* search	1st search	2 nd search	3* search
Live	56%	20%	7%	77%	16%	-	26%	27%	-
Recorded	15%	38%	15%	18%	47%	-	9%	11%	-
Free VoD	10%	25%	44%	3%	35%	-	17%	25%	-
SV ₀ D	5%	6%	16%	1%	2%	-	11%	11%	-
Other Online	13%	11%	18%	0%	0%	-	39%	25%	-
Share of viewing occasions	18%	3%	2%	16%	2%	1%	27%	7%	3%

Source: Routes to Content (Illuminas) 2015

Note: 'Share of viewing occasions' refers to the percentage of viewing occasions where viewers made an

active decision to view content

Conclusion

Evidence on how viewers navigate to BVoD content such as BBC iPlayer suggests that younger viewers are more likely to substitute from sVoD or BVoD than other forms of content, especially if the changes to BBC iPlayer lead to more people using it as their initial search destination. By contrast, for older viewers, which are still more likely to begin a search on linear TV, it is possible that substitution will come from linear (including recorded) TV.

A.9 Attitudes of BBC iPlayer users

BBC iPlayer

BBC iPlayer is seen as a catch up service and not primarily as a destination to find new content or "exclusive" content. The most common reason cited for using BBC iPlayer in the MTM survey was to catch-up on content from the past week (56% of people agreed with this).

However, when asked about the changes to BBC iPlayer, respondents in the MTM survey reported that they would be more likely to use it to access new content (40% of respondents versus 24% before the changes) and be more likely to watch content that was exclusive (28% versus 18%) or watch something that has not been on TV (23% versus 14%). This suggests that BBC iPlayer may become more of a destination, than simply a catch-up service.

Reasons for using on demand services (total sample) Reasons for using Plaver (BBC iPlayer users) Catch-up on content from the past week Catch-up on content from the past week Browse for new content Catch-up on content from the past month Watch something recommended Watch something recommended Catch-up on content from the past month Watch something exclusive/original Re-watch something familian Watch something that hasn't been on IV Catch-up on content from more than a vear ago Re-watch something familiar Watch something exclusive/original Catch-up on content from more than a year ago Watch something that hasn't been on TV

Figure 66 Reasons for using VoD and iPlayer

Source: BBC MTM survey

BVoD

Like BBC iPlayer at present, commercially funded BVoD providers were seen as predominantly catch up services: the most common reason to use ITV Hub (50%), All4 (44%) and My5 (41%) was to catch up on content from that week.

For BVoD services, watching original series made by the provider is often not seen as important compared to sVoD services – less than 20% of people named this as one of the reasons for watching a BVoD service.

sVoD

A common reason for watching sVoD content (especially for Netflix and Amazon Prime Video) is to watch new or exclusive content. Indeed, for sVoD services (Netflix, Amazon Prime Video and NowTV), watching new content ranked among the top reasons for using. Furthermore, 46% and 39% of people said that they used Netflix and Amazon Prime Video respectively because they offer exclusive or original TV shows and films. This is consistent with other surveys: 38% and 19% of sVoD users in the GfK sVoD Tracker said that one of the reasons for using Netflix and Amazon Prime Video was watch original series made by the provider 124.

Conclusion

The MTM survey suggests that the changes to BBC iPlayer will it position closer to sVoD providers which contain large libraries of content and are seen as destinations. Therefore, while BBC iPlayer is currently seen as a closer substitute with BVoD services, it is likely that after the changes BBC iPlayer will be seen as a closer substitute for sVoD services.

A.10 Consumption of other audio-visual content

"Other" content includes short form video content on video sharing sites including, but not limited to, YouTube or gaming.

¹²⁴ GfK SVoD Tracker, Q1 2018 (accessed through Ofcom Media Nations, 2018).

There are many other content providers which provide customers access to audiovisual content. The most prominent of these is YouTube which allows users to freely upload content, but makes money through advertising. The content varies significantly, from user generated content such as vlogging and how-to videos, to professional music videos and other short-form content. Other content providers include social media websites such as Facebook, general short form content providers and gaming companies. There is also a wide range of companies which do not necessarily produce audiovisual content such as online publishers

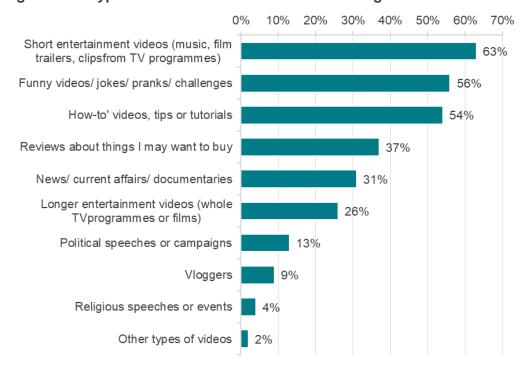


Figure 67 Type of content watched on video sharing sites

Source: Adults' media use and attitudes report 2017, Ofcom

Note: IN18. And what types of videos do you tend to watch on these sites or apps? (prompted responses, multi-coded). Base: All aged 16+ who ever watch videos on these types of sites (1114).

"Other" content is clearly differentiated from traditional broadcast content in a number of ways: for example, it is largely short form rather than a 30 minute TV programme (only 26% of users reported using these sites to view longer entertainment videos (i.e. TV programmes and films) which are most similar to BBC iPlayer content); and it is not scheduled like linear TV, but instead is accessed on demand via searchable menus or recommendations (like BVoD or sVoD). Gaming on consoles is differentiated from TV content in that it is interactive, and increasingly a social experience, rather than a passive experience of watching TV content. However, even for gaming there is clearly a degree of substitution. This was illustrated by a recent statement from Netflix who said:

"We earn consumer screen time, both mobile and television, away from a very broad set of competitors. We compete with (and lose to) Fortnite more than HBO. When YouTube went down globally for a few minutes in October, our viewing and signups spiked for that time. ... There are thousands of competitors in this highly-fragmented market vying to entertain consumers and low barriers to entry for those with great

experiences. Our growth is based on how good our experience is, compared to all the other screen time experiences from which consumers choose. Our focus is not on Disney+, Amazon or others, but on how we can improve our experience for our members."¹²⁵

There are a number of reasons to expect that BBC iPlayer users will substitute from other content to BBC iPlayer.

First, a significant proportion of viewing of BBC iPlayer takes place on portable devices (not on the TV). For example, in November 2018 over 50% of the BBC iPlayer's streams (though not viewers) were on a portable device (see Figure 68). The devices that content is available on will impact a person's behaviour. For example, services which are used heavily on a smartphone outside of the house, will be competing with other (not necessarily audio-visual) products for 'screen time'. A person using BBC iPlayer while they commute, is likely to substitute consumption of it with a wide range of activities such as watching short-form audio-visual content on social media sites (Facebook, YouTube, etc.), reading the news or playing games.

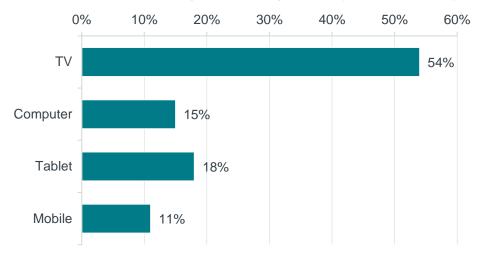


Figure 68 Share of BBC iPlayer stream by device (November 2018)

Source: BBC iPlayer Monthly Report, November 2018

Note: A small percentage of data could not identify the device. 'These have not been reported but account for 2% of viewing.

Second, younger viewers in particular are more likely to consume a wide range of non-TV audio-visual content and have substituted from TV services. In total all individuals watch 66 minutes per day of YouTube and other non-TV video or games consoles per day (approximately 22% of daily viewing), whereas younger demographics watch 122 minutes per day (42% of total daily viewing).

¹²⁵ Netflix, Q4 18 Shareholder letter, 17 January 2019

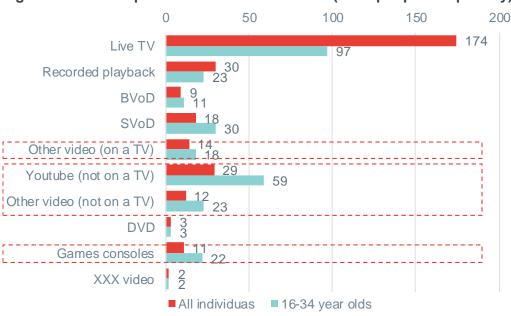


Figure 69 Time spent on audiovisual content (mins per person per day)

Source: Ofcom Media Nations, 2018, p21

Note: Original source: Ofcom/BARB/BARB TV Player (census data)/TouchPoints/ComScore – see detailed methodology section of how the sources are used to construct a total estimated view of video watched

Third, while there is clearly differentiation between traditional (long form) TV content and short form content the boundaries between the two are blurred. For example, long form content is found alongside short form on video sites such as YouTube. Indeed, many broadcasters use YouTube as a distribution platform to earn incremental viewers and revenues. Moreover, traditional broadcasters are increasingly publishing short-form content alongside long-form content to attract viewers (BBC Three is one example).

Finally, a significant proportion of other viewing is watched on the main TV set and available at the touch of a button on the remote control.

Conclusion

While "other" content is clearly differentiated from content found on BBC iPlayer, a proportion of it is still watched on a TV (like BBC iPlayer), and of course a large proportion of BBC iPlayer viewing is on a device where other content is often watched. We would expect a measurable but weak substitution from this large category of content (particularly reflecting the consumption habits of younger viewers).

This report does not consider the impact of the changes to BBC iPlayer on these providers, as there are a wide and diffuse set of providers (including YouTube, Facebook and a plethora of other online publishers) and the strength of substitution is relatively weak. However, in aggregate given the high volume of consumption, even a weak strength of substitution would still account for a material amount of BBC iPlayer viewing.

A.11 Summary of evidence of conclusions

Based on the analysis above it is a possible to make a high level judgement on the relative strength of substitution between the different services. For obvious reasons there is a degree of judgement in weighing evidence of the strength of substitution of different categories of substitutes, and of weighting the different types of evidence.

In summary:

- Commercially funded BVoD is the closest substitute in terms of characteristics, though is consumed in relatively small volumes compared to sVoD, linear and other non-broadcast content. It is free at point of use like BBC iPlayer, however, it has adverts (unlike BBC iPlayer) and is primarily viewed as a catch up service. It is has similar content (mostly UK-originated), although the range is currently limited on ITV and My5. Younger viewers might substitute from ITV or Channel 4, as they are proportionately more likely to use it. The evidence on cross consumption suggests a high degree of substitution.
- sVoD is a strong substitute (for the 40% of households that have access to sVoD). It has similar characteristics (in that it offers VoD) and the content is similar in some ways (with a strong focus on drama and comedy). It is similar to BBC iPlayer in that it does not show adverts. However, sVoD services are differentiated from BBC iPlayer in that they show largely US-originated content and have a much higher focus on movie content. There is a strong degree of cross consumption (BBC iPlayer users are twice as likely to use sVoD than the general population.) However, it is a subscription service, unlike BBC iPlayer (which is funded through a licence fee) and commercially funded BVoD which are free at point of use.
- While content available on PSB linear FTA channels is similar to BBC iPlayer (UK-originated with a mix of genres), it is not on demand (though PVR enables time shifting of linear content). Linear TV's near universal reach means that it is available to all BBC iPlayer users. The evidence on searching for content on a TV noted that viewers often search from linear to VoD when searching for content. However, for the proportion of BBC iPlayer content that takes place on a device, linear TV may be less of a substitute.
- Other audio-visual content (YouTube on a TV or device, other video on a TV or device and gaming on a console connected to a TV) is a relatively weaker substitute in terms of characteristics. However, it may be important for younger demographics who have shifted consumption from TV services to other audio-visual content over time. These groups are much more likely to navigate to other content on the TV and may therefore switch from "other" content to watch incremental BBC iPlayer content.

ANNEX B IMPACT ON SVOD SUBSCRIPTIONS

The analysis undertaken by Communication Chambers has revealed that as a result of the changes there would be a 1% reduction in the volume of viewing of subscription services in 2024. For those subscribers that substitute sVoD viewing for BBC iPlayer viewing but maintain their subscription there will be no consequent impact on subscription revenues. However, some subscribers may be incentivised to cancel their subscription.

This section considers the evidence on the proportion of sVoD subscribers that would be incentivised to cancel their subscription and the consequent impact on revenues.

B.1 Qualitative evidence on the reasons for subscribing

The relationship between viewing on an sVoD and subscriptions is complex. Even where viewers substitute some viewing to BBC iPlayer they may be unwilling to cancel their subscription.

- A significant number of subscribers to Netflix and Amazon Prime Video choose to do so because of the original content provided by these services, or because they produce content not available elsewhere. 32% of Netflix subscribers, and 18% of NowTV subscribers stated that reason for signing up was 'to watch exclusive content not available elsewhere'.
- For example, NowTV's most expensive package is its Sports pass which costs £33.99 per month. Given that the incremental content is unlikely to focus on sport, it is unlikely that consumers would cancel their subscription to this service.
- Consumers highly value the bundle of services that is often available through their sVoD provider. For example, the key reason for subscribing to Amazon is to receive free delivery, rather than watch its content.
- Consumers who subscribe to sVoD services typically watch a large volume of content. For a consumer to cancel their subscription because of the changes to BBC iPlayer, they would have to replace their entire viewing of an sVoD service with BBC iPlayer or other sources of content.

Nonetheless some marginal viewers of sVoD services would consider switching. Therefore we explore below survey evidence on the propensity of switching.

B.2 Survey evidence

The BBC's MTM survey asked respondents whether they would cancel their subscription. This is discussed in Annex C and summarised below.

In particular, the survey asked all respondents that who stated that they would watch less paid-for catch-up/on demand TV whether they would cancel a VoD

service. The survey asked respondents to choose from a list of four (prompted, and unrandomised) options¹²⁶.

Figure 70 Percentage of sVoD users that would cancel subscriptions (prompted)

	Definitely cancel	Consider cancelling
Total sVoD users	6.8%	14.1%
Single-person households	5.3%	9.0%
Multi-person households	7.1%	15.0%

Source: MTM

Additionally, the survey asked unprompted, those who said they would consider cancelling a service which service they would consider cancelling (though these figures should be treated with care given the small sample sizes involved).

Figure 71 Percentage of sVoD users that would cancel subscriptions (unprompted)

	Definitely cancel	Consider cancelling
Amazon	1.0%	3.8%
Netflix	0.8%	5.2%
NowTV	0.3%	2.4%
Any sVoD	1.5%	6.7%

Source: MTM

Notes: These results should be interpreted with caution since the base is very low. Weighted number of unprompted responses for would definitely cancel: Netflix (13), APV(7), NowTV(2). Weighted number of unprompted responses for would consider cancelling: Netflix (45), APV(48), NowTV(15)

When prompted 6.8% of sVoD users noted that they would definitely cancel a subscription and 14.1% said they would consider cancelling a subscription. However, when asked which specific services they would cancel, only 1.5% of sVoD users stated that they would definitely cancel and 6.7% stated that they would consider cancelling.

In order to understand the impact on subscription revenues given the reported actions of subscribers we make three adjustments. We adjust the results from the survey to:

- account for response bias in survey responses;
- account for the fact that in multi-person households the decision to cancel a subscription would depend on the attitudes of all members of the household, not just the individual answering the survey; and,
- consider the impact that many households hold multiple subscriptions and are likely to consider cancelling the "marginal" subscription.

D10. You've said that you might spend less time watching TV programmes and films accessed on-demand through a pay-TV or online subscription service. Which of these statements best describes you? DO NOT RANDOMISE. SINGLE CODE ANSWER LIST. 1. I'd consider cancelling a subscription service if BBC iPlayer made these changes 2. I'd definitely cancel a subscription service if BBC iPlayer made these changes 3.I wouldn't cancel any of my current subscriptions to TV services, I'd just spend less time watching them 4. Don't know

B.3 Interpreting the results

All surveys are necessarily imperfect mechanisms to understand future outcomes. Survey respondents are subject to a number of biases¹²⁷. In some cases there are techniques that can be used to minimise scope for over overstatement bias¹²⁸. This does not mean that they do not provide valuable evidence on views of consumers, rather that the results should be interpreted appropriately¹²⁹.

- The described BBC iPlayer changes are necessarily a double hypothetical question. It asks consumers to posit what their hypothetical response would be to a number of hypothetical changes that could be made to a service that they use. This is in contrast to surveys designed to understand the impact of a price increase where it is assumed that the service remains the same so respondents only have to consider a single hypothetical question¹³⁰.
- Consumer stated hypothetical reactions can be framed by the survey design.
 For example, the questions immediately preceding the questions on stated response asked consumers about their favourability for the proposed changes.
- More generally, survey results which ask about specific actions can be subject to overstatement bias. Typically spontaneous, unprompted results are more appropriate where consumers are likely to recall the specific actions that they may undertake. There is a potential for prompted responses to lead to response biases (where consumers overstate their propensity to act).
- In addition to a general overstatement bias, some services can specifically be subject to inertia bias. This is a tendency to understate the costs or barriers of changing existing behaviours.

One common technique to account for the scope for biases is to weight the responses. There is no scientific way to weight the response to interpret data, and the precise weights will be subject to a degree of judgement. Limited weighting would be applied where consumers were asked about products or services which they understood; or where their hypothetical actions would not incur costs (for example, money or time); or more generally in markets where the hypothetical actions are not subject to observed inertia behaviours.

Examples where survey responses were weighted to account for biases are set out in Figure 72.

- See for example CMA (2018) Good practice in the design and presentation of customer survey evidence in merger cases.
 https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/708169/Survey_good_practice.pdf
- For example some surveys use revealed preference techniques to understand preferences (for example by asking consumers to rank pairs of options which have a limited number of differentiating features). Surveys can ask consumers hypothetical questions but about goods and services that they know and understand (for example willingness to pay surveys might take an existing product and ask consumers iteratively for their value of it at ever higher prices).
- While we recognise that some of these adjustments can be applied to other results in the MTM survey, these are unlikely to impact the results. In other sections of this report, specifically section 4.3, we are more interested in the relative impacts of the results. As any adjustments would be likely to apply to all services, it is unlikely that the relative impact would change.
- For example, with a survey designed to understand the impact of a price increase (such as a SSNIP survey in market definition for competition analysis) where it is assumed that the service remains the same but increases in price by 10%.

Figure 72 Weightings applied to hypothetical statements of actions

i igaic 12	Weightings applied to hypothetical statements of actions		
	Questions relate to	Scope for "bias"	Weighting applied
Ofcom 2017 ¹³¹	Mobile consumers requesting a code to facilitate switching	Relates to a personal decision. Relates to a service that the respondent may not know so may need explaining. Relates to a "costless" one-off action	"When analysing stated take- up of a future scenario/product it is appropriate to down-weight responses. This is to reflect that people will not always do what they say they will. The analysis applied a down- weight of 80% for those stating they would 'definitely' take up each new option and 20% for those stating they would 'probably' take up the option."
Ofcom - willingnes s to pay for pay TV services	Willingness to pay survey for TV services, iterative response to increasing prices	Relates to a personal decision (the survey specifically questioned the decision maker ¹³³) Relates to mix of existing content packaged in new potential services Standalone willingness to pay survey	"The categorical responses were converted to a probability of subscription, assuming a relative conversion rate of 0.75 for "definitely would buy" and 0.3 for "probably would buy"."

Source: Ofcom

There is some justification for using higher weightings (i.e. a greater down weight to survey responses) in this case compared to the cases set out above.

- Both cases in Figure 72 related to personal decisions, whereas a decision to cancel a household subscription is a household subscription, which increases the scope for decision inertia (i.e. the costs and frictions in making a subscription decision are greater).
- The BBC iPlayer survey related to hypothetical changes (described at the midpoint of the survey), whereas the other two surveys were based on well understood, existing products.
- The other surveys look to be more bespoke and specific to the issues, whereas the BBC iPlayer survey jointly considered appreciation for the changes, followed by switching decisions.
- The BBC iPlayer survey asked consumers whether they would be prepared to cancel a subscription which is a known source of behavioural inertia¹³⁴.

https://www.ofcom.org.uk/ data/assets/pdf_file/0008/102005/Mobile-Switching-Research-2017-Technical-report.pdf

https://www.ofcom.org.uk/__data/assets/pdf_file/0016/41146/annex10.pdf

¹³³ Paragraph 8.2.

For example a recent CMA report on Loyalty Penalties in relation to subscription services (and other repeated buying decisions) noted that observed customer inertia behaviours in relation to subscription services. CMA (2018) Tackling the loyalty penalty Response to a super-complaint made by Citizens Advice on 28 September 2018

Given this we expect stronger scope for bias than for either of the two Ofcom surveys. Therefore, we apply a 75% weight to "definitely would buy" and do not include responses of those that would "consider" cancelling.

B.4 Accounting for subscription decisions of those that live in multi-person households

The BBC survey asked respondents about their personal views on their hypothetical action (whether they personally would watch more BBC iPlayer, and if so whether they would therefore cancel a subscription service). However, subscription decisions to household services (such as TV) are *household* decisions involving the whole household. Therefore we have made an adjustment to the responses to account for the fact that different members of a household would have heterogeneous preferences¹³⁵.

Specifically, we assume that for multi-person households the subscription decision will depend on whether a household contains *any* individuals who continue to subscribe. Where *all* members of a multi-person household would cancel a subscription we make no adjustment to the propensity to discontinue to subscribe. In a household where one member would definitely cancel, and one would definitely not cancel, we assume that a quarter of these households would in fact cancel.

Understanding the distribution of individuals that would cancel subscriptions across households is complex. We have made conservative, simplifying assumptions. We assume that individuals who would and would not cancel are uniformly distributed across households and that multi person households contain only two individuals.

Under this model, given a cancellation rate of 5.1% (i.e. 6.8% * bias weighting of 75%) those cancelling their subscription would be distributed as follows.

- In 90% of (two person) households, <u>both</u> individuals would <u>not</u> cancel their subscription
- In 10% of (two person) households, only one of the two members would cancel
- In 0.28% of (two person) households, both members would cancel their subscription.

We note that (after adjusting for the overstatement bias) single-person households are less likely to cancel (4.0%), and individuals in multi-person households are more likely to cancel (5.3%) compared to the average (5.1%)¹³⁶.

Therefore in order to down weight the cancellation decisions to reflect the fact that many subscribers live in multi-person households with individuals who would **not** cancel their subscription we apply a weighting of 61%. This is described in Figure 73.

https://assets.publishing.service.gov.uk/media/5c194665e5274a4685bfbafa/response_to_super_complaint_pdf.pdf

Note that this adjustment is different to the inertia bias that is inevitable in purchase decisions which reflect more than person, i.e. the "costs" and frictions involved in making a decision where more than one person is involved, which are not present when a purchase decision is taken unilaterally.

¹³⁶ After the bias adjustment

Figure 73 Adjustment for household decision

	Factor		Note
(1)	Single person cancellations (m)	0.122	Percent of single-person HH * total subscriptions * cancellation rate
(2)	Multi-person HH with one person who would cancel	0.786	Percent of multi-person HH where one would cancel * total subscriptions
(3)	Adjustment in mixed household - only 25% of mixed households would cancel as it is a household decision	25%	Assumption
(4)	Cancellations in Multi-person households (m)	0.197	(2)*(3)
(5)	Multi-person HH with two people who would cancel (m)	0.022	Percent of multi-person HH where both would cancel * total subscriptions
(6)	Total cancellations accounting for household decision (m)	0.341	(1)+(4)+(5)
(7)	Cancellations assuming no adjustment (m)	0.555	total subscriptions * 4.5%
(8)	Implied adjustment for household decision	61%	(6) / (7)

Source: Frontier

B.5 Accounting for multi-homing subscriptions

Finally, we make an adjustment to account for the fact that half of sVoD households subscribe to more than one sVoD service. This means that it is likely that when a subscriber notes that they would cancel a subscription, where the subscriber has more than one subscription service they would only cancel one service.

sVoD subscribers are likely to have a "hierarchy" of sVoD services (i.e. each incremental service provides diminishing utility). They would cancel their subscription first with the service that is watched least.

Therefore assuming that 6.8% of households would cancel, but that multi-homing households would only cancel one service as a result of substitution of some viewing to BBC iPlayer, this would imply that only 4.1% of subscriptions would be cancelled 137. This implies an adjustment of 61% (i.e. 4.1% / 6.8%).

Figure 74 sVoD households and subscriptions

•	•	
	Households	Total subscriptions
1 service	5.4	5.4
2 services	4.2	8.5
3 services	1.3	3.9
	11.0	17.8

Source: BARB data. ONS data on households (27.2m).

¹³⁷ The number of cancelled services = 6.8%*13.4m = 800k cancellations. 800k expressed as a percentage of total subscriptions = 800k / 21.9m = 4.1%.

B.6 Total adjustments

Therefore based on the adjustments set out above we would anticipate that this would lead to a 1.9% reduction in subscriptions. We assume that the change in subscription revenues is made over time in proportion to the change in viewing to sVoD services.

Figure 75 total adjustment

	Factor	
Unadjusted impact	6.8%	(1)
Bias adjustment	75%	(2)
Multi-person HH adjustment	61%	(3)
Multihoming adjustment	61%	(4)
Adjusted impact	1.9%	= (1)*(2)*(3)*(4)

Source: Frontier

ANNEX C EXPLOITING "SECONDARY RIGHTS" FOR CONTENT

The additional content on BBC iPlayer as a result of the changes will relate to older content (i.e. content first broadcast on linear channels more than 18 months ago), as well as longer availability of more recent content. The section below describes how newer and older content is currently commissioned and commercially exploited.

- Section C.1 describes the windowing of content rights and the role and value of secondary rights
- Section C.2 describes the commissioning and exploitation of content rights including of secondary rights.

C.1 Windowing of content rights

Rights to exploit content are typically offered in distinct "windows". The "window" defines a specific period over which a rights licensee is permitted to broadcast the content. The rationale for exploiting content rights in this way is that the value of the content generally declines from when it is first broadcast. By exploiting the rights in distinct windows, the rights holder can profitably price discriminate by licensing the content to different broadcasters who have different strategies.

Generally, the value of content declines over time for a number of interconnected reasons. First, once someone watches content its value to that viewer may decline since the value of novelty is eliminated. Viewers are likely to have a lower value for certain types of content they have already seen. Second, broadcasters and producers at time of first broadcast typically invest in marketing in order to generate interest and anticipation in viewers. These can relate to marketing adverts (press or trails advertising the content) or media and press engagement of the key content. Figure 76 shows the estimated relationship between viewing and period of availability on iPlayer for different types of programmes. It shows that viewing "decays" over time. Finally, new broadcasts can generate wider public interest at the time of broadcast when viewers collectively connect and engage in the content ("the watercooler" TV moments¹³⁸).

See for example: https://www.scotsman.com/news/uk/bodyguard-heralds-return-of-water-cooler-tv-1-4804193

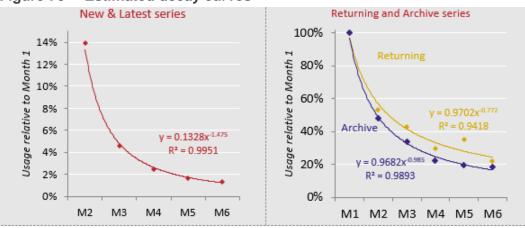


Figure 76 Estimated decay curves

Source: Communication Chambers

Notes: relates to estimated viewing on BBC iPlayer in each month relative to viewing in month 1 (i.e. at initial release on BBC iPlayer)

Figure 77 below summarises the windowing strategies of BBC and other public service broadcasters. TV rights are sold as primary rights and secondary rights.

- Primary rights. Typically, a BBC commission acquires a licence to exclusively broadcast the content on linear and as 30 day catch up to each linear transmission (i.e. the content premiere and each subsequent repeat). Channel 4, ITV¹³⁹ and Channel 5 have rights longer periods of exploitation on their VoD platforms.
- UK TV secondary rights. After the end of a "hold back window", when the secondary rights cannot be exploited in the UK, the rights holder (the producer) can exploit secondary TV rights. These can be offered to sVoD providers, PayTV VoD services or linear TV providers such as FTA channels (like Dave) or pay channels (such as Discovery).
- Global international rights. Which are offered after the first transmission in the UK.
- Other transaction sales such as DVD, Electronic Sell Through (EST) are available after the first transmission in the UK.

¹³⁹ The length of period of availability will vary for each broadcaster depending on the rights window negotiated and the broadcaster's commercial strategy. For example ITV Hub generally offers 30 day availability, whereas ITV Hub+ offers longer availability.

TΧ 30 18 PS Davs Linear repeats with 30 day catch up Linear repeats with 30 day catch up Extend PS 30 day catch up No series stacking No series stacking DVD and EST box set DVD and EST box set Episodic release on EST EST Box Limited early release for UKTV channels or 3rd party linear (+associated A/F/S Vod) set release 3rds party linear and VOD DVD (series 3rd party stand-alone SVOD or pay TV VoD - local and post final in return for production length dep.) investment

Figure 77 Windowing of content

Source: BBC Studios

Note: EST – Electronic sell-through, PS Public Service exploitation (i.e. on the linear channel and iPlayer), BBCS - BBC Studios commercial exploitation, TX initial linear transmission.

The entry and growth of the US based broadcasters (such as Amazon and Netflix) has upended the commercial model for many producers. Commissions from Amazon and Netflix are usually on the basis that the producer will not retain any ownership in the rights which are owned and exploited by the broadcaster. This is because the business model of the large OTT entrants is to entice customers by building a large library of content, of which some is identified as a Netflix Original (such as The Crown) or Amazon Original (such as The Grand Tour).

C.2 Commissioning and exploitation of content rights

There are a number of different routes through which content can be created, and these will impact the ownership and exploitation of the content rights. Broadcasters will commission content from producers and commercially agree terms including the price and the owner of the secondary rights. There are many models that can be chosen depending on whether the primary commissioner acts alone, or jointly with other broadcasters (in a "co-production").

Figure 78 sets out three ways that content can be commissioned and who owns rights to exploit secondary content:

- (i) content self-supplied by a vertically integrated producer and broadcaster;
- (ii) content is commissioned by a PSB broadcaster but the secondary rights are owned by the producer;
- (iii) content is commissioned by another broadcaster (e.g. sVoD provider) and the secondary rights are owned by the broadcaster

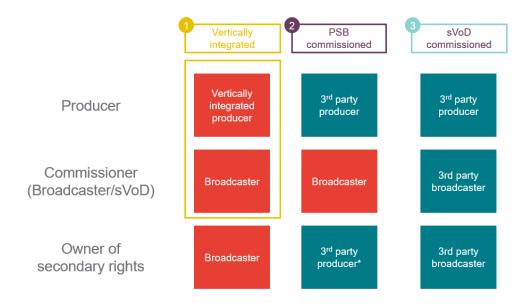


Figure 78 Owner of secondary rights

Source: Frontier

A broadcaster can commission a production company to produce TV content on their behalf or self-supply the content if it has the upstream production capabilities. The ownership and exploitation of the contents rights would then be agreed between the commissioner and the production company. These negotiations would determine the terms under which the commissioner can use the content, the ownership of the 'secondary' contents rights and any agreements regarding the exploitation of these rights (e.g. revenue sharing arrangements). These negotiations will vary depending on the retailer and production company. However, PSBs which commission content from qualifying independent producers (i.e. producers that are not affiliated with a UK broadcaster via common ownership) will be subject to the 'Terms of Trade' which are negotiated by the PSB and PACT, an industry body for production companies (see below for greater detail).

Unlike PSBs, sVoD providers such as Amazon and Netflix typically commission content from production companies and retain the primary and secondary rights to exploitation. By doing so they are able to associate the value created by the content to the broadcaster's brand. Netflix noted that such a strategy would "strengthen title-brand-love and franchise value"¹⁴⁰. Increasingly sVoD broadcasters are vertically integrating upstream to self-produce content.

Netflix Q3 Results and Q4 Forecast shareholder letter.

EXPLOITATION OF CONTENT FOR PSB-COMMISSIONED CONTENT

- A PSB can commission a qualifying independent production company to produce content on their behalf, in which case the ownership and exploitation of the content is subject to the 'Terms of Trade', as negotiated by PSBs and PACT, an alliance of production companies. Commissions which are from other producers are not subject to the Terms of Trade. The 'Terms of Trade' define the scope of rights, duration, payments and revenue sharing arrangements between both parties in the primary licence window. While the agreements vary between PSBs, we focus on the BBC, which is similar to that of other PSBs.
- The BBC's 'Code of Practice'¹⁴¹ gives the BBC an exclusive 5 year licence in the UK PSB channels, with the option to extend this by a further 2 years (this is known as the primary licence window). The agreement lets the BBC broadcast a set number of transmissions of the programme on its linear television broadcast services and to make the services available on its public service on-demand offerings (i.e. catch-up) during the primary licensing window. The BBC can show further transmissions of the programme during this period for an agreed fee. In the case of returning series, the BBC has the option to renew the exclusive licence for all previous series.
- Under the agreement, the production company owns the rights to the content. However, programmes are subject to a 'standard exclusive window' during which the BBC has exclusive UK broadcasting (i.e. the production company cannot exploit the secondary rights in the UK). The 'standard exclusive window' varies depending on the channel and whether the programme is a single episode or a series of episodes, but it is generally between 6 and 18 months.
- After the 'standard exclusive window', the production company may exploit the secondary rights by licensing them to other UK content retailers. However, for the duration of the licence the BBC will be paid a percentage of the secondary rights in the UK market, typically 25% of UK back end within the licence period when it reverts to 15%¹⁴². This aligns the incentives of the commissioner and production company to ensure the proper exploitation of the content.
- The production company may exploit the content overseas, but cannot do so before the episode has been broadcast on the BBC platform (i.e. the BBC is offered the worldwide premier of the production).

Distributors license secondary TV rights

Secondary TV rights to content are licensed by "distributors". Distributors are appointed by the rights holder (e.g. the producer) to exploit the rights on their behalf. BBC Studios exploits secondary rights for the BBC, for some third party producers of content commissioned by the BBC and for other holders of secondary rights (i.e. content not commissioned by the BBC). Other distributors include Sky

http://downloads.bbc.co.uk/commissioning/site/code_of_practice.pdf

¹⁴² See for example: http://downloads.bbc.co.uk/commissioning/site/BBC_New_Business_Framework_July_2014.pdf

Vision, Endemol Shine, DRG, FremantleMedia, All3Media and ITV Studios (some of whom are integrated broadcasters, producers and distributors).

Distributors are appointed to license the secondary IP rights of content producers to the retail providers(sVoD, PayTV VoD, linear FTA and linear pay broadcasters). The distributor tries to maximise the value of the assets. In doing so, it will balance both the short-term and long-term value of the IP rights. Licensing the content to too many providers may lead to short term revenue gains, but would reduce the appeal of the content in the future (as more people will have seen it).

The distributor typically licenses bundles of multiple titles. The distributor and retailer will negotiate the terms of the deal including:

- □ Size and content mix of the packages: This will likely depend on the genres of content that the retailer is interested in.
- Duration of the licensing period: For VoD platforms, this will typically be a fixed length of time (e.g. 2 years). For linear broadcasters, this will typically be a fixed number of transmissions (with any catch-up service associated with this).
- Typically content is licensed on a non-exclusive basis. Content might simultaneously be available on one or more sVoD services, a PayTV VoD service or linear channel simultaneously.

In return for licensing the content of third parties, distributors normally receive a commission on the revenues generated.



