



**Free to view TV
for the connected age**

Update: July 2015

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Chair's Report



Caroline Thomson

Digital UK's increasingly important role alongside managing day-to-day operations for UK terrestrial television is leading the development of a long-term strategy for the platform as it adapts to shifts in technology and viewer behaviour.

This crucial area of work is already bearing fruit in the form of Freeview Play. I'm delighted that a year after announcing our intention to develop a Freeview-branded connected TV platform, manufacturers have started making the first TVs and set-top boxes which will support the new service, signalling the dawn of an exciting new era for free-to-view television in the UK. I would like to congratulate everyone involved in overcoming the many challenges in bringing this exciting project to fruition.

The development of Freeview Play is a great example of the importance of the close working relationship between Digital UK, Freeview, our respective member organisations and a host of industry partners. Cross-industry collaboration is also vital to the effective management of digital terrestrial television (DTT). This was particularly true of the successful move in September 2014 of all Children's and News services to new channel numbers, freeing up more room for the steady stream of channels applying to join the Freeview line-up. I am pleased to note that this not only went well from a technical standpoint but also that the information and support in place for viewers kept disruption to a minimum.

While seemingly simple, in truth such events require a great deal of planning, coordination and communication across broadcasters and industry to ensure everything goes as smoothly as possible. Looking ahead, we will increase our focus on supporting viewers, whether it be answering questions about new services such as Freeview Play or managing technical changes on the platform. This area of activity will be important as airwaves become more crowded and we begin to prepare for another spectrum shake-up to boost capacity for more mobile broadband services in the years ahead.

In this context we look forward to the World Radiocommunication Conference later this year and will continue to press for positive support by European institutions for the role of DTT.

Amid all this change, Digital UK and its members – the BBC, ITV, Channel 4 and Arqiva – will continue working constructively with Government, Ofcom and our industry partners to ensure that viewers come first and Freeview remains central to TV in the UK. We are rightly proud that Freeview is the country's most popular TV service and I would like to thank Jonathan Thompson and the Digital UK team for their hard work and commitment, which is helping ensure this continues to be the case.

Chief Executive's Report



Jonathan Thompson

We have a fantastic television sector in this country and one we should all be proud of for the significant cultural and economic role it plays. As a nation we are both producers and consumers of brilliantly creative content. UK television punches way above its weight on the world's television screens.

In an era of technological change, live broadcast television remains remarkably resilient and still contributes the vast majority of people's TV consumption here in the UK. I don't see this changing any time soon. But the arrival of bigger, better, connected televisions, the growing use of tablets and smartphones and the emergence of over-the-top content providers like Netflix and Now TV are transforming how we discover and consume video content.

While there is no sign we are falling out of love with television as a nation, audiences rightly expect greater choice and flexibility in how, where and when they watch the programmes they love.

I firmly believe that digital terrestrial television must and will evolve to embrace the change and opportunities that new technology and internet connectivity are bringing. Only services that adapt will continue to be successful. This will be our priority focus at Digital UK over the months and years ahead.

Our mission is to ensure that there continues to be a strong, evolving and attractive free-to-air television choice for all viewers in the UK.

This means a platform that retains the principles that underpin its historic strength but evolves to embrace how consumers are watching TV. Freeview's strength is rooted in some simple characteristics: its availability to virtually every home in the UK, that it provides a reliable and easy-to-use service at no cost to the viewer beyond a one-off purchase of reception equipment, and that it offers a growing choice of programming and functionality from high-definition channels to digital recording. And, of course, one of Freeview's greatest strengths is that it is free of control by any one single player in the market – open to anyone – promoting choice, competition and innovation.

In our report last year, I highlighted the critical decisions facing policy makers with regard to the airwaves used by the platform. The last 12 months have seen a number of positive developments that help to ensure the ongoing success of Freeview. In particular, I welcome the support from both Ofcom and Government for the vital role that the platform plays for viewers and the importance of its ongoing access to the airwaves over which our services are broadcast.

We will continue to work on securing a positive outcome from the World Radiocommunication Conference later this year to secure the long-term future of the platform, while also working with Government and Ofcom on the successful clearance of the 700MHz band currently used by DTT, ensuring viewers suffer minimal disruption through this transition.

Putting viewers first in an era of change

One of our core purposes is to support the millions of people who watch Freeview.

Every week our advice line, website and social media channels are used by thousands of viewers who have questions about their TV service.

This part of our role is set to become even more important in the years ahead. As television and online services converge, the range and volume of viewer enquiries we receive will inevitably expand. One of the biggest changes, however, will result from a UK policy decision announced last year to take around a third of the airwaves used by Freeview (the 700MHz band) and re-use them for mobile broadband.

Squeezing the Freeview line-up of channels into significantly fewer airwaves inevitably poses major technical challenges. It will also require millions of households to retune their TVs and digital boxes when channels move to new frequencies. Up to 100,000 homes may also need replacement rooftop aerials.

While we recognise the growth in mobile technologies and the importance of creating additional capacity, we have always seen it as central to our purpose to act as the voice of Freeview viewers and to ensure their interests are represented when big decisions are being made. We have made the case to Government and Ofcom that viewers must be properly informed and supported when these changes to airwaves are made, particularly those who require new aerials or who may need additional help due to age or disability.

It was pleasing therefore that in the Budget statement in March 2015, the Chancellor of the Exchequer confirmed that up to £600 million would be allocated to funding the moves which are likely to start within the next five years. We have already started work with Ofcom and our partner organisations to ensure that effective plans are put in place to minimise disruption to Freeview viewers and will update on progress in future reports.

You can read more about how we support Freeview viewers on page 12.

We are also embracing the growing role of IP distribution with the launch of our new connected television service – Freeview Play – in partnership with the Freeview team. This will take the best of what people already love about Freeview and the potential of internet connectivity to enhance the service while retaining the principles of simplicity, choice and being subscription-free. The team at Digital UK deserves enormous credit for delivering this project, as do the many partners we have worked with as we prepare for launch.

We are committed to continuing to ensure that digital terrestrial television evolves and adapts in this country, providing the choice, freedom and flexibility that viewers expect. Looking ahead, our primary focus is on making further improvements to the UK's terrestrial TV offer, working in close collaboration with all the stakeholders who each have a critical part to

play in the platform's future success. These include everyone from the wide range of channel providers responsible for the programmes that drive the popularity of Freeview through to our partners in the consumer electronics sector and the DTG, which continues to drive the ever-evolving standards for reception equipment. We want to play our part in leading engagement and co-ordination among these and other organisations with a stake in the future of free-to-view television.

My thanks in particular to Caroline and the rest of the Digital UK Board for their ongoing support and engagement. I look forward to an exciting and important year ahead for the platform.

TV today and tomorrow: facts and figures

Most popular TV platform

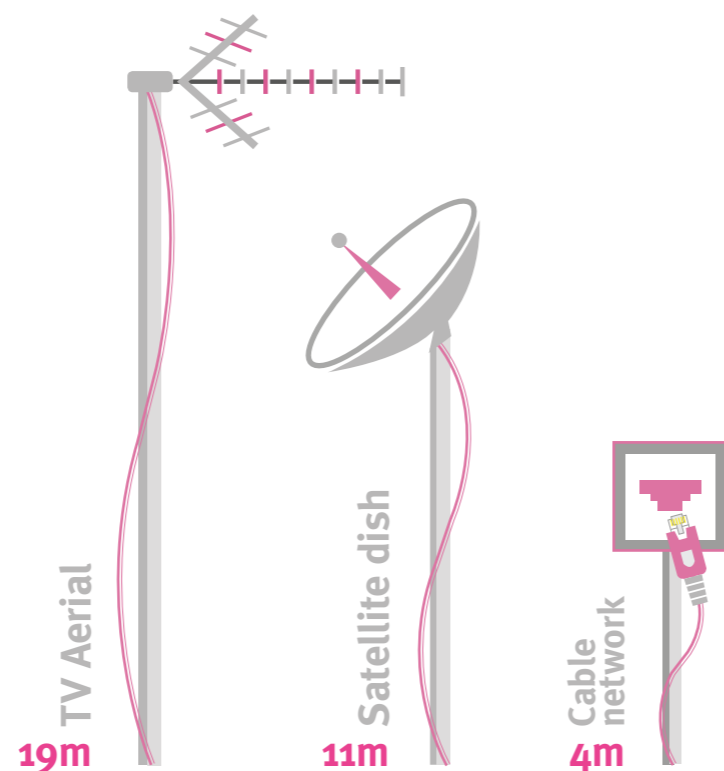
Today there are a number of ways for viewers to receive TV – via an aerial, satellite dish, cable network and through the internet. Freeview continues to be the most-watched service in the UK.

Included in all televisions and available without subscription, the free-to-air service offers 95 per cent of the most-watched programmes and is used in around 19 million homes. To date, more than 100 million Freeview products have been sold.

19m homes have freeview

Satellite TV services like Sky and freesat are watched in around 11 million homes, while 4 million households choose cable TV from Virgin Media.

Source: BARB



Live TV still top with viewers

4% Video on demand

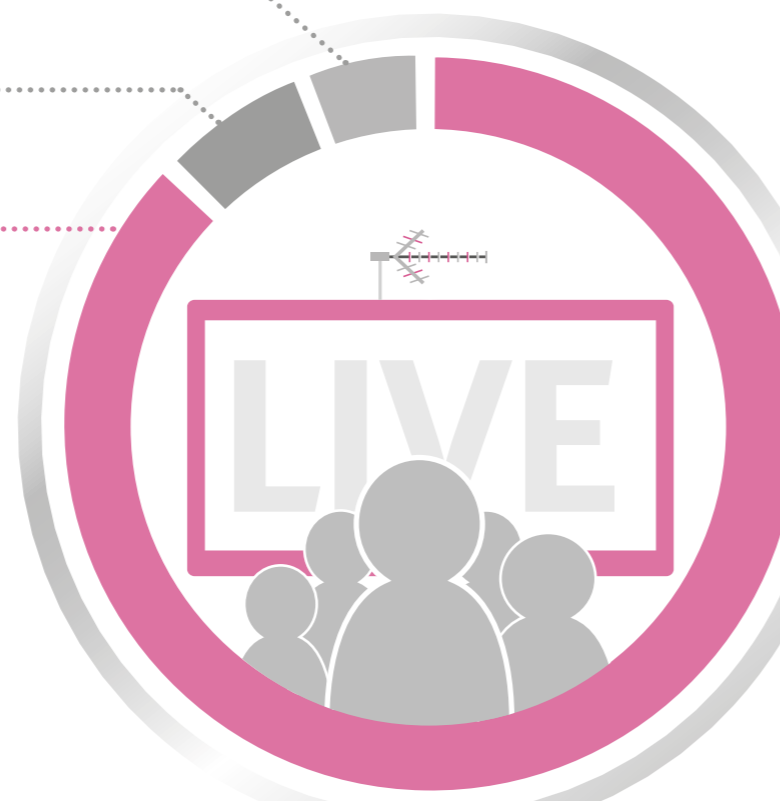
10% Recorded TV

86% Live TV

Despite the rising popularity of catch-up TV services, such as BBC iPlayer, most of us continue to watch our favourite programmes as they are broadcast.

Latest figures suggest around 90 per cent of all viewing is still in line with the TV schedule – the rest is divided between watching recordings of earlier broadcasts and programmes delivered via the internet, including catch-up services.

Source: Thinkbox



A smarter future

Smart TVs provide viewers with a way to enjoy both traditional television and internet-based programming, including catch-up TV from the main broadcasters and subscription video services like Netflix.

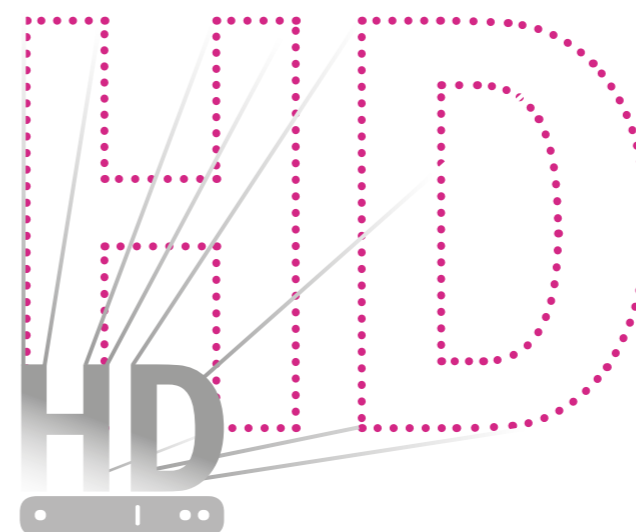
Today, around one-in-four households with a television has a Smart TV. Latest forecasts indicate around two-thirds of homes will have at least one Smart set by 2020.



The bigger picture

Offering a more detailed picture and improved sound quality, high-definition TV is increasingly popular. Thanks to a recent boost in broadcasting capacity more than 10 HD channels are available on Freeview, including BBC One HD, BBC Two HD, ITV HD and Channel 4 HD. Around 40 per cent of homes with a television currently have a main set capable of receiving Freeview HD.

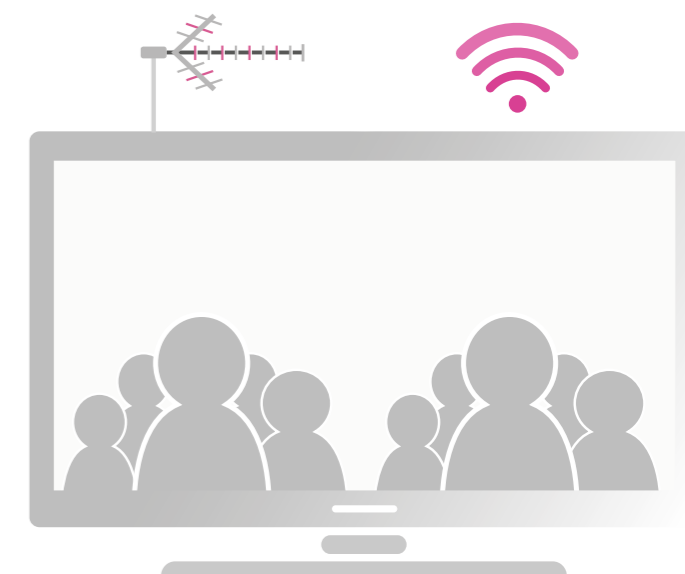
This figure is forecast to reach 80 per cent in the next five years as viewers upgrade their TV equipment and more programmes are made and broadcast in HD.



The hybrid TV world

As the development of new services such as Freeview Play makes it easier to switch seamlessly between broadcast and catch-up TV, there's no doubt that the future of TV will be increasingly hybrid – a rich mix of free-to-air channels and online services.

At present, around four-in-ten viewers regularly watch TV programmes online. This is expected to reach seven-in-ten by the end of the decade.



The story of Freeview Play

In June 2014 Digital UK and Freeview announced plans to develop a new television service, designed to help consumers take the natural next step into a connected TV world. Built to the latest industry standards, the platform would make it as easy as possible for viewers to enjoy both linear broadcast and on-demand content, and simple for manufacturers and broadcasters to deliver it. Later this year we will see the launch of Freeview Play.

To date, individual catch-up players have either been restricted to certain makes of product, creating an inconsistent line-up for viewers, or only available as part of pay TV or broadband packages.

This is despite research consistently showing a strong public demand for catch-up services without subscription or the need to change

telecoms provider. Viewers want a way to watch on-demand content as easily as traditional broadcast programming, regardless of the brand of TV equipment they choose to buy.

Manufacturers and commercial free-to-air broadcasters recognise the value that connected functionality adds to products but currently face unnecessary costs in having to develop and integrate different TV applications using a mix of standards and technologies.

This situation prompted manufacturers and industry representatives to approach the major UK broadcasters, Digital UK and Freeview, seeking to standardise the technology needed to support a wide range of catch-up and on-demand content.

Digital UK has led the development of the technical specification for Freeview Play, working in close co-operation with broadcasters, manufacturers and other industry bodies.

The service is based around the proven Freeview HD specification and the new forward looking and internationally agreed HbbTV 2.0 standard, which allows easier integration and adoption of the latest TV and connected technologies across markets.

At the heart of the service is a new on-screen programme guide, powered by a metadata system developed by Arqiva. The technology has been designed to manage the flow of huge amounts of programme information from multiple sources, and will enable viewers to navigate seamlessly between live TV channels and previously broadcast programmes.

Rather than dictate the look and feel of the platform, light-touch user interface guidelines

were set to provide consistency while also allowing manufacturers to more easily integrate new features into their own designs and continue to innovate with additional features.

New arrangements for testing connected Freeview products to ensure quality and compatibility were also agreed in November 2014, with the UK's leading television platform and device testing specialists, DTG Testing and Digital TV Labs.

Freeview Play will be incorporated into both televisions and set-top boxes, providing a range of options for consumers. Products will be widely available across UK retail outlets and supported through an extensive marketing and communications campaign. This will build on the hugely successful and trusted Freeview brand, which itself has undergone a bold redesign to reflect the platform's evolution as the benefits of connected TV finally come to the mass market.

7-day 'scroll back' EPG

Freeview Play gives viewers a new and improved on-screen programme guide which lets them scroll backwards in time to watch programmes they've missed by linking directly to catch-up TV services.

Advanced metadata system

Developed by Arqiva, a centralised metadata system allows for seamless integration of broadcast and on-demand services. The system will bring everything together so that audiences can find what they want to watch, when they want to watch it.

Free catch-up TV players

Freeview Play will provide free catch-up TV from all four of the main public service broadcasters – BBC, ITV, Channel 4 and Channel 5. More players will be added over time.

Latest standards

Freeview Play is built around the latest industry technology standards including: DVB-T2, HbbTV 2.0, HTML5, HEVC and BBC Red Button+. Support for DVB-DASH, SmoothStream and HLC adaptive video streaming is also provided to give the best viewing experience with on-demand content across different broadband speeds. The platform features Microsoft PlayReady Digital Rights Management (DRM).

Multiple manufacturers

Freeview Play is supported by a number of manufacturers, offering consumers a choice of equipment and price points. Panasonic has announced a range of TVs and both it and Humax will be first to offer digital recorders, allowing consumers to upgrade their existing sets. Other manufacturers, including multi-brand specialist Vestel, will follow.



Research and viewing trends

As the TV industry continues to evolve so do our viewing habits, from the amount of time we spend watching to the size of the screens we use to do it. Most viewing remains to programmes as they are broadcast and the majority of UK households are choosing to watch via Freeview.

However, as the choices of how and what to watch increase, viewers are taking advantage of the flexibility and benefits offered by other technologies and new on-demand services.



While our viewing habits are changing subtly, TV sets continue to dominate

Last year saw another small decline in overall TV viewing with the average person now watching for 3 hours and 41 minutes a day, down by 11 minutes over 2013. Viewing of TV programmes on other devices grew substantially, up 17 per cent to 3 minutes and 30 seconds, but this rise doesn't quite compensate for the decline in total viewing levels.

While viewing habits are evolving these changes are subtle and, despite the explosion of options available to viewers, the TV set has remained remarkably resilient. Free-to-air terrestrial television continues to play a huge part in this, delivering more than 30 billion hours of live programming to TV sets last year.

Source: Think Box and Digital UK



Internet delivery of TV programming is increasingly used to complement traditional viewing

While most people continue to watch TV via Freeview, satellite or cable, our latest research suggests more than 2 in 5 access programmes over the internet at least once a month. In the main, viewers are using services such as BBC iPlayer, ITV Player and All4 to catch up with shows they've missed.

Many viewers expect that online TV delivery will play a more important role in future, with almost half believing that all television will be delivered online in the foreseeable future (within 30 years). However, our research has also revealed that many viewers worry that such a change could be confusing for some.

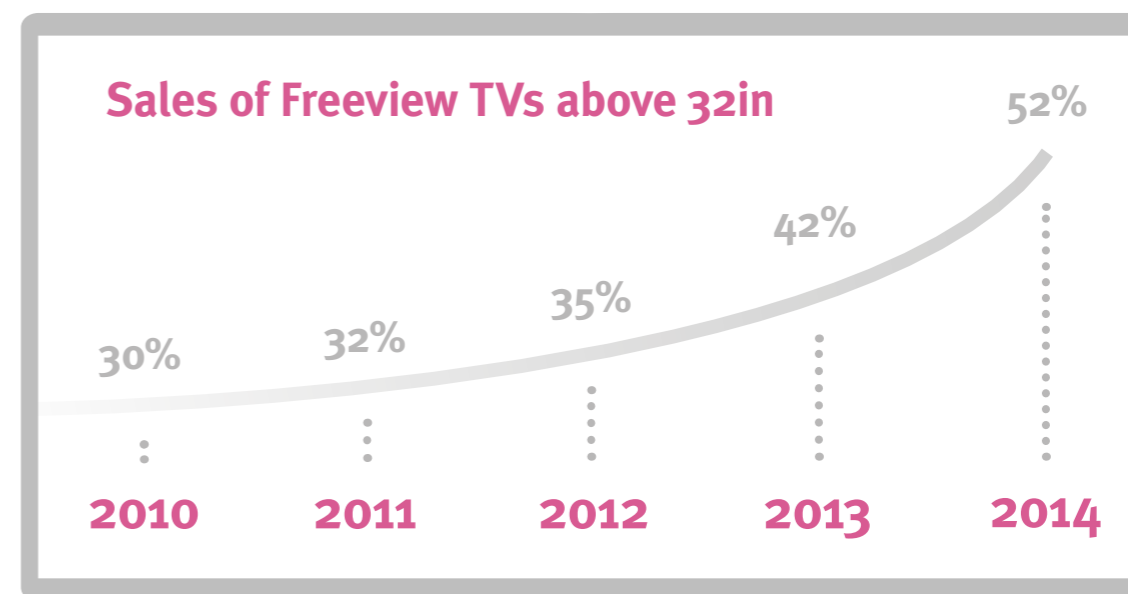
Source: Digital UK



TV sets are getting bigger and include the latest technologies in growing numbers

Viewers continue to love their TVs and when it comes to replacing them, bigger and more technically advanced is better. Average screen size reached approximately 34 inches in 2014 with sales of sets able to receive a DTT signal at 6.5 million, up from 6.3 million in 2013. Including recorders and other set-top-boxes, total receiver sales stood at 7.2 million last year.

To date, more than 100 million Freeview TVs and boxes have been sold since the launch of the platform in 2002. In 2014, 58 per cent of TVs sold were compatible with the latest transmission technology used to broadcast Freeview HD channels, and 48 per cent were internet enabled, or "smart".



Source: GFK

Shaping the future of Freeview and DTT

These inter-connected changes in technology and viewer behaviour pose both challenges and opportunities for existing TV platforms. Freeview's role as the cornerstone of the UK's vibrant and competitive television sector makes it especially important that the platform continues to meet the needs of modern audiences.

Digital UK is working with a range of partner organisations to help shape the future of Freeview and DTT as broadcast and IP technologies converge. While there is considerable uncertainty over whether mass-market internet delivery of television is feasible in the foreseeable future, there can be no doubt of its role as a complement to broadcast channels enhancing viewer choice and convenience.

The development of Freeview Play outlined elsewhere in this report is a key plank of our strategic response to changing viewing habits. We are also exploring how to continue developing our HD proposition and improving consumer support to meet the needs of Freeview viewers in a more complex TV environment. Developments in these and related areas will keep Freeview relevant and help ensure the long-term strength of free to view television in the UK – however viewers choose to watch it. We will provide updates on these and other areas in future reports.

Supporting viewers

Delivering support for Freeview viewers is central to our role in managing the DTT platform. During the last year, we've made a number of improvements to our advice line and website, making it easier than ever for viewers to find the information they need.

To reflect Digital UK's closer working relationship with Freeview and the simple fact that most viewers associate the name with DTT, our contact centre has been rebranded as the Freeview advice line. Last summer the telephone number also changed from an 0845 to an 0345 code, making it cheaper for viewers to call – particularly from mobile phones. The new advice line number is now promoted prominently across both the Digital UK and Freeview websites, making even more viewers aware of the service.

In total, advice line staff helped more than 110,000 viewers via telephone, email, web chats and social media in 2014, while our website saw around 1.2 million visits. Online support is proving increasingly popular. We now regularly use our @FreeviewAdvice Twitter account to proactively notify and remind viewers of upcoming changes to the platform, as well as for answering general queries. Those with more complex queries can use webchats or telephone support for more detailed conversations. We also make sure the Help and Advice section of our website is kept up to date with topical and frequently asked questions.

As well as providing guidance on terrestrial TV reception and coverage, our advice line offers information on the different types of Freeview products available. Our agents offer help on digital recording, HD channels and are currently preparing to support the launch of Freeview Play. In addition, we continue to work closely with at800 to ensure viewers don't experience interference to Freeview due to the roll out of 4G mobile signals in their area.

Our interaction with viewers can also help identify and resolve wider issues. Recently, the advice line team worked with a number



of residents in Inverness and a local aerial installer to help diagnose reception problems affecting a small group of households. Enquiries have also helped us work with manufacturers and broadcasters to resolve compatibility issues with certain models of TV equipment. Looking ahead, we are now planning the processes necessary to help support viewers during future changes to the airwaves used by Freeview as spectrum currently allocated to terrestrial TV services is reallocated to mobile networks.

Platform events

Over the past twelve months our advisors have supported viewers through a number of platform events including the launch of local TV channels, such as London Live, STV Glasgow and Mustard TV in Norwich, and changes to the channel numbers for all Children's and News services on 3 September. The latter involved working directly with Freeview and each of the channels affected to co-ordinate viewer communications, including advertising and on-screen messaging.

Research immediately following the move suggested almost half (49 per cent) of viewers had retuned on or after 3 September, with 83 per cent finding the process easy and more than three-quarters completing the retune in under 10 minutes.



Managing the airwaves

As the UK seeks to boost capacity for mobile broadband services, the DTT platform is playing its part in making the most efficient use of spectrum – the airwaves over which both TV and mobile phone signals are transmitted.

Technical advances over the last ten years have helped Freeview more than double the number of channels it offers without requiring any more spectrum capacity. At the same time, Digital UK and its members have been working with Ofcom and others to free-up more spectrum for new uses, such as mobile broadband, and to develop new approaches for sharing spectrum with a new generation of connected 'white space devices'.



The spectrum squeeze

In November 2014, Ofcom announced its intention to make a major tranche of airwaves currently used by Freeview available for mobile broadband. The change, scheduled to happen around 2020, poses significant technical challenges for broadcasters – notably the need to squeeze the existing Freeview channel line-up into 30 per cent less spectrum. Digital UK is helping develop plans for the change with the aim of minimising disruption to Freeview viewers.



Smarter TVs

In an era of greater pressure on spectrum and increased sharing, we are working with industry and partners, such as the DTG, to minimise the risk of interference to Freeview services. Equipment specifications for 2016 have been improved and will include 'smart retune' functionality to reduce inconvenience to viewers caused by spectrum changes. EU regulations adopted in 2014 will also ensure televisions and set-top boxes are less susceptible to interference from other spectrum users.



Protecting Freeview's future

Terrestrial TV services like Freeview are the most popular way to watch in the UK and across the EU. Following industry consultations, both Ofcom and the European Commission advisory groups have expressed the view that terrestrial television will remain the cornerstone of TV delivery for the foreseeable future and have recommended preserving a core band of airwaves for broadcasting until at least 2030.



Fair shares

Spectrum allocated to terrestrial television has successfully been shared with the wireless microphone industry for many years. Digital UK is now working with Ofcom to increase spectrum sharing. A key development in this area is TV 'white space' technology, which will harness the gaps between TV signals to enable a new generation of connected devices and increase broadband availability.

Funding and Governance



Digital UK is owned and funded by the BBC, ITV, Channel 4 and Arqiva. The company is limited by guarantee. Each member bears an equal share of the central costs of Digital UK's DTT platform operations, which include viewer support, communication and staff and office costs.

In general, multiplex-specific costs related to network management, platform support, technical development and platform innovation are split six ways between the members according to the number of national multiplexes they operate.

Digital UK works closely with Freeview, which is managed by DTV Services Ltd.

More information about Digital UK and our annual financial statements is available from digitaluk.co.uk

The Digital UK Board at July 2015

Kieran Clifton

Director, BBC Distribution and Business Development
BBC

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Head of Distribution Strategy
BBC

Magnus Brooke

Director, Policy & Regulatory Affairs
ITV

Paul Kanareck

Director of Online & Brands
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