



**Sky's response to Ofcom's call for evidence  
on the future of TV distribution  
[Non-Confidential]**

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## Introduction

Sky welcomes the opportunity to respond to Ofcom's call for evidence on the future of TV distribution, which in practice focuses on the future of distribution of TV services via DTT and the transition away from this mode of delivery to IP delivery.

Sky has a track record of innovation in TV delivery, including the development of satellite broadcasting, driving the switch to digital broadcasting, pioneering broadband delivered over-the-top delivery of TV services and driving on-demand viewing. Sky's two latest TV products, Sky Glass and Sky Stream, deliver content entirely over the internet.

Sky has also been heavily involved with the DTT platform, from its position as a founding member of Freeview in 2012, to its role as a broadcaster of important TV channels available on the platform today.<sup>1</sup>

We are also a large ISP [3<] in the UK. Not only do we deliver our own audio-visual content to our broadband customers over our broadband network (and to other ISPs' customers over their networks) but we collaborate with other large content providers to ensure that their online TV content is also delivered to our broadband customers satisfactorily.

This is a short response because we do not have a significant amount of evidence on the issues raised in Ofcom's call for evidence. Those issues are inherently forward-looking, and relate to the developments in the sector over the next 10-15 years, which is a period well beyond Sky's own forecasting horizons. Notwithstanding this, we have some historic evidence (e.g. on viewing trends) which is relevant and have a number of observations on the issues raised in the call for evidence which we hope are of assistance to Ofcom.

This is an important workstream and it is appropriate for Government and Ofcom to be thinking about the future evolution of DTT, broadcast television more generally, and the ability of broadband networks to cope with a greater role in the delivery of linear television. Nevertheless, much of this transition will be evolutionary in nature, given the long timescales involved. In our view, the current ecosystem works well in supporting an ongoing trend of TV viewership moving to internet delivery, and will continue to do so for the foreseeable future.

## How are audience demands and expectations evolving, and how does that vary for users of different TV platforms and different demographics?

Ofcom's call for evidence identifies the well known, fundamental changes that are occurring in the way that UK audiences view video content, which can be anticipated to continue into the foreseeable future. These include the rise of on-demand viewing, (and corresponding decline in live viewing of linear TV channels) and the fact

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<sup>1</sup> Sky was a founder member of the Freeview consortium that rescued DTT in the aftermath of ITV Digital's collapse, making a number of popular channels available via the platform since its launch in 2002. In 2020 Sky made its flagship arts channel, Sky Arts, available on Freeview.

that modes of consumption differ significantly by demographic characteristics and the video platforms adopted by a household.

As noted by Ofcom, average daily viewing of broadcast TV has fallen by approximately 90 minutes across all demographics since 2012<sup>2</sup>, aside from a spike associated with Covid-19 pandemic lockdowns. The decline is greater the younger the age group; for audiences 75+ linear viewing has decreased by around 10 minutes per day, whereas among 25-34 year old and 16-24 year old age groups, the decrease has been approximately 2 hours per day.

This trend appears likely to continue, for example as behaviour changes among those demographics that have, to date, been slower to move away from linear TV viewing. Ofcom's latest Media Nations report found that:

*"for the first time there is evidence of a significant decline in broadcast TV viewing among older audiences. Over-64s watched 8% less broadcast TV in 2022 than in 2021 and viewing was 6% lower than in 2019 (the last pre-pandemic year). Older viewers are increasingly using streaming services, with take-up of Disney+ among online over-64s rising from 7% in 2022 to 12% in 2023."*

Despite this trend, however, viewing of broadcast linear TV remains a significant form of viewing of audiovisual content in UK homes, accounting for 44% of total video viewing in 2022.

It is also important to note that, while it is growing, use of the internet to view live broadcast TV remains limited – traditional broadcast technologies (DTT, cable and satellite) remain the predominant way that viewers receive live television. In the case of PSB channels, for example, while use of the internet to watch these channels has increased by 6% over the past three years, over 93% of live viewing remains via traditional technologies.

[✂]

## Households remaining on DTT

Plainly, the focus of attention in Ofcom's analysis in the context of its current analysis must be on those households that are likely to continue to rely heavily on DTT delivery of content over a longer period of time.

Ofcom's view is that *"under current trends, millions of households will use DTT well into the 2030s"*.

Whilst we agree that there is likely to be a significant number of UK households that continue to rely on DTT for linear TV broadcasts into the 2030s *"under current trends"*:

- (a) we are not convinced that this will, necessarily, be *"millions of households"*; and
- (b) *"under current trends"* is a critical caveat. What really matters here is the set of factors that might either induce or hinder switching away from reliance on DTT broadcasting by viewers.

<sup>2</sup>

Barb data from Ofcom [Consultation: Channel 4 licence renewal \(ofcom.org.uk\)](https://www.ofcom.gov.uk/consult/condocs/channel4/channel4_licence_renewal/)

This issue appears ripe for scenario modelling of the type that Ofcom has either conducted or commissioned in the past, such as the Mediatique report for Ofcom on the future of FTV broadcasting in 2014<sup>3</sup>.

A number of observations are relevant here:

- while the PSBs main services are likely to remain the mainstay of the DTT platform, the commercial viability for broadcasters of other services using that platform (including the commercial PSBs' portfolio channels) may diminish over time leading to a reduction in the scope of its offering and therefore its attractiveness to households. One of the key attractions to broadcasters of FTA channels of the DTT platform is its wide reach. If the number of households using it diminishes significantly it may no longer be commercially attractive. This may act as a significant driver of households away from the DTT platform over time;
- there may be valuable insight that can be brought to bear on this subject from considering other significant technological transitions in the past, in particular the move from analogue to digital television.

One lesson that may be relevant is how fast a transition can occur in the right circumstances (e.g. with significant publicity, an effective co-ordinating body and clear timetable for switch-off). For example, between 2003 and 2009 around 16 million households took up digital terrestrial television services.

Sky's own experience in moving from analogue to digital satellite broadcasting was that there remained a small but significant number of customers who continued to use the analogue service despite (a) it being reduced to a handful of TV channels, and (b) significant incentives to move to the new, vastly superior (and no more expensive) digital service (such as a free digital box and installation). One lesson we draw from this is that there can be a high degree of inertia among small numbers of households in relation to adopting new technologies, even when there are significant benefits from doing so.

- given the long timescales under consideration, demographic factors will play a role, and need to be taken into account. In short, the number of people in households who are 75+ today (who are disproportionately reliant on live television viewing via DTT) will diminish over time;
- the role of the BBC is likely to be significant, given its extensive reach and ability to engage with TV viewers. In particular, its Digital First strategy, adopted in 2022, is likely to be a significant catalyst for households moving away from DTT in future.

We agree with Ofcom's analysis that those who remain on DTT are likely to be disproportionately older households or vulnerable, in view of such households' lack of incentive to switch, or lack of ability to do so.

[X]

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<sup>3</sup> The development of free-to-view television in the UK by 2024', Mediatique, 2014. [https://www.ofcom.org.uk/\\_data/assets/pdf\\_file/0024/40569/mediatique.pdf](https://www.ofcom.org.uk/_data/assets/pdf_file/0024/40569/mediatique.pdf)

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## How do broadband networks and supporting infrastructure need to evolve to support resilient delivery of TV over the internet in the future?

Sky is both a large ISP and distributor of audiovisual content online over our own and other ISPs' broadband networks, and we draw on that experience in the following comments.

Use of the internet for delivery of audiovisual content in the UK has increased significantly over the past ten years. As Ofcom has observed, a range of investments – both by network operators and content providers – together with a pragmatic and co-operative approach on the part of players within the sector, have facilitated this growth. We see no sound reason to believe that this approach will be insufficient to support resilient delivery of TV over the internet in the future.

Sky's broadband network capacity in the UK has historically seen average year-on-year traffic increases [X] without significant difficulties. In fact, despite annual variations the overall trend in the traffic growth rate is declining and is anticipated to continue to do so.

[X]

Increasing consumption of television services delivered via broadband, with a move away from DTT broadcasting, will require investment in broadband infrastructure in order that networks are able to deliver high quality video to viewers. In Sky's view, there is no reason to believe that such investments pose an insurmountable challenge to network providers.

The key determining factor of the ability of broadband networks to deliver high quality video services to viewers is capacity of core networks at the busy hour. As Ofcom notes, the busy hour is likely to continue to be driven by events when significant numbers of UK viewers wish to view live events simultaneously, such as sports events or royal events.

In this respect, we consider that the past is likely to be a good guide to the future. Networks have been able to cope with increased busy hour traffic over time via a combination of factors including:

- operators in the sector have adopted a pragmatic and co-operative approach to identifying and addressing potential issues [X]
- growth in the number of simultaneous users at the peak has been relatively gradual over time, meaning that network providers have not had to make extremely large investments in additional capacity;
- the cost of network components has been falling over time, reducing the unit cost of providing additional capacity;
- technological change has reduced the demand placed on networks by video content, for example via new codecs which reduce the data payload of video content on IP networks and use adaptive bit rate technology that reduces the speed requirements for the delivery of video content streams; and
- video operators have invested in their own infrastructure, particularly CDNs, enabling content to be cached closer to end users, reducing peak network bandwidth requirements for ISPs.

Nevertheless, addressing challenges posed by greater levels of broadcast video over IP networks going forward may also involve increasing the number of ISP interconnection points, managing the complexity of hosting multiple caches in ISP networks, standardising multicast solutions, and mitigating risks associated with CDN consolidation (such as introducing larger single points of failure or imbalances in commercial collaboration between ISPs and content providers).

### Households without internet access

Being able to receive broadcast TV services via the internet requires a broadband connection, although it is important to note that there is no need for this to be a high speed connection: an IP delivered TV service like Sky Glass requires only a minimum home broadband speed of 25 Mbps.

Nevertheless, as noted by Ofcom there is a risk that even a considerable period in the future some households that are able to receive DTT services today may not have an internet connection. This seems unlikely to Sky to be a significant issue over the timeframe considered in the call for evidence as we believe that there will be strong incentives driving near universal take-up of internet access over this period of time.

Moreover, we consider that a clear timetable for DTT switch off would act as a significant catalyst for non-adopters to take an internet connection, in the same way that analogue switch off encouraged people to acquire the equipment required to receive digital television. The shift to internet delivered TV has the potential to drive greater broadband take up and therefore digital inclusion in the long-term, helping meet Government aims in this area.

To the extent that non-adoption of broadband is a financial issue for some households, this issue is being addressed via other policies, such as encouraging the provision of social tariffs.

## Given the sharing of infrastructure, what would the implications for other sectors be if there was a change to the use of DTT?

We welcome Ofcom's recognition that any change in use of spectrum currently used for DTT services may have implications for spectrum used for programme-making and special events. Sky, like other UK broadcasters of news and sports, is an extensive user of PMSE equipment such as wireless microphones, talkback systems and cameras. Over time, most of our spectrum usage for these applications has been migrated out of the spectrum used for DTT. However, the most intensively used spectrum for these applications (in the 460-470 MHz band) is adjacent to DTT spectrum and is therefore at risk of interference if DTT spectrum were to be repurposed.

We recognise that consideration of such matters is likely to lie some time in the future. However, we would also urge Ofcom to bear this issue in mind in any consideration of repurposing of DTT spectrum.