



Watch this space: a new strategic direction for UK media

Response to the DCMS Green Paper

September 2026

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Executive Summary

Arqiva welcomes the Green Paper which sets out two options for the future of Digital Terrestrial Television (DTT) - commonly known as Freeview. Either switching it off in 2034 or extending it for a further ten years to 2044 in order to protect viewers and communities across the UK who cannot afford or do not want to be forced to switch; to reduce the costs of an eventual transition to full reliance on the internet and fixed broadband for television; to avoid a significant ongoing burden on the public finances; and to protect the UK's communications resilience and knock-on impact to the UK's radio sector.

It is very clear that the 2044 extension is the only reasonable choice for the Government to make based on the following key arguments:

DTT remains a hugely used and relied upon service underpinning universal free TV and that is set to continue - viewers and the public do not want to see DTT turned off.

- DTT is not some marginal service ready to be switched off. It is the primary platform on the main television set for 10 million UK households, is used in some form by just under 13 million households. It accounts for around 44% of total television viewing and delivers almost half of all Public Service Broadcaster (PSB) viewing supporting access to trusted news, universal delivery of public service programming and nationally significant moments for audiences across the UK;
- Whilst viewing habits are undoubtedly changing with ongoing growth of streaming and internet-delivered services, particularly for younger audiences, core groups and communities are not changing as rapidly and will continue to rely heavily on DTT – this includes older demographics, those on lower incomes, those in rural areas and those who either do not want, cannot afford or cannot get a reliable high-speed fixed broadband service in their home;
- There are likely to be 5.4m households still heavily reliant on DTT in 2034 including many who have the internet and use online services (including millions who use a mobile service) but who do not want to rely solely on it for their TV – that should be their choice;
- The public do not want to see DTT turned off and it would represent a very unpopular and unnecessary policy for the Government to adopt. Recent polling of over 26,000 people found that 80% want DTT to continue beyond 2034, and more than 160,000 and 108,000 people have signed petitions by Silver Voices and 38Degrees respectively. The Government should listen to the views of people and communities across the UK.

There is a fully costed and deliverable plan for 2044 which: protects universal free TV services for viewers, places no ongoing cost on the public purse, materially reduces the cost of DTT for the Public Service Broadcasters and releases radio spectrum early for use by the mobile sector.

- A common argument is that DTT is too expensive for PSBs as they also must pay for streaming service delivery. This argument is too simplistic. The 2044 plan would modernise DTT and reduce the costs of provision to the PSBs by up to 50%.

- Once the avoided increased costs of paying for IP distribution for the DTT viewing that would otherwise need to switch (which are ignored in the Green Paper), the increased costs of radio distribution for the BBC, and the forecast reduction in advertising income (including for UKTV, which is owned by the BBC) are taken into account, the PSBs are likely to be financially better off by continuing with DTT to 2044;
- Viewers will be fully protected under the 2044 plan with the universal coverage of DTT remaining and the network having sufficient capacity to offer a comparable range of TV services as today delivering the same reliability and resilience – it requires no ongoing public funding to support it;
- A key attraction of the plan is that the modernisation of the DTT network would permit the release of the 600 MHz spectrum to a guaranteed timetable in 2034 whilst permitting the continuation of DTT to 2044 – this would provide significant auction proceeds for the Exchequer and benefits for the mobile sector, or any other alternative use.

In contrast, there is no plan for a 2034 switch-off – no detailed proposals for how any of the substantial challenges would be addressed, no funding and no clarity on who would pay.

- It is surprising that, following over a year of effort, the Green Paper sets out no plan for how a switch for everyone across the UK to full reliance on the internet and high-speed fixed broadband for their TV by 2034 would work;
- The DCMS says that it wants to work with industry on a plan and a package of measures to support audiences but that there should be no expectation of public funding to support a transition – with no detail and no plan it is hard to see how 2034 could be seen as a credible policy option;
- A key concern from the arguments put forward in the Green Paper, and from those pushing for a rushed 2034 switch, is that it would somehow be good to use the threat of taking away free terrestrial TV to force people to adopt high-speed fixed broadband, thus unlocking wider benefits of households being online – we believe that viewers, particularly those most vulnerable in our society - deserve better than that and should not be used as guinea pigs in some social experiment where they are likely to face the damage and cost when it fails.

The costs of a 2034 switch to all-IP would be significant and likely to fall on consumers and the public purse.

- The Government has stated that no one should be left behind from any switch. That means that everyone currently reliant on DTT will need to have an alternative. Around 10m households will need to switch themselves or be provided with the financial support needed to do so;
- This includes not only having a high-speed fixed broadband connection but the right TV equipment (with millions of modern connected TVs not able to support linear IPTV other than through apps) and ongoing training and support for those who lack the skills and for those who will undoubtedly run into a myriad of technical problems as they seek to make the switch;

- There is a real risk that the Government underestimates the costs involved with not leaving anyone behind and without TV – if we look at those in society who are more vulnerable, other benefits such as Universal Credit (received by 6.7m HHs), social tariff support for water bills (received by c.2m HHs) or those eligible for the Warm Home discount (received by c.5.7m HHs) may provide a proxy. The ongoing cost is likely to easily exceed £1bn per annum;
- While broadcasters indicate they may be able to save money directly on distribution via a switch to all IP (a position which is questionable given the costs they will have to incur for IP delivery and the commercial risks they face), the reality is that the overall ongoing costs significantly outweigh any savings and those ongoing costs will most likely transfer either to the public purse through direct support via the benefits system or to consumers directly or through higher broadband prices if they are asked to subsidise free broadband for millions of households who cannot pay, thus exacerbating the ongoing cost-of-living crisis.

A rushed 2034 switch-off **risks undermining the UK's communications resilience with potentially damaging impacts** for the radio sector and other services sharing the DTT infrastructure.

- DTT itself is vital to the UK's communications resilience providing an independent and separate network to the internet and broadband networks which face security challenges and vulnerabilities which could be targeting by hostile states. In a modern and developed society, retaining diversity in critical national infrastructure should be a key priority for government and whether it is a covid-type event – where DTT was a vital method of communication for the Government to speak to the nation – a national security event or extreme weather, DTT has an important role to play;
- It is important for the UK government to retain independence in its communications infrastructure. Unlike internet delivered services, DTT is under full UK sovereign control and not dictated by global tech giants whose services are a key element of the IP-delivery chain and who may act at the direction or interest of foreign states; DTT is the anchor tenant for the UK's tall-tower infrastructure consisting of over 1,100 masts and towers across the UK delivering not just TV but broadcast radio and a wide range of other vital communications services including those for emergency services, Government, utilities, mobile, transport and others;
- There are knock-on risks to these other uses if DTT is turned off in 2034. It will significantly increase the costs for the radio sector – we estimate by around 35% on average and much higher for services in some parts of the country – putting the viability of services at risk whilst also threatening other uses of the infrastructure and financial viability of some sites.

On the Government's own tests and assessment 2044 is the lower-risk and lower cost option – if it is serious about protecting viewers and ensuring no one is left behind, and without TV through a switch, then 2044 is the only option.

- The Green Paper itself sets out that 2044 would represent a lower-risk option and be lower cost and that is before it has taken into account some key cost areas for the 2034 option which further reduce its attractiveness (e.g. the costs of IP distribution for the PSBs, stranded assets for the DTT network and the true costs of ensuring no one would be left behind);
- The Government's own set of tests – set out in the Green Paper - reinforce the conclusion that 2044 is a better option than 2034:

<i>Government Test</i>	<i>2034</i>	<i>2044</i>
<i>Delivering for all audiences</i>	Fails: There is no plan on how universal uptake of high-speed fixed broadband, TV sets, skills or ongoing support could be achieved or funded	Passes: preserves universal free-to-air access while IPTV adoption continues to increase
<i>Reliable and resilient service</i>	Fails: no end-to-end resilience plan for IP-only delivery with higher risks introduced. UK's communications resilience weakened with negative impacts on radio and other sectors	Passes: maintains broadcast resilience while replacement capability matures
<i>Competition and innovation</i>	Fails: would reduce competition in the TV platform market and increases dependence on commercial platforms and intermediaries with additional adverse impacts on the radio sector	Passes: preserves platform choice while enabling IP innovation. Allows time for other sectors to innovate in the longer term
<i>Sustainable Public Service Media (PSM)</i>	Fails: commercial risks, prominence and IP distribution costs and risks, public support for PSM are all challenges without a solution	Passes: significantly reduces broadcaster DTT costs, protects universal reach, avoids commercial losses and support for PSM

Certainty over the future of DTT is very important to all stakeholders and Arqiva, therefore, asks Government to confirm the DTT extension to 2044 through a White Paper and mandate 600 MHz clearance so preparations can begin in 2027.

- Television distribution infrastructure depends on long-term investment, specialist capability and resilient supply chains. A delay does not work for any stakeholders as prolonged uncertainty will increase costs, weaken capability, hinder investment and undermine the benefits the Green Paper is seeking to secure;
- The Government has set out two clear options, which is helpful in providing certainty. Arqiva urges the Government to make a clear decision and select the 2044 option as soon as possible providing viewers, broadcasters, investors and adjacent sectors the confidence to plan and deliver;
- With certainty on the 2044 extension, work to release the 600 MHz spectrum to a guaranteed timetable in 2034 can also begin providing financial benefits to the Exchequer and mobile sector or other uses of the spectrum.

About Arqiva

Arqiva is a leading UK communications service and infrastructure provider, operating at the heart of the UK broadcast industry.

Arqiva's broadcast transmission network spans over 1,450 sites and delivers universal broadcast television (also known as digital terrestrial television or DTT) and radio services to over 98.5% of the UK, ensuring universal availability of a wide range of free-to-air services.

Arqiva holds two of the three national commercial DTT multiplex licences, operates two national commercial digital radio multiplexes, and holds multiple DAB local radio multiplex licences. Arqiva also provides a wide range of managed media services, including a growing range of IP-delivered services, both to UK media companies and internationally. It operates over 80 ground satellite dishes for Direct-to-Home (DTH) TV and is the UK's largest independent reseller of satellite capacity.

Arqiva is committed to supporting and advancing the UK's media industry, ensuring that our customers can deliver their content to audiences wherever they are and however they choose to watch or listen – with services meeting the highest standards for reliability, security, and user experience.

1. DTT remains an essential universal free to air TV platform

1.1 DTT continues to underpin universality and serve millions of households

DTT remains a vital public service that serves millions of households and remains the only platform capable of delivering universal, resilient, free-to-air television access across the UK. DTT remains the primary platform used on the main set in around 10m households across the UK, with around 12.8m households using DTT in some form on other televisions around their homeⁱ.

DTT remains vital not just for individual households but also across other user groups including those using communal television systems in blocks of flats, sheltered accommodation, care homes, hotels, hospitals, student accommodation, prisons and other shared premises.

Millions of households use DTT as part of a 'hybrid' connected TV television ecosystem, combining the benefits of DTT with online subscription services and catch-up services. The volume of use and viewing accounted for by DTT is often underestimated in the debate around its future. DTT is no marginal service - it accounts for around 44.2% of all television viewing in the UK. Whilst this share of viewing has declined slightly over time as competition increases from other platforms and viewing habits evolve, it has only been dropping by an average of c.1% in absolute terms per year over the past decade or soⁱⁱ.

A further fact often overlooked is that the number of households relying on DTT on their primary set has changed relatively little over time – see Figure 1 below. The number of households using DTT on their primary set has remained broadly stable since 2015, with growth in IPTV-only households driven largely by migration from satellite and cable platforms as people move away from full pay TV services towards reliance on streaming services. We expect this trend to continue as Sky continues to encourage its customers toward its all IP-based service (e.g. Sky Stream and Sky Glass) and away from its traditional satellite delivered service^{iiiivv}.

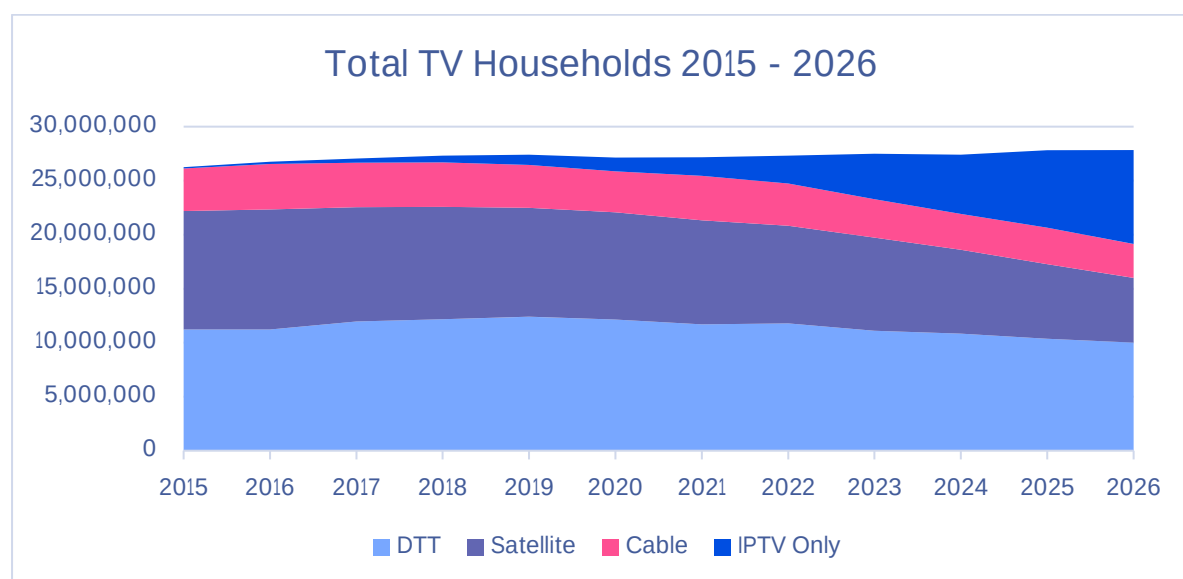


Figure 1 – BARB (2026)

Whilst many homes choose to watch a mix of broadcast and IP delivered content, crucially, millions do not. There are 4.9m homes who watch TV without connecting it to the internet and, within this group, 1.3m homes do not have a fixed broadband connection in their home at all^{vi}. Whilst many households may continue to move towards further use of IPTV, these statistics highlight that it is wrong to assume that even those who have broadband can or want to use it for their television viewing. This can be due to a variety of reasons including broadband performance around the home, an inferior viewing experience on broadband with outages and picture blurring, the cost of upgrading a television, time lags in content (particularly live and sports) and basic choice and preference for the broadcast delivered service.

Where a household does not even have high-speed fixed broadband, the challenges are even greater with affordability, availability and digital skills key factors which highlight why reliance on, and the continued availability of, DTT remains so important.

1.2 DTT remains vital to Public Service Broadcasters

PSBs remain a critical part of the country's social fabric and the wider broadcast environment. Arqiva fully supports the ongoing role and delivery of the objectives set for the UK's PSBs. It is for that reason that we wish to highlight just how important the role of DTT plays in supporting the PSBs and, in particular the ongoing compact between the BBC and society.

DTT remains the single largest platform for viewing PSB content, accounting for c.42.6% of all viewing (see Figure 2) with the remaining viewing being split between IPTV, cable and satellite^{vii}.

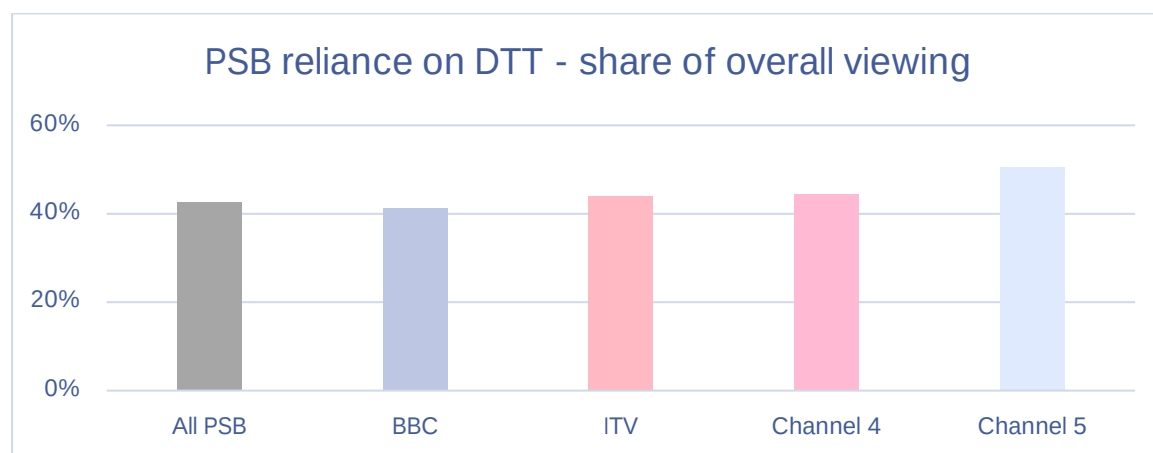


Figure 2 – BARB (2026)

DTT also remains vital to the PSBs, and other broadcasters, commercially. Around 49% of all broadcast advertising impacts (what is sold to advertisers) are delivered through DTT homes, a figure that has remained relatively stable over the past year^{viii}. With TV advertising around £5.2bn^{ix}, on a rough calculation, DTT viewing is likely to support around £2.5bn of TV advertising revenues.

DTT continues to underpin a substantial proportion of commercial public service broadcasters' advertising revenues. Based on current viewing patterns, DTT is likely to account for more than £700 million of ITV's annual television advertising revenues (TAR) of £1.7bn, around £500m of Channel 4's £0.9bn TAR, and approximately £190m for Channel 5 annual revenue.

DTT is also critically important to UKTV, which is owned by BBC Studios and represents a significant contributor to the BBC's commercial income. Given its strong DTT audience, UKTV may generate around £150m per year in advertising revenue associated with DTT viewing.

As we discuss later in this response in support of the 2044 option, DTT is also set to remain extremely important over the long-term to the PSBs and their ability to deliver for audiences, generate commercial income and ultimately justify an ongoing universally applied licence fee.

Long-term forecasts by industry expert Mathew Horsman – ex-Mediatique – suggest that around 5.4m homes are likely to still rely on DTT as their primary means of watching broadcast television in 2034 with around 2.9m still continuing to do so in 2045^x. Arqiva does not believe that the DCMS Green Paper adequately reflects this ongoing reliance on, and preference for, DTT over other delivery platforms.

In addition, PSBs will remain commercially reliant on DTT. Horsman's work suggests that an early switch-off of DTT could deprive PSBs of £768m in foregone advertising revenues in the 10 years between 2035 and 2045. This view is also supported by a report by respected industry analyst Ian Whittaker, from Liberty Sky Advisors, who highlights the substantial early risk to the commercial broadcasters' advertising income if there is a rushed switch-off of DTT in 2034^{xi}. He posits that the advertising buying market is likely to re-adjust and price linear viewing down under that scenario creating huge risks well before 2034 for ITV, Channel 4, 5, UKTV and other broadcasters currently reliant on DTT. Whittaker estimates that TV advertising income for the commercial PSBs will be £530m p.a. (16%) lower in 2034 under a 2034 switch-off relative to the 2044 date with the impact felt well ahead of the switch-off date as advertising markets adjust. In the coming years e.g. even by 2032 advertising revenues could be £380m lower for the PSBs if 2034 is selected over 2044.

It should also be recognised that PSBs enjoy favourable conditions within the Freeview/DTT viewing environment both in terms of the channel ordering and the degree of competition and control over viewing experience and delivery directly into people's homes. The IPTV environment is totally different and PSBs will face challenges with prominence on different platforms and the growing range of competition from IP-delivered content. PSBs would also not be in control of the end-to-end viewing experience which would be passed over to broadband providers, CDN, ISPs and other platforms responsible for delivering and serving the content in the different environments.

1.3 DTT supports nationally significant events

Arqiva agrees with the Government that universality remains fundamental to the role television plays in society, providing a common ground through which audiences participate in shared social, cultural and democratic experiences. At its best, television provides the basis of a cohesive country and a healthy democracy, helping to advance shared understanding, shared facts and shared experiences.

The DTT platform is central to supporting nationally significant and unifying events and is the only viewing platform able to ensure universality remains at the heart of major sporting events, breaking news, and how the Government reaches the nation in times of crisis. For example, it was vital during Covid-19 when roughly 10m households watched the 2020 Prime Ministerial statement announcing the first Covid-19 lockdown via DTT, compared to just c.0.2m via IPTV. Two years later, over 8m households marked the State Funeral of Her Majesty Queen Elizabeth II via DTT, compared to just c.0.4m via IPTV. The Coronation of His Majesty King Charles III attracted 5.2m viewers via DTT, and only c.0.5m via IPTV^{xii}.

One reason that DTT remains the preferred platform for national moments is its ability to deliver a consistent, high-quality, near-live viewing experience to millions of viewers simultaneously, regardless of audience size. This is a key difference from IPTV, where viewer experience can depend on broadband capacity, local networks, content delivery arrangements and in-home connectivity. Unlike DTT's one-to-many broadcast architecture, IPTV relies on individual network connections and has not yet demonstrated that it can deliver a fully universal, like-for-like replacement at national scale, providing equivalent video quality, management of peak viewing demand, and near-live performance during major live events.

The IPTV delivery chain is also inherently more complex than DTT, relying on multiple networks, platforms, devices and service providers to deliver content to viewers. This increases the potential points of failure and can make it more difficult to diagnose problems and determine where responsibility for service interruptions lies. Delays and service issues are particularly problematic when it comes to major sports events like the World Cup. Ofcom guidance^{xiii} indicates that streamed video can have a delay of 30-100 seconds behind live play relative to broadcast TV of only 5-15 seconds. Indeed, the recent World Cup highlighted issues of delays, intermittent coverage dropouts, and connectivity issues for those watching via the internet and the PSB online players^{xiv}.

1.4 DTT infrastructure provides communication resilience and support for a wide range of other sectors

The future of DTT cannot be assessed as a simple matter of television distribution policy. The DTT network is the UK's resilient, secure and universal communications network that supports a range of services beyond television, including radio, emergency communications, utilities, government networks, transport systems, mobile communications and telecommunications services.

The Green Paper acknowledges some of these interdependencies but does not fully assess the implications of removing DTT as the primary user of this shared infrastructure.

The value of broadcast infrastructure is not limited to day-to-day viewing; it also provides a sovereign and strategically independent means of reaching the entire population when other systems are degraded or under exceptional pressure. Unlike internet-delivered services, broadcast distribution operates through highly regulated infrastructure without reliance on global technology platforms,

foreign intermediaries or commercial decisions taken by international device manufacturers, operating system providers and streaming platforms. This helps ensure that universal access to public service media remains subject to UK policy and regulatory objectives rather than reliant on non-UK companies services and ultimately the interests and control of other states.

Arqiva's principal transmission sites are typically located on elevated ground and engineered to withstand severe weather conditions. Key sites benefit from resilient power arrangements, including backup generation capable of supporting services for extended periods. The revenue generated from DTT contributes significantly to the fixed costs of maintaining sites, structures, power supplies, security, access arrangements, engineering capability and network operations across the sites and services that rely on the same infrastructure.

Supported sites and services include:

- The core terrestrial television network which comprises approximately 1,150 sites nationwide;
- Radio transmission across around 700 sites;
- The tall-tower DTT network also supports energy, water, transport, government, emergency services, mobile networks and wider telecommunications across hundreds of DTT sites; and,
- Broadcast television and radio also support established emergency communications arrangements. The BBC's Radio Broadcast System (RBS) network spans over 200 sites and provides a secure mechanism for relaying emergency information where primary communications channels are compromised. Broadcast services continue to support the long-standing "*Go In, Stay In, Tune In*" principle of directing the public towards trusted information during major incidents.

It is important that the Government considers the risk to the UK's communications resilience and emergency preparedness when it decides its policy on the future of DTT. An early closure in 2034 would undermine and introduce a range of risks to the nation's resilience – we discuss this later in this document under Section 3.5.

2. The 2044 option is best for society – it is lower-risk, lower-cost and has a detailed, fully-costed and deliverable transition plan

Based on the evidence available, the option to extend DTT to 2044 is the only credible option for Government to select. It is low-risk, low cost and the only option which has a fully costed and deliverable transition plan requiring no ongoing funding from the public finances.

Selecting the 2044 option would preserve the significant benefits that DTT continues to deliver for viewers, particularly those most vulnerable in society, while providing Arqiva and broadcasters with the long-term certainty required to plan and invest. It would also enable a measured and orderly transition towards greater IP delivery, avoiding many of the risks and unintended consequences that could arise from a rushed switch-off of such a widely used and socially important platform in 2034.

Arqiva recognises that IP-delivered viewing will continue to grow, that PSBs face increasing financial pressures, and that Government and Ofcom must consider the future use of UHF spectrum. Selecting the 2044 option, and the proposal outlined in the Green Paper, would reflect these factors and deliver the benefits associated with a transition while avoiding the social, financial, resilience and implementation risks of forcing millions of households to migrate before the evidence demonstrates they will be ready or open to considering the change.

The 2044 option presents a detailed proposal to modernise and streamline the DTT network from 2035, which will protect viewers whilst significantly reducing broadcaster transmission costs, improve energy efficiency and provide certainty over the release of the 600 MHz spectrum to a set timetable. The option maintains universal coverage and access to free-to-air television and protects national resilience whilst IP adoption continues to grow through consumer choice and natural replacement cycles. This option gives viewers, broadcasters and Government the time needed to prepare for an eventual all-IP future beyond 2044.

2.1 A modernised, efficient three-multiplex DVB-T2 platform

Arqiva supports innovation and recognises that any continued DTT service beyond 2034 will require a refresh of some of the equipment installed during the Digital Switchover (DSO) in 2008-2012. The DTT platform currently consists of six national multiplexes (collections of TV channels) with three serving the PSBs and three carrying commercial services. Five of the six use DVB-T technology, with only the BBC's HD multiplex currently operating in DVB-T2 technology.

Under the 2044 option, and as part of the renewal of transmitter equipment, the platform DTT would be able to move to three national multiplexes each operating in DVB-T2. With a DVB-T2 multiplex offering greater capacity than a DVB-T multiplex (c.40 Mbps vs 24 Mbps) the overall capacity of the platform can be maintained to a level where a comparable range of HD and SD services can continue to be offered to viewers. DVB-T2 has formed part of the UK television technical standard (the DTG D-Book) since 2008 and has been widely incorporated into television receivers for many years.

This means that, by 2034, a complete transition to DVB-T2 transmission should be achievable. As well as capacity improvements, DVB-T2 offers energy efficiency gains of around 40% on current levels offering carbon and power benefits.

The DTT platform would continue to provide universal coverage to 98.5% of the population, enabling PSBs to meet their universality obligations. At the same time, the proposed migration of all PSBs onto a single multiplex would reduce DTT carriage costs by up to 50%, materially improving the economics of the platform. In light of broadcasters' concerns about the costs associated with maintaining multiple distribution routes during the transition to IP, this would provide a more sustainable model for delivering universal television services while preserving audience reach.

Moving from 6 to 3 multiplexes would also enable the network to be re-planned and further UHF spectrum to be released. Under the proposal the 600 MHz band would be released in 2034, and this could be committed to with certainty of a known date. This has considerable benefits for the auction proceeds and for the mobile sector which would benefit from its release. The PMSE sector would also be able to continue to share the remaining UHF spectrum with DTT users.

2.2 Delivers for audiences by protecting universal access to reliable, free TV

Retaining DTT protects vulnerable viewers

A premature switch-off of DTT risks having a disproportionate impact on some of the nation's most vulnerable and digitally excluded households. Research published by Broadcast 2040+ identifies older people, disabled people and lower-income households among the groups least likely to have adopted the high-speed fixed broadband services that would be required in an internet-only television system^{xv}.

EY forecasts that more than 5.5 million UK premises could still be without a high-speed broadband subscription in 2040, despite near-universal network coverage^{xvi}. Older people face a particular risk because availability does not necessarily translate into adoption. Age UK estimates that 2.4 million older people, almost one in five, make only limited use of the internet^{xvii}.

Age UK analysis also found that digital capability declines significantly with age: 69% of people aged 75 and over were unable to complete all eight fundamental tasks required to use the internet successfully, compared with 30% of those aged 65-74^{xviii}. Conversely, only 52% of older people in the most deprived areas use the internet every day, compared with 80% in the least deprived areas^{xix}.

Crucially, digital inclusion is also not simply a question of connectivity. It is influenced by a much broader range of factors including digital skills, affordability, confidence, access to suitable devices, accessibility, the availability of ongoing support and training, and individual preferences. A household may have access to broadband, often via mobile device and contract, whilst still lacking the equipment, confidence or skills needed to engage with online banking, healthcare, education or government services.

For many, the challenge is not internet access but the ability to use digital services independently and confidently. People living with dementia, cognitive impairment or certain learning disabilities may rely upon familiar television interfaces, channel numbering and established routines. Changes to devices, interfaces and viewing journeys can create confusion and reduce independent access to television, particularly for those living alone.

It is wrong to suggest that turning off DTT and forcing people to pay for high-speed fixed broadband might somehow address the challenges of digital inclusion in the UK. All it risks doing is introducing a further set of challenges and obstacles for those most vulnerable in society rather than helping them.

A forced switch-off of DTT would, therefore, involve far more than replacing television equipment. It would require households to purchase and maintain an internet connection, develop the skills and confidence needed to navigate IPTV services, and rely on broadband connectivity. These requirements may present significant barriers for groups already at greater risk of digital exclusion, yet no practical or financial assessment has been made for the support programme required to overcome them.

Low-income households and social renters may be particularly exposed to the recurring costs associated with fixed broadband subscriptions, in-home connectivity and equipment replacement. Rural, remote and island communities may also face additional challenges, including reduced service resilience, longer repair times and more limited access to face-to-face support.

The implications of a premature DTT switch-off are not solely technological or financial. Research undertaken by the Digital Poverty Alliance (DPA) in partnership with Broadcast 2040+ found that 75% of people agree that the availability of free-to-air terrestrial television helps reduce loneliness and isolation. Among people aged 65 and over, this rises to 87%^{xx}.

These concerns are reflected in public attitudes across all demographic groups, not only among those most at risk of exclusion. The DPA's research found that 90% of respondents believe terrestrial television is important in ensuring that people who cannot afford more expensive television subscriptions can continue to access information and entertainment. It also found that 70% regard access to affordable television as very important to their day-to-day lives, while the same proportion feel reassured knowing terrestrial television remains available as a fallback option, including 57% of people who do not currently watch terrestrial television^{xxi}.

Many viewers will naturally adopt internet-delivered television services as connectivity, devices and viewing habits continue to evolve. Extending DTT to 2044 allows audiences to transition to IP services at a pace that reflects their individual circumstances, preferences and confidence with digital technologies, rather than requiring migration within an artificially compressed timeframe. It therefore enables digital participation through choice and readiness, rather than by making television access contingent on navigating a wider digital ecosystem before many households are ready to do so.

Maintaining free universal access is supported by citizens across the UK

A petition organised by Silver Voices has secured over 160,000 signatures from concerned citizens calling on ministers to maintain free-to-air terrestrial television until at least the mid-2040s, amid concerns that a move to internet-only broadcasting would place new costs and barriers on households across the UK^{xxii}. A separate very recent petition by 38Degrees^{xxiii} has also secured over 108,000 signatures highlighting the strength of feeling towards keeping DTT amongst viewers across all part of the UK.

Further research published by Broadcast 2040+ consistently indicates that DTT continues to be widely used and valued by the public. A large-scale poll^{xxiv} of over 26,000 adults across 100 UK constituencies found that nearly eight in ten respondents believed it was important that DTT remained available beyond 2034.

74% said ending DTT would feel like a betrayal of people like them. Nearly two-thirds worry about there being fewer free-to-air television channels in future, while 73% were concerned about losing access to nationally shared events, such as major sporting events and elections.

The same polling also highlighted how Freeview is regarded as an important and affordable service. 83% said access to affordable television was important to their day-to-day lives, while 52% identified free-to-air television as one of the services that mattered most to ensuring fairness in society.

Separate national polling conducted of over 12,000 people across 120 marginal constituencies found that 77% supported extending terrestrial television to 2044 rather than ending it in 2034. 65% saw switch-off as taking something away from people who rely on it, and 74% were concerned about the impact on older, disabled and rural audiences^{xxv}.

2.3 Significantly lowers costs for PSBs, supporting their financial sustainability into the future

Arqiva recognises the concerns expressed by broadcasters regarding the cost and complexity of maintaining parallel distribution platforms over the long term. Crucially, the 2044 option addresses this cost challenge and facilitates a significant cost saving in the provision of DTT for the PSBs.

By moving to a shared PSB multiplex and entering into a new long-term contract from 2034-2044 which reflects the ongoing depreciation of the Arqiva asset base, the cost of the service can be materially reduced from current levels. As set out in the Green Paper, the 2044 option would reduce the cost to the PSBs by around 50% on current levels with the cost of a shared multiplex reducing to around £78m per annum in real terms including an estimate of electricity costs. Here, with modern transmitters, the energy consumption of DTT is expected to fall by around 40% supporting environmental/carbon targets and minimising power costs.

The reduced cost to PSBs is supported by the ongoing provision of two commercial multiplexes alongside the PSB multiplex. These help to carry the wide range of commercial channels and wider offer of the commercial PSBs but also reduce the costs to the PSB multiplex by sharing costs of operation and use of structures.

The Green Paper suggests that ending DTT might help the PSBs financially and support making them financially sustainable over the long-term. Arqiva disputes this suggestion and highlights that, with the changes proposed to DTT charges under the 2044 option and once consideration of increased IP delivery costs, loss of TV advertising revenues and increased radio distribution costs for the BBC, the PSBs are likely to gain financially if the 2044 transition option is selected.

When assessing the costs to the PSBs it is important to recognise that IP delivery – the alternative to DTT – is not free to them or other broadcasters. IP delivery costs money for broadcasters with spend with CDNs, ISPs and some platforms to ensure content is distributed. These costs are in addition to those incurred by the consumer for the broadband connection to their home.

As we note in section 4 when critiquing the DCMS Cost-Benefit Analysis (CBA), it is not clear why the Green Paper does not attempt to quantify the cost of IP delivery for the PSBs which would increase significantly if DTT was turned off and the equivalent viewing were to be carried and paid for via IPTV.

Taking the ongoing cost of DTT and netting off the estimated^{xxvi} avoided additional cost of IP delivery in the 2044 scenario, could leave the net cost to the PSBs of DTT at just £38m per annum. In context, with BBC income from the TV Licence Fee of £3.9bn in the 2025/26 financial year, even if the BBC were to cover the entire cost of the shared multiplex it would represent just 1% of the Licence Fee income (or 2% if the saving of the additional cost of IP distribution were not factored in). The cost would be lower once sharing with the other PSBs is agreed.

As highlighted earlier, the cost of continuing DTT for the PSBs is further mitigated because of the advertising revenues supported by DTT which are likely to fall if DTT is turned off and the PSBs need to compete solely in an IPTV environment. For ITV, Channel 4 and 5 there would be the risk of a direct loss in advertising revenue. For the BBC, they face commercial exposure through UKTV which is owned by BBC Studios, and which is a significant contributor to the BBC's commercial income.

Mathew Horsman estimates that the PSBs could face a reduction of £768m in foregone advertising revenues between 2035-2045 if DTT is turned off in 2034 and analyst Ian Whittaker^{xxvii} from Liberty Sky Advisors predicts advertising income for the commercial PSBs could be £530m p.a. (16%) lower in 2034 under a 2034 switch-off relative to the 2044 date. Furthermore, the impact would be felt well ahead of the switch-off date as advertising markets adjust in the coming years e.g. even by 2032 advertising revenues could be £380m lower for the PSBs if 2034 is selected over 2044.

In the BBC's case there is also the increased costs it would face for the distribution of its radio services in the event that DTT is turned off. If the aim is to make the PSBs more financially sustainable, rushing to switch off DTT in 2034 is not the answer. It would harm, not help, the PSBs' overall financials with the potential for early damaging impacts following a 2034 decision.

2.4 Delivers spectrum benefits to a guaranteed timetable without closing DTT

The 2044 transition option moving from six to three multiplexes would enable the DTT network to be re-planned and the 600 MHz band released. Crucially, this means that the Government, Ofcom and Mobile sector can secure access to this band of spectrum without needing to turn off DTT. Extending the use of DTT to 2044 can support the efficient use of spectrum, the ongoing development of the mobile sector and mobile services, and generate considerable income for Government through a spectrum auction.

It is important to note that the 600 MHz band is the only part of the UHF spectrum band currently used by DTT that is likely to have meaningful value in the period under consideration. The propagation characteristics of DTT in the UHF band mean that it can travel 100s of kilometres and would risk interfering particularly if the alternative use was a low-power application. To have real value and avoid interference with services from neighbouring countries, radio spectrum needs to be harmonised. The 600 MHz band is set for discussion at the World Radio Communications conference (WRC) in 2031 and we anticipate that it will be harmonised and released for alternative uses to DTT. Attempting to release further spectrum in the UHF band, e.g. the 500 MHz band before 2044 and without international harmonisation, would significantly reduce the value and potential use of any further spectrum, particularly if neighbouring countries were to continue to use the spectrum for DTT and this caused interference into the UK.

Arqiva also notes the Green Paper's reference to the Programme Making and Special Events (PMSE) sector and its ongoing shared use of the DTT spectrum. The 2044 option is also the most practical and least disruptive outcome for PMSE users. The three multiplex proposal would reduce the spectrum requirements of DTT enabling both the release of the 600 MHz band and the continuation of shared use between DTT and the PMSE sector across the UK. Whilst there may be some re-tuning or replacement of equipment so it can operate in the remaining part of the UHF band, this would be better than not having access to spectrum at all if the whole of the UHF band was auctioned for use by the mobile sector.

The primary advantage to note on spectrum with the 2044 option is the fact that it would provide certainty that the 600 MHz can be released by 2034 and that Ofcom and the mobile sector can plan on that basis as soon as a decision on the future of DTT is made. The engineering programme required to deliver the change to DTT is well understood with experience from recent spectrum clearances providing absolute confidence it can be delivered on time.

Ofcom could start the planning process quickly and move to an auction when needed and the mobile sector could start to build in use of the 600 MHz band into the equipment it rolls out, knowing that it will become available in 2034. In contrast, the 2034 option might superficially look like it releases the same spectrum.

However, given that the 2034 option depends on consumer uptake of high-speed fixed broadband being in a position that DTT could be turned off, which is highly uncertain and outside of the sector's control, it would be difficult to say and plan with any certainty that the 600 MHz spectrum could be released by that date. That will reduce the value of the spectrum for Government and the date on which it can plan to get access to important auction proceeds.

2.5 Extending DTT protects and supports industry competition and ensures ongoing choice for viewers

When setting out the challenges with a transition to all-IP, the Green Paper highlights competition and innovation as important considerations. At present, consumers have a huge amount of choice on which TV platform and brand to use across a range of distribution technologies including DTT, DTH, Cable and IP. This includes Freeview, YouView, Freely, Connected TV brands including Samsung, Virgin, BT TV, EE TV, Freely and a host of streaming services including Apple TV, Netflix, Amazon Prime and Disney+.

DTT currently plays an important role in helping to retain and moderate healthy competition between platforms and providers in the UK TV market, and there is a risk if DTT is prematurely switched off in 2034 that competition could be undermined with negative consequences for consumers, individual platforms and certain broadcasters which might be disadvantaged as a result of the change. Maintaining DTT for a longer period supports ongoing competition, allows for market adjustment with a greater understanding of the dominant players and (if required) regulation to support transition.

Some potential competition and platform choice benefits of retaining DTT until 2044 include:

- *Retaining platform choice for viewers* – Having free DTT in the market provides strong competitive balance between the UK's pay and free TV sectors with consumers having choice and not facing pressure to sign up for pay-TV services if they do not want to or cannot afford to. With the potential acquisition of ITV by Sky and uncertainty over the future of free direct to home satellite services (DTH) once Sky fully migrates to IP-delivery (as discussed further below), maintaining DTT as the primary free TV option available to consumers supports competition;
- *Ensuring manufacturer and hybrid platform access to content including that from the PSBs* – an important feature of the market currently is that any manufacturer or platforms can integrate a DTT tuner into their offer without needing to strike individual deals with channels or face restrictions or charges. This has enabled the UK TV market to thrive with a wide range of manufacturers offering services, both those within Freeview branding but also outside e.g. Samsung TVs. Unless carefully managed, transition could mean any manufacturer or platform will only be able to get access to content if it strikes individual deals with content providers and see some TV platforms disadvantaged and having to exit the market or pay fees they otherwise could avoid. Equally, it could see some smaller content providers facing challenges

in securing access on IP-based platforms or facing charges they can currently avoid by being part of the DTT bouquet of channels;

- *Avoiding undue reliance on IP distribution networks* – at present, DTT acts as a strong counterweight to the PSB and broadcaster communities' reliance on IP delivery networks. DTT carries the bulk of viewing and IP networks know that if they increase charges too much then it shifts the balance towards free DTT delivery for broadcasters. Transition to all IPTV will mean the market power of the CDN, ISP providers and fixed networks increase significantly, particularly as, under that scenario, the PSBs will no longer have any control over whether they can meet universality objectives as it will depend on the ISPs and broadband providers ensuring that there is universal uptake and the service is delivered. At present, the PSBs have universality requirements built directly into their DTT multiplex licences and very strict service obligations with Arqiva. The balance of power between broadcasters and these networks will change and the telcos will have an incentive to use that power to increase prices. Whilst net neutrality discussions and regulatory frameworks will evolve and may be used to address some of these competition challenges, rushing to end DTT in 2034 will remove an important component of the competition dynamic between these players and risk creating a very uncertain and expensive market for broadcasters as they seek to distribute their content.

A key area we believe the Green Paper is misguided in is the claim that satellite TV will definitely remain in place and act as an “alternative and economic means of TV delivery” to IPTV in the event that DTT were switched off in 2034.

As the DCMS will be aware, with satellites moving towards end of life, Sky is moving towards all-IP delivery of its pay-TV services with a focus on its Sky Stream and Sky Glass IP-delivered services. It no longer offers its traditional satellite based DTH service to new customers. The timing of a full switch to IP delivery for Sky is unclear but the direction of travel is not. When Sky moves fully from its DTH service, the free Freesat service will also be unlikely to be able to continue to operate in the UK as the cost of sustaining a DTH platform on its own without sharing elements with Sky would be vast. Based on Arqiva's knowledge and experience as a satellite uplink provider it would, in our view, not make any commercial sense to continue the DTH service without the Sky platform in the market.

Given that it is likely that DTH services in the UK will not be available over the period in question up to 2044, Arqiva believes this strengthens the importance of having DTT as a free TV platform available to UK households. To end DTT at a point when DTH is likely to be withdrawn would severely restrict viewer choice and undermine access to free and universal TV. We ask that DCMS looks again at any assumptions it is making around the DTH market in the UK and its likely sustainability over the period to 2044.

Arqiva believes that this is an area which Ofcom should carefully assess and there should not be a decision to turn off DTT until these competition and market dynamics are well understood and the potential impacts assessed. The 2044 transition option helps carefully manage and ultimately avoid these competition and regulatory challenges and is the lower risk option on that basis.

2.6 It protects other users of the infrastructure including radio and supports the UK's communications resilience

The 2044 option would protect the UK's communications resilience over the coming decades and help avoid an early situation where turning off DTT undermines other users of the shared infrastructure including radio services, emergency services and a host of other communication areas which rely on the same network.

At a time of increasing geopolitical uncertainty and a growing focus on national resilience, the DTT network preserves a resilient, geographically dispersed national infrastructure asset that can continue to play a key role in the Government's emergency preparedness planning and its ability to communicate with the nation in times of emergency and continue to support the radio sector and other key users of the shared infrastructure.

The 2044 option would provide time for the Government to fully plan for a move away from DTT over the long-term and also allow other important uses of the tall tower infrastructure to continue to be explored and developed (e.g. as an alternative Position, Navigation and Timing (PNT) capability for the nation). We expand on the risks to the nation's communications resilience further in our critique of the 2034 option in Section 3.5.

2.7 There is a fully costed, detailed and clear implementation plan for 2044, requiring no ongoing public funding, ensuring that it can be delivered

The Green Paper makes clear that, unlike the 2034 option, the 2044 transition option for DTT has a detailed, fully thought through and fully costed implementation plan. On this basis alone, it is the only option the Government can pick and have any certainty it can be delivered.

The programme of work and timetable to move from six to three multiplexes and to release spectrum by the end of 2034 is well understood and is based on Arqiva's experience of delivering complex national engineering programmes, including the recent clearance of the 700 MHz spectrum band and previously the DSO programme.

A lot of the required work in planning for the change has already been completed including the likely frequency plan and changes needed, the details of the engineering work and process for managing the multiplex transition. This work (which the DCMS has access to) can relatively easily be turned into finalised plans. There is equally an established route for Ofcom in terms of multiplex licensing which can follow a Government White Paper and legislation.

Crucially, the 2044 option does not require any ongoing government funding either to subsidise fixed broadband uptake or provide support to impacted sectors such as the radio industry which could be required under a rushed 2034 switch-off.

3. Selecting the 2034 option would be high-cost and very high-risk and it fails the reasonable tests set by Government

The Green Paper contains no details on how a 2034 transition option would be delivered or funded. Arqiva finds this increasingly concerning, particularly as the DCMS forum has already provided considerable time and opportunity to consider and resolve challenges. In these circumstances, selecting the 2034 option over a low-risk, fully costed and deliverable 2044 alternative would be irrational with very high costs for, and negative impacts on, viewers and communities across the UK.

There would be a high risk of:

- Households losing their TV services or being left with an inferior service;
- Households incurring high costs they have not planned for or cannot afford;
- Broadcasters losing financially with many channels potentially being forced to close;
- Trust and support for the BBC declining and a backlash against paying a universal licence fee;
- The radio sector facing significantly increased costs with a risk of closures around the UK;
- The UK's communications resilience being undermined at a time of increasing global insecurity.

Evidence suggests that a government policy to switch off DTT in 2034 would be extremely unpopular with viewers and citizens. That is for the Government to judge. Arqiva makes a further point, if a 2034 decision is taken it would be hard to reverse it, if over time, it is viewed as the wrong policy. A 2034 decision would set in train impacts for broadcasters and channels due to advertising market reactions, for Arqiva given an investor view of broadcast infrastructure, for the radio sector and other relevant sectors given the impact if DTT is removed, and for viewers and communities who will face considerable uncertainty on whether they will be able to continue to receive a TV beyond 2034.

A substantial amount would need to happen for the Government to have certainty that the policy could be delivered by 2034. It would need to be 100% sure that:

- There will be universal fixed broadband coverage across the whole of the UK (noting that the project Gigabit programme target deadline^{xxviii} has recently been delayed to 2032 from 2030 which itself was a delay from 2025, so there is clearly a risk of further delays);
- There will be universal uptake of high-speed fixed broadband replicating the 98.5% coverage area of DTT and ensuring the c.10m households which rely on DTT have a genuine IP alternative (i.e. not mobile, at least 30 Mbps, working around the home). The Green Paper itself casts doubt on IPTV readiness;
- There is a genuine fully funded support scheme in place with broad eligibility to ensure ongoing delivery for all audiences so that households who cannot afford broadband or who struggle to pay have cast-iron support and access to communications (i.e. a clear government-backed safety net in line with other benefits not just discounted or cheaper broadband);

- Consumers are willing and able to incur the wider costs with a switch (e.g. new TVs, upgraded broadband, in-home broadband distributors) and genuine ongoing support is provided for those viewers who lack the digital skills or ability to fix problems if they occur;
- The government has a plan to support the radio sector and accept or mitigate a degradation in the UK's communications resilience;
- There is a plan to handle the complex regulatory changes which would need to be addressed by the date of switch-off (including handling stranded assets, re-thinking regulatory and licensing frameworks and addressing complex competition and fair access issues).

Arqiva sees no evidence that there is any form of plan across these areas. We have seen suggestions by others that the government should adopt 2034 as some form of signalling to the market to force people to take-up fixed broadband with the threat that they will lose their free TV if they do not. We fundamentally believe that this would be a highly damaging approach introducing significant risks and costs. A responsible government should proceed with the 2044 option.

In the rest of this section, we expand on these issues and highlight that the 2034 DTT switch-off option fails on all levels to meet the challenge tests set out by the Government in the Green Paper, namely that it would: not deliver for all audiences (and protect universality); not maintain a reliable television service; not support competition and innovation; and not secure a sustainable future for PSM. It would also not protect the UK's national resilience and introduce risks for the radio sector.

3.1 It would fail to deliver for all audiences and introduce significant risks to ongoing access to TV

The first challenge set by the Government in the Green Paper is whether a transition would deliver for all audiences. As the Government recognises, any future television system must preserve universal access to TV for all audiences irrespective of their income, location, age, disability, digital confidence or as a result of any other practical barriers to adoption of IPTV. A 2034 DTT switch-off would not meet this challenge.

Broadband availability is not the same as universal access to IPTV

The ability to switch over depends on more than continued IPTV growth. While Government has stated its commitment to achieving nationwide gigabit coverage by 2032 we note that even this aspect of the challenge is behind its original targets and it might not be met. The original target was 2025 and this was moved to 2030 before recently being moved again to 2032^{xxix}. There is no certainty that this date will not be moved again over time.

Crucially, it would be wrong to assume that IP coverage equates to high-speed fixed broadband uptake which is an absolute requirement if a household is to continue to be able to receive TV once DTT is switched off.

The Green Paper itself acknowledges that “while the vast majority of households are expected to have access to reliable broadband capable of supporting IP-based television by the early 2030s, near-universal access to IPTV is not anticipated until the early 2040s”. On the Government’s own assessment, a 2034 switch-off would therefore withdraw DTT before Government expects near-universal IPTV readiness to be achieved. The 2034 option therefore fails the Government’s universality test. In contrast, 2044 would seem to align with the Government’s position on IPTV readiness.

IPTV Readiness and Adoption Challenges

Any switchover depends on millions of hybrid households being able to stop using broadcast television altogether and becoming wholly dependent on IPTV. That is a much stronger assumption than simply forecasting continued IPTV growth. A household may have broadband, a connected television and access to streaming services while still relying on DTT for live television, secondary sets, ease of navigation, resilience, affordability or habit.

The Green Paper relies heavily on single forecasts and assumptions about broadband uptake which suggest that over 1.5m households will not have access in 2034. Arqiva questions this figure noting that recent Enders Analysis data indicates that the UK broadband market is largely mature. Total broadband subscriptions have remained broadly unchanged at around 28.9 million connections over the past year, with year-on-year growth is estimated at -0.01%^{xxx}.

Ofcom also reports that gigabit-capable broadband is available to 87% of UK premises, yet only 56% of premises passed by these networks take a gigabit-capable service. Similarly, full-fibre networks reach 78% of premises, but only 42% of premises with access have adopted a full-fibre connection. This also varies considerably across the UK, and in rural and urban areas^{xxxi}.

It is clear that the gap in uptake of high-speed broadband networks could be far greater than assumed in the Green Paper.

We note that the Green Paper does not conduct sensitivity analysis around the update forecast which is not in line with Green Book Best Practice. Technology adoption rarely proceeds at a constant rate. Migration can slow as it reaches households with stronger preferences for established services, lower digital confidence, accessibility requirements, or less willingness to take on additional costs. The forecast gap in uptake could clearly be much higher in practice, and we note that Mathew Horsman forecasts that 5.4m households will still be heavily reliant on DTT in 2034 suggesting a far greater challenge than that set out in the Green Paper.

IPTV transition will make television access dependent, in practice, on connectivity, devices, in-home networking, installation, account management and support. These are not one-off technical issues; for many households they would represent recurring financial and practical burdens.

The risk of disproportionate impact is greatest for older, lower-income, disabled, rural and digitally excluded audiences. The Green Paper fails to set out how these challenges would be overcome by 2034. 2044 would provide more time to overcome these barriers in a more cost-effective manner.

IPTV affordability and support requirements

The Green Paper does not set out how universal uptake of high-speed fixed broadband could be practically achieved by 2034 or who would pay for it. We note in section 4 that the estimates of the cost of broadband provision support required are significantly understated. In practice, any support system would need to operate as a universal benefit where, even if a household currently has fixed broadband, they may still need to qualify for support if they run into financial difficulties or if someone in similar circumstances is deemed eligible. For example, 6.7m households in the UK receive Universal Credit, c.2m households receive social tariff support for Water Bills and 5.7m households receive the Warm Home discount benefit providing £150 credit for electricity bills. There is no reason why similar numbers of households would not qualify for high-speed fixed broadband support if the government was to commit to a safety net where no one would lose TV if DTT was turned off.

EY^{xxxii} has previously estimated that broadband support costs could run to £1bn per annum on an ongoing basis if DTT is turned off in 2034. If broadband enters the overall benefits system and eligibility is required to be broadly drawn, then costs could easily exceed this figure.

The Green Paper is silent on who would pay this cost but states that “no assumption should be made at this stage that public funding will be available to support a transition”. Arqiva fails to see how the Government could ensure that households do not lose their TV without significant public funding or watertight commitments from the broadband sector that broadband would be provided for free to relevant households. We see no evidence of this being the case.

If there would be taxpayer or BBC funding involved, the Government should consider any potential distortive effects under the UK’s subsidy control regime, particularly in circumstances where DTT has received no public subsidy. Under the Subsidy Control Act 2022, a subsidy is only justified where its objective “cannot be achieved through other, less distortive, means.” It is difficult to see how the 2034 option could meet that requirement, when the 2044 option delivers the same objectives without recourse to the same level of public support.

Further additional costs and challenges for households and other users

The Green Paper significantly understates the wider challenge for households if the 2034 date is selected. This would include a requirement to upgrade televisions as even most modern connected TV’s would not function as linear viewing devices. Unless the home has a modern Freely TV which is not in major manufacturers sets including Samsung, LG and Sony and not in existing Freeview TV sets, all the household would get is a series of apps with no channel listing or programme guide to help navigation.

This would be the case in TV sets around the home so a much bigger replacement challenge than on the main TV set alone. TV sets would either have to be replaced, or a streaming device attached to each device in order for it to continue to function as a working linear TV.

A further consideration is the challenge of the wide range of different non-household user groups who also rely on DTT, and which would need to incur costs to carry on receiving services. This includes care homes, those in shared accommodation, prisons, hospitals and many other government and commercial premises. TV services in these types of buildings will need to be re-thought and investment incurred to move solely to IPTV. We see no evidence that the Green Paper has adequately thought through and allowed for these costs under the 2034 option.

DTT switch-off would be far more complex than the previous Digital Switchover programme

It has been suggested by some that a 2034 switch-off is comparable to the DSO programme which replaced analogue with digital TV between 2008-2012. Whilst DSO is instructive at one level it is completely different in that fact that DSO only required households to incur a one-off cost to change their TVs and they had an incentive to do so to get a better service. Under the 2034 option, households would be asked to change their TV without getting any benefits with even many new connected TV sets no longer working as usable linear TV devices if DTT is discontinued. Furthermore, the challenge of ensuring that all households have a high-speed fixed broadband and that they will be able to continue to afford it is of a different order of magnitude to what needed to be tackled under DSO as are the digital skills issues and complexity of who a user should contact if they experience problems.

The challenge of trying to get to universal uptake of high-speed fixed broadband is far more complex and expensive than what was required under DSO and it will take considerably more time than the DSO programme did for society to get there. 2034 is not feasible and, as the Green Paper notes, the 2044 option is far lower risk and lower cost.

3.2 It would lead to a less reliable television service for millions of households

The Green Paper is right to set a demanding threshold. DTT is not simply a transmission technology; it is a highly regulated national platform with established technical standards, predictable consumer outcomes and a long track record of reliable delivery. Through standards such as the D-Book, viewers can purchase a television from any manufacturer and expect it to receive DTT services consistently and reliably, regardless of device brand or operating system. This level of interoperability, standardisation and certainty is fundamental to the success of Freeview and has helped create a viewing experience that audiences trust and rely on.

The Government test of maintaining a reliable television service is not therefore a narrow technical question about whether an IP stream can normally be delivered under ordinary conditions. It is a question about whether IPTV can deliver comparable or better national reliability, resilience, interoperability and coverage including during peak viewing events, major incidents, power failures, cyber-attacks and national emergencies.

At present, there is limited evidence that an IPTV ecosystem comprising multiple broadband providers, device manufacturers, operating systems, platforms and applications can consistently replicate these outcomes at national scale in a way that audiences have come to expect. By way of example, at a product level, Freely - which is frequently cited as an IP-based successor to Freeview – has not been adopted by leading TV manufacturers Samsung, LG and Sony who hold considerable market share. Furthermore, television replacement cycles are relatively long, with primary sets typically remaining in use for around seven years. This means the transition to newer IPTV-focused devices would occur gradually, with a large installed base of Freeview-capable televisions remaining in homes well into the 2030s, including connected TV sets sold by major manufacturers that do not currently support Freely.

A more complex distribution chain

At present, IPTV depends on a much longer and more complex delivery chain than DTT. It relies on broadband networks, power, cloud infrastructure, software, content delivery networks, authentication systems, platform interfaces, consumer devices and in-home Wi-Fi. A failure at any point in that chain can disrupt the viewing experience.

By contrast, DTT is a purpose-built one-to-many resilient broadcast platform designed to deliver the same signal simultaneously to millions of households. Service quality is largely unaffected by audience size, broadband congestion, authentication systems or the performance of in-home networks. This architecture has enabled DTT to provide highly reliable services to UK viewers for many years.

The Green Paper does not provide evidence that the broadband ecosystem can match DTT's reliability, resilience, interoperability and coverage at national scale. Nor does it show how households would be protected in the event of service disruption or failure. A credible transition plan would need to address end-to-end service performance, network capacity during mass viewing, power resilience, contingency arrangements, recovery from major failures, consumer support and the ability to maintain equivalent service standards across a fragmented IP ecosystem. That plan has not been provided and given the complexity of the ecosystem is likely to be costly and take some time to produce.

Real-world broadband performance

The issue is not only whether a household can receive a broadband service in theory. Viewers have come to expect television services to be available immediately, operate consistently and deliver a high-quality viewing experience regardless of household activity or network conditions. Any replacement for DTT must be judged against those expectations.

An all-IP television system must work reliably in real-world conditions, not only under idealised assumptions. Evidence demonstrates that significant challenges remain in the broadband ecosystem even without the additional challenges of supporting a fully IPTV environment.

Uswitch reports that c.240 million hours were lost to broadband outages in the twelve months to November 2025, with over 22 million users (41% of people) being disconnected at least once and 15 million people facing outages lasting for three hours or more^{xxxiii}.

Citizens Advice reported assisting one consumer every three and a half minutes with a telecoms-related issue in 2024 and found that 8.6 million UK consumers experienced problems with their mobile or broadband provider. One in four broadband customers had reason to complain in 2024, with the majority citing service issues such as slow speeds or total loss of service^{xxxiv}.

On top of this, live television presents a particular challenge for IP delivery. Streaming services routinely experience delays relative to broadcast television and can be affected by bandwidth constraints, congestion and variations in network performance. The FIFA World Cup 2026 highlighted these challenges – as noted in Section 1 – with viewers reporting significant delays, buffering and picture-quality issues when watching online. These are not marginal concerns if the objective is to replace DTT as a like-for-like universal platform for live national events by 2034.

Furthermore, real-world broadband performance varies significantly within the home. Wi-Fi speeds can degrade in rooms farther from the router and may be affected by walls, floors and interference from other devices. Households are also increasingly using bandwidth-intensive applications concurrently, including video streaming, gaming, smart speakers and connected home devices. In larger households or communal living facilities, aggregate demand from multiple users and devices can materially exceed the capacity required for a single IPTV stream^{xxxv}.

Even within the Freely service itself we note that it can experience significant outages which can last for extended periods^{xxxvi}. This provides a warning to only relying on IP for delivery of TV in the future.

The Green Paper correctly identifies the standard that any replacement platform must satisfy. However, it does not demonstrate that IPTV can meet or exceed DTT's reliability, resilience, interoperability and coverage at national scale by 2034. Nor does it provide a credible plan for proving that equivalence before DTT is withdrawn. Until that evidence exists, a 2034 switch-off would increase, rather than reduce, risks to viewers and the wider television ecosystem ultimately leading to exclusion of viewers and damage to the PSM which the Government is aiming to protect.

3.3 Removing DTT as an alternative to IPTV would undermine competition and innovation

As set out in section 2, retaining DTT to 2044 avoids a whole range of competition issues risk harming the market and restricting competition. If DTT is turned off in 2034 it would reduce platform choice for viewers, end manufacturer and hybrid platform's easy access to content including that from the PSBs, negatively impact other sectors and increase the market power of IP distribution networks which is likely to result in increased costs for broadcasters.

In the likely event that DTH services are also removed from the market as a result of Sky moving fully to IP-delivery and Freesat, and the rest of the DTH delivery chain being unable to sustain a viable free to air service, it would also leave the consumer with no viable genuinely free TV service as all services would require broadband to access them.

It is hard to see how a rushed decision without a complete understanding of the ecosystem or regulation required to support the broadcast community could help to support competition and innovation.

As part of any consideration of the 2034 option, Arqiva is assuming that the Government, Ofcom and potentially the CMA are involved in dialogue around a range of regulatory issues which will need to be addressed if a rushed switch-off is pursued. These issues include:

- A new regulatory framework across the broadcast, device manufacturer and broadband ecosystems including to deal with challenges identified in the Green Paper around guaranteeing PSB prominence, universal access, TV manufacturer access to content, required service levels requirements placed on ISPs/telcos if DTT is switched off and distribution control avoiding challenges in market dominance by those involved in these different markets;
- Adjustments to regulation Arqiva is required to follow based on a set end date for DTT (including any potential impacts on radio and consideration of stranded assets and de-commissioning);
- Transition programme governance and risk management.

If these issues are not being considered, or the view is that they will take many years to work through, we urge the Government to select its 2044 option to provide sufficient time for Government, regulators and industry to work through these complex areas.

3.4 It would make public service media less sustainable and weaken public support

The sustainability of PSM depends on more than the continued availability of content. It requires PSBs to maintain universal reach, prominence, discoverability, audience trust, financial sustainability and control over how their services are distributed. While the Green Paper rightly recognises these requirements, it does not demonstrate how they would be preserved following a 2034 switch-off.

A 2034 switch-off would risk the PSBs ability to continue to deliver universal services

The sustainability of PSM is inseparable from universal reach. Public service media is designed to serve all audiences, regardless of income, geography, age or digital confidence. A system that reduces access to public service content, or creates new barriers to that access, risks undermining the very purpose of PSM.

As set out in section 2, the Green Paper itself acknowledges that near-universal IPTV readiness is not expected until the early 2040s. A 2034 switch-off would therefore create a risk that some audiences are excluded from, or face greater difficulty accessing, public service content before an equivalent universal alternative has been demonstrated.

Prominence and discoverability are not guaranteed in an IP-only environment

DTT provides PSBs with direct access to audiences through a regulated platform with established prominence arrangements and a familiar user experience. An IP-only environment would be materially different. Public service content would increasingly sit within interfaces controlled by device manufacturers, operating systems, platform operators, app stores and content aggregators.

The Green Paper recognises that PSM content must remain free, easy to find and available across major platforms and devices. However, it does not explain how equivalent prominence and discoverability would be achieved across a fragmented and rapidly evolving IP ecosystem. While it acknowledges that regulatory intervention may be required, the nature, timing, cost and effectiveness of those interventions remain unclear.

A 2034 switch-off would increase PSB dependence on commercial intermediaries

A further concern is the transfer of control over distribution. Under DTT, PSBs retain a direct relationship with audiences through a regulated and universally available platform. In an IP-only environment, access to audiences would increasingly depend on commercial intermediaries that control devices, operating systems, applications, user interfaces and recommendation engines.

This creates a risk that PSBs become increasingly dependent on third parties to reach audiences and fulfil their public purposes. The Green Paper does not demonstrate how broadcasters would maintain equivalent control over distribution, prominence and audience access following a 2034 switch-off.

A 2034 switch-off would harm the PSBs financially

As highlighted in section 2, the commercial PSBs are likely to face a significant loss in advertising income if DTT is switched off in 2034. This includes a direct loss when DTT is turned off in addition to a likely earlier decline once an announcement is made and TV advertising buyers start to modify their behaviour. Reports by industry analysts Ian Whittaker and Mathew Horsman identify and quantify these risks. The BBC also faces a financial risk through the impact on UKTV's advertising and the resulting decline in profits passed through to the BBC's commercial arm.

Once the increased costs of IP distribution are taken into consideration and the knock-on impact on radio costs to the BBC when DTT is switched off, Arqiva believes that PSBs will be worse off financially as a result of a closure of DTT in 2034.

The BBC may find itself funding large elements of any switchover

The Green Paper states that no assumption should be made that public funding will be available to support a transition. If a 2034 switchover is to be pursued, funding for it will have to come from somewhere.

Given that the BBC has historically been the major industry player pushing for a 2034 switchover, there could be an expectation that it is required to fund all or some elements of a switch and that the licence fee would be used as a mechanism to support broadband uptake as well as communication and

device support. This would not be Arqiva's preferred option, and we believe that 2044 is preferable for all key stakeholders in the DTT platform, including the BBC.

As noted above, the Government must also consider any potential distortive effects under the UK's subsidy control regime if BBC funding were involved.

Public support for the BBC and a universal Licence Fee could be undermined if 2034 is selected

DTT and its ability to ensure free universal TV is available to all Licence Fee payers is, and has been for decades, a cornerstone of the PSB framework in the UK. It is part of the social compact between citizens and the BBC and underpins a large part of the value the BBC delivers for the nation. It ensures everyone can have access to TV no matter where you live, your income or your social circumstances. Having free access to universally available DTT also helps to justify a universal charging mechanism.

Ending DTT and moving to all-IP would change this dynamic, and, whilst Arqiva would not support such a change, it would allow some parties to raise questions around whether universal charging is still appropriate and if a subscription model should be introduced instead.

Furthermore, ending DTT is likely to be perceived by many Licence Fee payers as a degradation of their service and the value they get from paying the Licence Fee. Nationally representative polling of over 26,000 people from across the UK respondents found only one in five would support the licence fee if terrestrial television disappeared, falling to one in seven in Scotland. 64% said that the licence fee should be reduced or abolished if terrestrial television were switched off, while nearly half said that they would watch less BBC content or cease watching it altogether if the BBC moved online-only. 68% believed that many groups would be harmed by an online-only BBC^{xxxvii}.

A rushed switch off of DTT in 2034 would create risks for the BBC, potentially financially through a greater number of households not paying the Licence Fee and a reduction in commercial income from UKTV which relies heavily on DTT for viewers and advertising (wholly owned by BBC Studios and a key contributor to the BBC's commercial income), plus wider risks in terms of public support for the BBC and its role in society.

3.5 It would undermine the UK's national resilience and create risks for the radio sector

Risks to national resilience and emergency preparedness

The Green Paper's assessment of the future of television does not adequately consider the resilience value of the terrestrial broadcast infrastructure. A decision to switch off DTT in 2034 would not simply change how television is distributed; it would remove an independent, sovereign communications capability before an IP-dependent ecosystem has been shown to provide equivalent resilience.

The DTT network and wider tall-tower estate provide a communications capability that is structurally unique from internet-based alternatives. The network reaches 98.5% of UK households through a one-to-many architecture, operates independently of consumer broadband and the public internet, and is supported by geographically dispersed infrastructure designed and operated under UK jurisdiction. Unlike IP distribution, it does not depend on household broadband connections, cloud providers, data centres, global technology platforms or international content-delivery infrastructure to reach audiences.

The tall-tower network also supports a broad range of services beyond television broadcasting, including radio, emergency communications, utilities, transport, government networks, mobile communications and wider telecommunications services. Many users benefit from characteristics that may be difficult or expensive to replicate elsewhere, including substantial height, wide-area coverage, secure access, resilient power arrangements and extensive geographic reach.

The United Kingdom today faces a more complex and volatile risk environment than at any point since the end of the Cold War. The National Risk Register identifies a wide range of threats, including cyber-attacks, power disruption, extreme weather, telecommunications outages, subsea cable incidents and hostile state activity^{xxxviii}. The Government's own resilience assessments highlight how these risks are becoming increasingly interconnected, creating shared vulnerabilities across critical services and infrastructure^{xxxix}. Resilience therefore depends not only on the robustness of individual systems, but on maintaining diversity in the ways essential information and services can be delivered.

Recent events illustrate the significance of this challenge. Storm Éowyn left around one million properties across the UK and Ireland without power, with extensive disruption to broadband and telecommunications services^{xl}. The 2025 Iberian Peninsula blackout left more than 50 million people without electricity and resulted in the loss of mobile communications for more than half of mobile subscribers in some areas as backup power systems were exhausted^{xli}. The CrowdStrike outage demonstrated how a failure within a single technology provider could disrupt healthcare, transport, media and wider public services simultaneously, costing industry over \$5.4bn^{xlii}. These incidents demonstrate that disruption is rarely confined to a single sector and that failures increasingly cascade across interconnected communications systems.

In July 2026, the National Preparedness Commission (NPC) published “When the Internet Stops: The resilience case for retaining terrestrial television and the UK's tall tower network”^{xliii}. The report examined the implications of removing the UK's universal terrestrial broadcasting capability and concluded that decisions regarding the future of DTT should be considered not only as a broadcasting matter, but as a national resilience issue. Its central question was simple: when internet-based systems fail, what communications capability remains available to Government, broadcasters and the public?

The report concluded that resilience planning must focus not only on preventing failures but also on ensuring that independent communications channels remain available when primary systems are unavailable. It highlights the risks associated with the concentration of communications, information and public services onto infrastructure with common dependencies including electricity networks, mobile networks, broadband networks, cloud providers, data centres and international connectivity. When those dependencies fail, multiple services can fail simultaneously.

The NPC report highlights just how important it is to have DTT if there is a significant broadband outage including due to a cyber-attack on core infrastructure along the broadband delivery chain. In addition, whilst the broadcast network, and particularly radio, becomes very important during prolonged power outages the report notes that consumer broadband routers generally cease functioning immediately when power is lost and that mobile networks typically rely on battery backup measured in hours rather than days. By contrast, primary broadcast transmission sites benefit from resilient power arrangements, backup generation and fuel reserves that can allow services to continue operating for extended periods so consumer devices with power can continue to receive services. The report points to the Iberian Peninsula blackout as an example where mobile services progressively failed as backup power was exhausted, leaving radio as one of the few ways of receiving trusted information. During the outage, reports described crowds gathering around radios in public places to obtain news and official information^{xliv}. Given that DTT and radio share a network and switching off DTT early risks the ongoing viability of radio services this is an important consideration for government.

The NPC report further notes that UK resilience policy already depends upon maintaining multiple and independent means of communication. Government emergency planning continues to direct the public towards broadcast services through the long-established *"Go In, Stay In, Tune In"* principle, while the Cabinet Office's resilience planning envisages broadcast media operating alongside other public-warning mechanisms such as Emergency Alerts. The NPC report argues that maintaining separate communications routes should be viewed not as duplication, but as a form of deliberate strategic capacity, consistent with the resilience principles applied elsewhere across government in sectors such as electricity, cash payments and Position Navigation and Timing.

The consequences of removing DTT as the anchor service for that infrastructure have not been fully assessed within the Green Paper including the resilience implications of replacing a terrestrial broadcast platform with systems that share common dependencies on power, broadband, mobile connectivity and global digital infrastructure.

Ultimately, the Government needs to decide whether it wishes to retain, until at least 2044, a sovereign, independent and resilient communications capability at a time when wider resilience policy increasingly emphasises the importance of avoiding common points of failure, maintaining diverse routes to delivery and sovereign control over critical elements of national infrastructure.

Risks for the radio sector

As already highlighted, alongside the overall resilience risks associated with switching off DTT, there would be associated risks specifically to the radio sector and radio users across the UK.

Arqiva supports radio transmission across around 700 sites, of which over 300 also carry DTT services. Arqiva has modelled the effect on radio transmission charges of ending DTT in 2034 compared with maintaining DTT platform until 2044 and this analysis suggests that the cost for the radio sector could increase by around 35% on average in real terms with considerable variations based on the location of services and the extent to which they currently share sites with DTT.

An increase on this scale could affect the financial sustainability of some radio services, particularly smaller commercial operators and local stations. It would also increase costs for the BBC to distribute its radio services which would offset any savings from switching off DTT. There is a clear risk that radio broadcasters could respond by withdrawing services or reducing coverage, reducing choice and availability for audiences and potentially threatening universal radio services across the UK.

The Green Paper does not consider these important potentially negative impacts for the radio sector and radio users which would be incurred over the period from 2034 to 2044. Arqiva highlights that retaining DTT until 2044 would avoid any of these challenges or cost increases for the radio sector and allow the sector to plan with confidence until the mid-2040s. Given the shared nature of the broadcast network, we encourage the DCMS to consider TV and radio more holistically.

4. Whilst the NPV for 2034 is already lower than the 2044 option, the costs and risks for 2034 remain understated and incomplete

As noted above, the 2034 option fails to pass the Government's tests and would represent a very high-risk option if selected. However, even if a credible plan were produced, this option does not make sense based on the cost benefit analysis presented. While Arqiva notes that whilst the Green Paper analysis is not intended to be final analysis, the analysis provided already clearly shows that the NPV of the 2034 option is lower than that for the 2044 option. That in itself supports the adoption of the 2044 option.

It is also clear that the costing of the 2034 is incomplete with the costs significantly understated relative to the 2044 option. There are major costs areas not accounted for, and insufficient recognition given to the fact that many of the costs areas already identified are likely to be much lower if the 2044 option is selected. When these are taken into account, we expect the gap between the two options to widen considerably, further strengthening the case for the 2044 option. On the Government's own figures, and even more so once the extra costs are included, a decision to opt for a 2034 switch off would appear to make little financial sense.

The key cost and risk categories that should be quantified and included in the analysis, consistent with HM Treasury Green Book guidance, are:

- Inclusion of the increased costs of IP delivery if DTT is turned off;
- The inclusion of stranded DTT/infrastructure assets if DTT is turned off early;
- A realistic view of fixed broadband support costs in line with other universal benefits if delivery for all audiences is to be maintained and viewers are going to be supported if DTT is turned off;
- Recognition of the scale of TV set replacement required to deliver the same viewer experience if DTT is turned off in 2034 given the functionality of most connected TVs and the rate of replacement;
- Recognition that many cost areas are likely to be significantly lower if the later date is selected e.g. communications;
- The advertising revenue risks for commercial broadcasters if DTT is turned off early;
- Recognition that the certainty of release of 600 MHz spectrum in 2034 under the 2044 option vs uncertainty under the 2034 option has value to auction proceeds and the mobile sector;
- Recognising the resilience value of DTT and wider uses of the infrastructure and quantification of the risks of this being undermined for UK emergency planning;
- The considerable uncertainty in the IPTV platform uptake forecasts which adopt a very optimistic view and the lack of any sensitivity analysis around this;
- The optimistic perspective that fixed broadband provision on its own would address digital inclusion challenges.

Looking at each of these categories in turn:

Inclusion of the increased costs of IP delivery

A fundamental area which has not been included in the cost benefit analysis is the increased cost of IP delivery which broadcasters, including the PSBs, would need to incur if DTT was switched off and viewing moved over to IPTV. IPTV delivery is not free for broadcasters. Subject to the delivery model, costs include fees with CDN providers, ISPs, online platforms or direct equipment and network costs if a broadcaster builds out some element of the IP delivery network itself.

There is a claim made that the PSBs will save money as a result of DTT being turned off, but there is no attempt made to quantify the costs of IP delivery or evidence to support this assertion. The DCMS cannot justify any decision to turn off DTT on cost grounds if it fails to quantify such an important area of cost which would clearly be very material for the PSBs and other broadcasters.

Attempts have been made to estimate this online delivery cost. For example, *informitv*^{xlv} published a recent piece of analysis which suggested that broadcasters could be required to spend around £450m per annum for IP delivery to replace content currently distributed by DTT with the cost to the BBC approaching £200m per year. This estimated cost is far in excess of what the BBC currently pays for DTT and what it would be required to pay from 2034 under the 2044 DTT transition option so, even at a much lower level than this estimate suggests, the PSBs could find that the additional cost of IP delivery matches or surpasses the alternative cost of retaining DTT for them. Other estimates present a more cautious view of the incremental additional IP delivery costs in the future, reflecting the fact that some viewing will naturally migrate from DTT to IP over the period to 2034. Mathew Horsman estimates that the incremental cost to the PSBs of DTT viewing having to be carried via IP at c.£39m per annum on average between 2034 and 2044. This cautious view would be less than the ongoing cost of retaining DTT but still around 50% of the potential cost.

A further factor on IP delivery costs is that over time, if DTT is switched off, it would leave the ISP, CDN and broadband providers in a much stronger commercial position to charge higher fees to the broadcasters to carry their traffic. This could see costs increase significantly and we anticipate ongoing discussions around net neutrality principles and obligations on those players involved in the delivery of IP traffic. The outcome of such discussions could result in charges for broadcasters going up significantly and far outweighing any ongoing costs of keeping viewing on the DTT platform.

For the 2034 option to be credible, the DCMS needs to set out its estimate and forecast the increased internet traffic costs the broadcasters would have to pay if DTT is turned off.

The inclusion of stranded DTT/infrastructure assets

The cost benefit analysis has failed to reflect the material issue of assets being left stranded in the event that the DTT network is forcibly closed before the end of its anticipated economic life. If an asset ceases to be profitably employed earlier than the end of its economic life due to an unanticipated or premature change, it is classed as “stranded”.

The regulatory regime under which Arqiva is obliged to operate, which has been in place since 2005, requires Arqiva to recover costs over regulator-approved asset lives. These assets lives which have been set by the regulator vary by asset type. For example, a DTT antenna has an expected life of 50 years, a steel broadcasting structure has 70 years, and a brick building has 100 years. Ofcom's guidance set an end date of no later than 2062 which runs well beyond both the 2034 and 2044 options being considered.

As DCMS will be aware, Arqiva's contracts with multiplex operators tend to be for a c.20-year duration, and the prospect of an early transition away from DTT was not mentioned by either Government or regulators when the current contracts were agreed or when significant investment was made by Arqiva during DSO. If it was the Government's intention not to continue with DTT, Arqiva and its counterparties should have been informed before agreeing their current contracts (and preferably much earlier). As a consequence, none of Arqiva's assets have been managed on the basis of a transition away from DTT at the end of 2034. Furthermore, given the regulatory and contractual framework, Arqiva has had no freedom to manage its business on that basis even if it had foreseen this risk. In other words, a stranded asset position arises directly from the interaction between the regulatory framework and any subsequent potential decision by Government to accelerate the transition timetable and set an early end date.

Based on Arqiva's initial assessment of the value of stranded assets, our preliminary estimations are that the cost could be in the several hundreds of millions if the 2034 switch-off option is selected. This figure could be much higher if remaining users, for example radio or other users of the structures, are not able to bear the resulting increased costs and further sites need to close. This scenario would leave further assets stranded which would need to be taken into consideration.

Any option involving an earlier transition date will necessarily create greater costs than a later transition date. Based on initial assessment, the degree of stranded assets under the 2044 option drops significantly.

Arqiva would expect to be fully compensated for those costs, which would flow directly from the combination of the regulatory controls which have been applied to Arqiva and DCMS' choice of transition timeline. The DCMS needs to take stranded assets into consideration within its evaluation.

A realistic view of fixed broadband support costs if viewers are going to be supported if DTT is turned off

The CBA includes an estimate of the cost of providing broadband to some households. We believe that the basis for the calculation is flawed because it only seems to take into consideration the forecast gap in fixed broadband uptake based on 0.7m households under the 2034 option and 0.5m households under the 2044 option. This understates how a support scheme, which would "not leave any households behind" would need to work in practice to be credible.

We know that broadband is subject to affordability and having broadband is no guarantee that a household will be able to continue to afford it going forward. During the cost-of-living crisis Citizens Advice reported that 1m people gave up broadband. For a support scheme to ensure that no one is left without TV, it would need to work in line with other universal benefit schemes where a household is evaluated on its socio-economic circumstances and provided with assistance if it meets a set criterion.

Given the affordability barrier, a support scheme which meets the Government's stated aim of delivering for all audiences would therefore need to consider the economic or social characteristics of the particular household. Eligibility for support in other areas (for example in line with access to Universal Credit or provision provided for electricity or water bills) is typically measured by qualification for universal credit, housing benefit, income related employment and support allowance and pension credit. c.6.7m households in the UK receive Universal Credit, c.2m households receive social tariff support for Water Bills and c.5.7m households receive the Warm Home discount benefit. Even at the low end, these are significantly higher than the numbers used in the Green Paper. The CBA therefore materially understates the social costs of a move to IPTV.

Recognition of the scale of TV set replacement required to deliver the same viewer experience if DTT is turned off in 2034 given the functionality of most connected TVs

The Green Paper fails to acknowledge the scale of consumer impact and television equipment replacement that would be required under the 2034 option. It appears to assume that only those households without any form of IP connectivity would require additional equipment. This materially understates the real-world implications for viewers if DTT services were withdrawn and television could only be accessed via broadband.

The analysis also risks oversimplifying the transition by assuming that television can be replicated through the deployment of so-called "easy plug-in devices" or replacement connected televisions. In practice, maintaining an equivalent viewing experience requires more than simply connecting a new device to a television set. It depends on a suitable broadband connection, reliable in-home Wi-Fi coverage, device configuration, account creation and the ongoing management of applications, passwords, software updates and service changes.

For many households, a full transition to IPTV would represent a fundamental change in how television is accessed and consumed. Rather than a single, integrated platform providing seamless access to linear channels through a familiar Electronic Programme Guide (EPG), viewers could increasingly be required to navigate between multiple applications, platforms and user interfaces to access different services. This risks creating a more fragmented viewing experience and reducing the simplicity and ease of use that audiences currently associate with free-to-air broadcast television.

The challenge is compounded by the long replacement cycle of television sets and the shorter support lifecycle of connected devices and applications. While television sets may remain fully functional for many years, application providers, operating system developers and platform operators do not necessarily continue supporting older hardware indefinitely. As a result, viewers may find that services become unavailable, require upgraded equipment or deliver a degraded experience despite their television still functioning perfectly well. This dynamic is already evident in the connected TV market, where support for older operating systems and device models is routinely withdrawn as platforms prioritise newer hardware^{xlvi}.

Faced with these realities, many households would have little choice but either to accept the loss of a familiar linear television experience or to replace otherwise functional television sets with devices specifically designed to support linear streaming services, such as Freely, or purchase additional streaming hardware. While Freely is growing in adoption, it is not currently available on televisions manufactured by Samsung, LG and Sony, which together account for a significant proportion of UK television sales and installed television stock. Given the relatively slow rate at which televisions are replaced, Freely-enabled televisions are likely to represent only a minority of the installed television base by 2034.

The CBA should therefore acknowledge and quantify the full cost to consumers of maintaining an equivalent linear television experience under the 2034 option. This should include not only the costs associated with replacing television sets or purchasing additional streaming devices, but also the wider consumer costs arising across all television sets within the home rather than just for primary sets.

In a similar way, the CBA includes, as an unmonetised cost, the replacement of DVB-T-only televisions by 2035 under the 2044 option. We believe this would affect only a very small number of sets. DVB-T2 was incorporated into the DTG D-Book, the UK industry standard for compliant televisions, in 2008 and has been included in virtually all televisions sold since that date. Moreover, there will continue to be a substantial second-hand market in DVB-T2-capable television sets to replace any remaining legacy equipment. More fundamentally, however, any television that is incapable of receiving DVB-T2 services is also unlikely to be capable of receiving IPTV services directly and may not support the connection of modern streaming devices. If replacement costs for these televisions are considered relevant under the 2044 option, equivalent costs should also be included under the 2034 option.

Recognition that many cost areas are likely to be significantly lower if the later date is selected e.g. communications

The CBA assumes that the cost of communication including public awareness, user support and skills training would be the same under a 2044 option as it would be in 2034. Given overall developments in society and the much lower number of households likely to be using fixed broadband in 2034 relative to the situation when it comes to 2044, it must be the case that any communication in the mid-2040s would not need to be of the same magnitude as it would be in 2034.

Recognition that the certainty of release of 600 MHz spectrum in 2034 under the 2044 option vs uncertainty under the 2034 option has value to auction proceeds and the mobile sector

The CBA takes account of the spectrum benefits of both the 2044 and 2034 options. A key difference is that only under the 2044 option can there be certainty for the Government, Ofcom and the mobile sector that it will be able to release the 600 MHz spectrum to a guaranteed timetable in 2034. Under the 2044 option the release of 600 MHz spectrum can proceed as soon as a decision on the future of DTT is made and a clear programme implemented in line with other recent spectrum clearance events e.g. the 700 MHz clearance programme. It is an engineering challenge which is well understood and the transition of DTT from 6 to 3 national multiplexes and the release of spectrum can be managed to a set timetable.

In contrast, it must be acknowledged that the 2034 option would carry significant risks of delay if it would depend on meeting a series of yet undefined criteria (e.g. fixed broadband uptake and the success in ensuring that all households have access to a reliable fixed broadband service) before a transition could occur. It would be very hard for Ofcom and mobile operators to plan with any real certainty whether the 2034 date could be delivered.

Arqiva believe that the certainty over spectrum release is an important benefit of the 2044 option which needs to be taken into account in the analysis.

Recognising the resilience value of DTT and wider uses of the infrastructure and quantification of the risks of this being undermined for UK emergency planning

As highlighted earlier, the Green Paper fails to reflect the wider risks of turning off DTT on the UK's tall tower network and its overall communications network resilience. If DTT is turned off in 2034 there are risks to the UK's radio network as well as other crucial users of the terrestrial network including emergency services, maritime and coastguard, uses by government departments and other sectors.

Such risks are highlighted in a recent report – “When the Internet stops: The resilience case for retaining terrestrial television and the UK's tall tower network” - published by the NPC^{xlvii}.

In line with HM Treasury Green Book best practice, we would expect that these risks to be considered within the analysis including in its assessment of risks, stress testing and sensitivity and scenario planning. We do not see any evidence that this has been factored into the analysis presented which appears to be a major omission and deviation from Green Book practice.

The advertising revenue risks for commercial broadcasters if DTT is turned off early

The CBA includes a reference to the change in advertising revenues for broadcasters as an undetermined impact within its calculation. We believe that the commercial broadcasters will lose substantial revenues if there is a rushed switch-off of DTT in 2034 as they continue to rely heavily on

income from DTT viewing and perform well in that relatively lower competitive environment than in a situation where they face broader competition from streaming and IP-delivered services.

As highlighted in Section 1, Mathew Horsman's report "The Future of DTT – the case for retaining flexibility into the 2040s and beyond"^{xlviii} estimates that the commercial PSBs would lose £768m of income over the period 2034-2044 if DTT is turned off in 2034. A report by respected industry analyst Ian Whittaker from Liberty Sky Advisors²⁷ also highlights the substantial early risk to the commercial broadcaster's advertising income if they rush to switch-off DTT in 2034.

The likely impacts on broadcaster advertising revenues are material with potentially very major implications for the performance of the commercial PSBs and their future prospects. The CBA must evaluate and reflect this.

The use of optimistic IPTV adoption assumptions and insufficient testing of alternative scenarios

The CBA analysis draws on forecasts from 3Reasons/MTM on the potential uptake of fixed broadband over time. We believe that the forecasts presented are optimistic and potentially downplay the ongoing reliance on DTT by households and their inability to pay, receive or desire to have a high-speed fixed broadband connection due to digital skills, appetite or satisfaction with reliance on mobile internet as an alternative for most digital and online needs (e.g. banking and access to government services). It is not the case that a household would have to have fixed broadband to access services and potentially millions of households will continue to be without high-speed fixed broadband services.

Mathew Horsman estimates that 5.4m households will continue with DTT as their primary means of receiving linear TV services on their main sets in 2034 with 2.9m households continuing to viewing this way in 2045.

Given the huge uncertainty in likely uptake of high-speed fixed broadband, we believe that the CBA should adopt a cautious approach in this area and, in line with HMT Green Book best practice, undertake sensitivity analysis to evaluate the impact if the gap in fixed broadband uptake were to be material higher than the current forecasts suggest.

The optimistic perspective that fixed broadband provision on its own would address digital inclusion challenges

A final point on the CBA relates to its reference to the digital inclusion benefits that could arise from accelerated broadband uptake following a DTT switch-off. Arqiva does not believe that removing a television service which millions of people enjoy, rely upon and actively choose to use, and effectively requiring them to purchase a high-speed fixed broadband service in order to continue watching television, represents a sensible or equitable approach to addressing digital exclusion.

Digital inclusion is a complex issue influenced by a wide range of factors, including digital skills, access to devices, connectivity, affordability, confidence, accessibility, the availability of ongoing support and training, and individual attitudes and preferences. These issues are explored further in Section 2.2. Millions of people who currently rely on DTT already have access to broadband or mobile connectivity and may use some online services in their daily lives. It does not follow that removing DTT from these households would solve digital exclusion challenges or result in a meaningful increase in engagement with government services or other digital services.

More fundamentally, the CBA risks conflating television access with digital inclusion. The provision of a broadband connection, streaming device or connected television may enable access to television services, but it does not address the wider factors that lead to digital exclusion. A household may be perfectly capable of streaming television while still lacking the equipment, confidence, digital skills or accessibility support needed to engage with online banking, healthcare, education or public services. Equally, requiring a household to access television via broadband does not mean it owns a laptop, tablet or smartphone through which many digital services are designed to be accessed.

This is particularly relevant for older people, disabled people and lower-income households. Many of the barriers they face are not principally related to connectivity, but to affordability, digital confidence, accessibility, cognitive load, usability and the practical challenges of navigating an increasingly complex digital environment. For people with cognitive impairments, learning disabilities, dementia or certain neurodiverse conditions, simply providing broadband does not remove the barriers associated with using digital services. Similarly, for people with visual, hearing or dexterity impairments, accessibility challenges can persist regardless of whether a broadband connection is available.

Nor should it be assumed that access to internet-delivered TV will naturally lead to greater participation in the wider digital economy. Watching television through a streaming device is fundamentally different from completing online forms, managing finances online, accessing healthcare services or engaging with government websites. The policy objective of improving digital inclusion should be pursued directly through targeted support, skills development, accessible digital services and measures to address affordability, rather than indirectly through the withdrawal of a universally available television platform.

We therefore do not believe that decisions regarding the future of DTT should be influenced by assumptions about digital inclusion benefits arising from broadband adoption. In any event, any benefits that may result from the continued transition towards digital services would also accrue under the 2044 option, by which point society is likely to be in a more prepared and accepting position to accommodate such a significant shift in television distribution.

5. Government must decide soon – and back 2044 as the only deliverable plan

Government must provide a timely and definitive decision on the future of DTT. Certainty is being sought from audiences, social groups, multiplex operators, television and radio broadcasters, equipment manufacturers, investors, programme-makers, regulators and other public and commercial services that currently depend upon the broadcast network.

The issue is not simply one of future audience behaviour. Either option requires substantial planning, procurement, investment and implementation activity. From a practical perspective, Government does not have the option of waiting until the early 2030s, or delaying, before deciding on the future of DTT.

A failure to decide and ongoing uncertainty would impose real costs on all stakeholders. Investment decisions would be deferred, procurement windows narrowed, specialist supply-chain implementation and Arqiva's own servicing capability lost, and commercial negotiations made more difficult with suppliers likely to apply premiums. A significant delay could also lead to regulatory changes being needed, emergency licence extensions, short-term contracts, unsupported equipment, accelerated procurement programmes and temporary engineering solutions implemented under significant time pressure.

Prolonged uncertainty could also create a self-fulfilling cycle of decline. Without a clear view and decision by Government, broadcasters may become reluctant to launch services or renew capacity commitments. Multiplex operators may find it more difficult to justify commercial risk. Manufacturers and suppliers may divert investment to markets offering greater certainty. Infrastructure spending may increasingly focus on short-term maintenance rather than efficient long-term renewal. Furthermore, Arqiva is a long-term infrastructure business, which accesses finance in the debt markets and the markets dislike uncertainty which could impact Arqiva's ability to raise finance on attractive terms^{xlix}.

In either of the DTT scenarios presented, Arqiva would require regulatory certainty that it would no longer be required to support DTT after that date on the same basis as today from the perspective of business planning and certainty (including for Arqiva's employees and investors). This is especially true for the 2034 option - service continuity risks would increase significantly as the end date approaches due to ageing assets and diminishing support arrangements and inability to replace assets at a late stage.

As Arqiva has made clear in this document, it believes that the 2044 transition option is the only credible choice for Government to make. It protects viewers, is low-risk and low-cost relative to the 2034 option and it provides time to properly plan for what would still be a significant change for society and the media sector. There is a clear, funded, deliverable plan which does not require ongoing public funding and work can start as soon as the Government makes its decision.

Arqiva is keen to avoid the risks and damage of ongoing uncertainty over the future of DTT. We urge the Government to stick to its proposed timetable for a decision, ideally before the end of 2026 or by early 2027 at the latest and to select the 2044 option.

Annex: Relevant Questions from the Media Green Paper on the Future of TV distribution

Question 13. Chapter 3.1 of the green paper outlines the government's preference for an IPTV transition from either 2034 or 2044. The following questions seek views and evidence relating to this proposal.

To what extent do you agree or disagree with the government's assessment of the case for change relating to the future of digital terrestrial television?

- Neither agree nor disagree - no strong opinion either way

Note: Arqiva does not believe that the Government has set out a credible case for switching off DTT in 2034. The evidence presented is weak and it is noticeable that there is no plan or funding set out for how that option would be achieved. Arqiva accepts that the 2044 option provides sufficient time to plan for a switchover and that it is the lowest risk and lowest cost option.

Question 13a. Please provide further rationale for your answer and any relevant evidence.

Question 14. The green paper outlines two timing options for digital terrestrial television (DTT) switch-off. These are 31 December 2034 (option 1 at Annex A) and 31 December 2044 (option 2 at Annex A).

Which option do you prefer as timing for DTT switch-off?

Option favoured:

- Strongly prefer 2044

Question 14a. Please provide further rationale for your answer and any relevant evidence.

Question 15. Do you have evidence that another timeframe is preferable to the ones specified in this consultation? If so, please provide further details.

Question 15a. For industry/organisations only:

To deliver an IPTV transition would require collaborative working with audience groups, industry and across government. Please outline your organisation's commitment to supporting this work, including relevant experience, resources, and innovative solutions as to how you would deliver this transition.

Question 16. To what extent do you agree or disagree that the challenges identified in the green paper (delivering for all audiences; maintaining a reliable television service; promoting competition and innovation in the television industry and supporting a sustainable future for PSM providers) capture all of the considerations when making a decision on whether, and how best, to support audiences to adopt IPTV and other similar technologies?

- Strongly disagree - the challenges definitely do not capture all of the considerations.

Question 16a. Please provide further rationale for your answer.

- See Arqiva response earlier in this document.

Question 17. In your opinion, which, if any, of the challenges are most important to you? Please rank in order of importance, where 1 is the most important to you.

Options ranked:

- Delivering for all audiences - Any transition to IPTV and other similar technologies must preserve universal access to TV, including public service media providers, regardless of income, location, age, or digital confidence.
- Maintaining a reliable television service - The ability to communicate to the public in a national emergency must be retained beyond a move to IPTV. Before digital terrestrial television is switched off, industry must show that alternative technologies can deliver comparable or better standards of reliability, resilience, and coverage.
- Supporting a sustainable future for public service media providers - public service media providers play a central role in the UK's cultural, civic, and democratic life. Industry must ensure that new distribution models support, rather than undermine, public service media providers' ability to play this role.
- Promoting competition and innovation in the TV industry - A managed transition to IPTV and other similar technologies offers an opportunity to modernise TV delivery, the transition should free up resources and spectrum, and allow broadcasters to focus on content and innovation rather than maintaining parallel legacy systems.

Question 18. In the event of an IPTV transition, which of the following, if any, do you think are the most important to ensure everyone can still access television from their own home? Please rank in order of importance, where 1 is the most important to you.

Options ranked:

- Affordable broadband for all, suitable for television viewing
- Low-cost or subsidised broadband for people receiving benefits or on low incomes
- Low-cost or discounted internet capable television sets for people on low incomes
- Simple devices that connect older television sets to the internet with no ongoing fees
- Services and systems that feel the same as digital terrestrial television so they are easy to use for people with limited digital skills
- Built-in, easy to use accessibility features for disabled users, for example subtitles and audio description
- Digital skills required to navigate or set up IPTV

Question 19. What are the likely environmental impacts associated with both a 2034 transition and 2044 DTT switch-off (transition to IPTV)?

In your response, please provide evidence where possible on:

- Under the 2044 option, the DTT proposal will enable the carbon and power emissions of the DTT network to be reduced substantially. Moving to DVB-T2 and reducing to three multiplexes will enable power and carbon reductions of around 40% on current levels.

Question 20. Is there anything else you would like to add regarding the future of TV distribution that has not already been captured?

- See Arqiva response earlier in this document.

ARQIVA

Arqiva Group Limited

Registered number 05254001

DCMS Green Paper Response

August 2026

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- ⁱ BARB, Total Television Households 2015-2026
- ⁱⁱ BARB, Viewing Data 2025 – 2026
- ⁱⁱⁱ [Sky Q No Longer Sold On Sky's Website, Cord Busters \(2025\)](#)
- ^{iv} [Sky UK Stops Selling Sky Q, ISPreview UK \(2025\)](#)
- ^v [Sky extends satellite TV service until 2029, RXTV \(2024\)](#)
- ^{vi} [Future of TV Distribution, DCMS \(2024\)](#)
- ^{vii} BARB, Viewing Data 2025 – 2026
- ^{viii} [FoTVD Forum Papers, UK Government \(2026\)](#)
- ^{ix} [Media Nations UK 2026, Ofcom \(2026\)](#)
- ^x [The Future of DTT, Mathew Horsman \(2025\)](#)
- ^{xi} [A Risk Too Far, Ian Whittaker Media \(2026\)](#)
- ^{xii} BARB, Special Events Viewing Data (2026)
- ^{xiii} [Keep up with play and avoid the delay during the World Cup, Ofcom \(2026\)](#)
- ^{xiv} [BBC iPlayer Complaints, Express \(2026\)](#)
- ^{xv} [Research & Reports, Broadcast 2040+ \(2026\)](#)
- ^{xvi} [The costs and risks of switching to internet distribution for all broadcast TV, EY \(2024\)](#)
- ^{xvii} [2.4 million digitally excluded older people are at risk, Age UK \(2025\)](#)
- ^{xviii} [Offline and overlooked digital campaign, Age UK \(2023\)](#)
- ^{xix} [Digital exclusion and deprivation, Age UK \(2025\)](#)
- ^{xx} [Safeguarding Britain's Social Resilience, DPA \(2025\)](#)
- ^{xxi} [Ibid.](#)
- ^{xxii} [More than 150,000 voters demand free-to-air TV be protected amid internet costs warning, The Mirror \(2026\)](#)
- ^{xxiii} [Save our Freeview TV!, 38Degrees Petition \(2026\)](#)
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- ^{xxix} [Ibid.](#)
- ^{xxx} [UK broadband trends Q2 2026, Enders Analysis \(2026\)](#)
- ^{xxxi} [Connected Nations UK Report, Ofcom \(2025\)](#)
- ^{xxxii} [The costs and risks of switching to internet distribution for all broadcast TV, EY \(2024\)](#)
- ^{xxxiii} [Network Nightmare, USwitch \(2025\)](#)
- ^{xxxiv} [Broadband Market Insights, Citizens Advice \(2025\)](#)
- ^{xxxv} [What Streaming Bandwidth Do You Need?, BroadbandNow \(2025\)](#)
- ^{xxxvi} [Warning for Future UK Broadband - Freely Outage, ISPreview \(2026\)](#)
- ^{xxxvii} [Attitudes to the BBC Polling, Broadcast 2040+ \(2025\)](#)
- ^{xxxviii} [National Risk Register, HM Government \(2026\)](#)
- ^{xxxix} [Resilience Action Plan, HM Government \(2026\)](#)
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- ^{xli} [Reflections from the Iberian Blackout, UKERC \(2026\)](#)
- ^{xlii} [CrowdStrike global outage, The Guardian \(2024\)](#)
- ^{xliii} [When the Internet stops, National Preparedness Commission \(2026\)](#)
- ^{xliv} [The day Spain clung to the airwaves, RSF \(2026\)](#)
- ^{xlv} [The Cost of Online Television, informitv \(2026\)](#)
- ^{xlvi} [Netflix Dropping Support for Older Devices, Kiplinger \(2026\)](#)
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