
EPG Accessibility

Annual report on improvements for people with visual impairments

STATEMENT:

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1. Overview

People with visual impairments watch about as much TV as other people¹ but face particular difficulties in using on-screen TV programme guides (otherwise known as electronic programme guides or EPGs) to plan their viewing.

As a result, the choice of viewing for people with visual impairments can be unnecessarily restricted, and they may miss out on the opportunities to see the programmes most people take for granted.

The Communications Act (2003)² requires that Ofcom's EPG code obliges EPG providers to incorporate such features in their EPGs as are appropriate to enable, so far as practicable, people with disabilities affecting their sight or hearing to use the EPGs for the same purposes as people without such disabilities.

This is our first annual report following revisions made to the EPG Code in June 2018.

The report in brief

Overall, we are encouraged by the response of providers to our statement and amendments to the EPG Code.

Given we published our statement on EPG accessibility on 29 June 2018, we recognise that this only allows a short reporting period (5 months) for this report.

Providers appear to be considering accessibility features and the needs of visually impaired consumers within their planning, discussions with suppliers and wider product development cycles.

We are concerned timeframes for development are in some cases too vague and it remains to be seen whether or not some providers can influence device manufacturers to include the more expensive features such as text-to-speech functionality.

We recognise that some relevant developments will be commercially sensitive but remind providers that their annual reports should wherever possible give detailed plans as this information is of value to consumers.

¹ [Provision of access services: research study conducted for Ofcom, Ofcom, March 2006.](#)

² [Section 310\(3\) of Communications Act \(2003\).](#)

2. Background

People with visual impairments

- 2.1 It is estimated that over two million people in the UK are living with sight loss, with one in five people aged 75+ and one in two people aged 90+ affected. The total of those with partial sight and blindness in the UK is expected to grow to over 2.7 million by 2030, and to over 4 million by 2050.³
- 2.2 Much of this growth is expected to arise from the ageing of the population, leading to an increase in the number of people with age-related macular degeneration and cataracts. Other main causes of visual impairment include diabetes retinopathy, glaucoma and refractive error.
- 2.3 Many programmes can be understood and enjoyed without perfect vision. Some television programmes (e.g. news, documentaries) rely heavily on speech, and some others are accompanied by audio description. Most people with visual impairments will have watched television regularly before their sight was impaired and will not want to give up a familiar and enjoyable activity. Indeed, as many are retired, they are likely to have more leisure time, and physical ability to engage in other activities. Television also helps people to cope with social isolation, to which older people are prone.

Electronic Programme Guides ('EPGs')

- 2.4 EPGs consist of the listing or promotion (or both) of television programmes, together with a facility for obtaining access to those programmes.
- 2.5 Access to EPGs and to the programmes promoted or listed in EPGs is dependent on the data made available by EPG providers, which is transmitted as a broadcast signal, as well as the hardware and software of TV receivers (TV sets and set-top boxes).
- 2.6 EPGs are licensed by Ofcom as television services and their providers must comply with the [EPG Code](#) (see below). The EPG providers are currently: Sky, Virgin, YouView, Freesat, Digital UK for Freeview, and BT (who provide both the BT and EETV EPG).

The EPG Code

- 2.7 The EPG Code was adopted in 2004 and amended in March 2005 and June 2018.
- 2.8 Among other things, the EPG Code sets out the practices that EPG providers should follow in relation to assistance to people with hearing and/or visual disabilities (see appendix 1).

³ [RNIB Statistics](#)

Ofcom's work on EPG accessibility

- 2.9 In June 2018, following a consultation, we amended the EPG Code so that visually impaired⁴ people can benefit from additional accessibility features. Our amendments meant that in future, they should be able to use EPGs in the same way that people without such disabilities use them.
- 2.10 These amendments included a new practice for EPG providers to use reasonable endeavours to secure, so far as practicable, that their EPGs include facilities for users to do all or as many as possible of the following, or to introduce accessibility features that would be equally effective:
- a) render text needed for EPG navigation and the provision of information on channels and programmes included in the EPG as speech (**'text-to-speech'** functionality or **'TTS'**);
 - b) highlight or list separately programmes with audio description, and with signing (**'filtering or highlighting'** functionality);
 - c) adjust the display of EPG information so that it can be magnified, or the text enlarged (**'magnification'** functionality); and
 - d) switch between the default and 'high contrast' displays (**'high contrast displays'**).
- 2.11 We also permitted providers to introduce 'equally effective' features, to allow for the possibility of current and future innovations in technology and user preferences. This was to enable providers to use innovative methods and provide the flexibility for developments to take place within the market.
- 2.12 Our June 2018 statement⁵ (the "2018 statement") also considered previous work by Ofcom including:
- a) the 2014 call for inputs ('CFI')⁶;
 - b) the 2015 consultation on EPG accessibility (the '2015 consultation'); and
 - c) stakeholder discussions.

⁴ In this document, we use the term 'visually impaired' to refer both to those with partial sight loss, and those who are completely blind.

⁵ [EPG Accessibility: Improvements for people with visual impairments, Ofcom, June 2018.](#)

⁶ [Speaking TV programme guides: would they help people with visual impairments, and are they feasible? Ofcom, July 2014.](#)

⁷ [What's on the telly? Proposed improvements to EPG accessibility for people with visual impairments, Ofcom, July 2016.](#)

3. Annual report on EPG accessibility

Summary

3.1 Paragraph 10 of the EPG Code reads in full:

EPG providers are required to produce an annual statement, by 30 November each year, of the steps they have taken and plan to take to facilitate the use of their EPGs by disabled people, specifying which steps they have taken to comply with paragraph 8 above. If an EPG provider has been unable to secure all or any of the objectives set out in paragraph 8 on the grounds of practicability, this annual statement should outline the alternative steps they have taken to increase the accessibility of their EPGs. Ofcom will assess the adequacy of these statements in the light of the particular circumstances of each EPG.

3.2 Given we published our statement on EPG accessibility on 29 June 2018, we recognise that this has allowed only a short reporting period for providers to produce their first report under the EPG Code's new requirements. This means that for this first report, we expected providers to inform us, and therefore consumers, of their future plans and some steps taken since the publication of our statement and amendments to the EPG Code.

3.3 Below, we provide a summary of providers' reports focusing on the features highlighted within the EPG Code. Providers' non-confidential submissions are published in full alongside this report.

Text to speech ("TTS")

Paragraph 8 (a) of the EPG Code defines this as the facility to "render text needed for EPG navigation and the provision of information on channels and programmes included in the EPG as speech".

3.4 This is a key accessibility feature for those with more serious sight impairment. No provider currently provides full TTS capability in their standalone set-top boxes.

3.5 Virgin Media confirmed their aim is to deliver this feature, alongside the other features we specify in the EPG Code, in their next generation platform ('Horizon') by the second half of 2020.⁸

3.6 Digital UK and Freesat currently provide this feature through a number of smart TVs including LG and Panasonic models. Digital UK is working with manufacturers to include this feature within future releases.⁹ (see 'Market Context' below).

⁸ [Virgin Media response, page 1.](#)

⁹ [Digital UK response, page 3-4.](#)

- 3.7 Most providers (BT, Digital UK, Freesat, Virgin Media, YouView and Sky) have either developed or begun investigating TTS offered via a second screen device (e.g. tablet or smartphone).
- 3.8 Digital UK has prototyped the delivery of an accessible EPG through an HbbTV application, similar to their own 'Freeview Explore' app which enables search and curated recommendations. As a temporary alternative to built-in features, this would allow accessibility improvements on existing and future FreeView Play devices with less involvement required from the manufacturer.
- 3.9 A number of EPG providers mentioned voice control technologies (e.g. Amazon Alexa) as a potential alternative approach to embedding TTS functionality within a set top box.

Ofcom response

- 3.10 We welcome Virgin Media's provision of a timeframe for introducing features including TTS functionality, and strongly encourage others to do the same in future reports.
- 3.11 While we welcome the development of second screen devices, we believe that providers cannot yet rely on this as a primary means to providing TTS, especially as the RNIB have previously indicated that a second device can be expensive and hard to use for visually impaired customers.¹⁰
- 3.12 Similarly, we look forward to seeing the results of Digital UK's forthcoming scoping work on its HbbTV app, whilst recognising that user input and awareness (as acknowledged by Digital UK) is vital if this is to be an adequate alternative.
- 3.13 The use of existing (and developing) voice-control technologies for TTS is a promising development. However, user-testing is required to determine whether or not these technologies to offer an accessibility function which is 'equally effective' to built-in TTS. We discuss this in more detail below under 'engagement with consumer groups and charities'.

Highlighting and filtering

Paragraph 8 (b) of the EPG Code defines this as the facility to "highlight or list separately programmes with audio description, and with signing".

- 3.14 Only Sky and Virgin currently offer this feature integrated into a set top box. Sky's own set-top boxes, for example, provide a full TV listing for the next seven days and remote record functionality, plus the ability to highlight shows with audio description in a different colour, so they stand out within the TV guide.¹¹

¹⁰ [RNIB response to 2017/18 consultation, page 7.](#)

¹¹ [Sky response, page 1-2.](#)

- 3.15 YouView offer this feature for on-demand content (which does not form part of the regulated EPG) but not yet for broadcast content, although they are currently exploring possibilities for doing so, including via software updates to existing set top box models.¹²
- 3.16 BT, Digital UK and Freesat do not currently provide this feature in their set-top boxes, although Digital UK and Freesat offer it via smart TVs.

Ofcom response

- 3.17 It appears that BT and EETV are lagging behind in not offering this feature. We would expect providers to make efforts in the near future to provide this function - providers have in consultation responses suggested that given the right metadata from content providers they could develop highlighting /filtering¹³.

Magnification

Paragraph 8 (c) of the EPG Code defines this as the facility to “adjust the display of EPG information so that it can magnified, or the text enlarged”.

- 3.18 YouView confirmed that this function is available on all generations of their set-top boxes and has continued to develop this feature, working alongside the RNIB and DTG Accessibility Group. It has been user tested by the Digital Accessibility Centre to ensure it supports the needs of users as well as exploring how it could be enhanced.¹⁴
- 3.19 BT stated that they provide this feature on BT TV set-top boxes, but it is currently not available on EE set-top boxes.¹⁵
- 3.20 Sky’s set-top boxes do not generally have this functionality, although Sky+HD offers the ability to enlarge the homepage font.¹⁶

Ofcom response

- 3.21 This is a more commonly offered feature. As such it appears reasonable to expect this function to be developed as a priority in the remaining EPGs (EETV, some Sky boxes, set top boxes carrying the Freesat and FreeView EPG).

¹² [YouView response, page 1-2.](#)

¹³ See section 3.26 of Ofcom’s [2018 Statement](#)

¹⁴ [YouView response, page 2.](#)

¹⁵ [BT response, pages 1-2.](#)

¹⁶ [Sky response, page 2.](#)

High contrast displays

Paragraph 8 (d) of the EPG Code defines this as the facility to “select a ‘high contrast’ display”.

- 3.22 This is another commonly offered feature, currently delivered by BT, YouView, Sky, Virgin and several of Digital UK’s partners delivering this on their set-top boxes.
- 3.23 The Code sets out that display ratio should be no lower than 7:1. BT confirmed in their response that their EPG currently offers a ratio of 15:1 (21:1 for other functionality) when the guide is being viewed and includes the ability to remove channel logos and choose a solid background to the TV guide rather than it being transparent (standard setting), allowing it to be read more easily.¹⁷
- 3.24 YouView highlighted that their boxes also offer high ratios of up to 21:1 for users.¹⁸
- 3.25 Both YouView and Sky stated that their high contrast display had been developed on insight and by working alongside charities and consumer advocacy groups.

Ofcom Response

- 3.26 We are encouraged by the inclusion of this feature across the majority of EPGs and the fact that many providers have gone beyond the minimum ratio prescribed in the EPG Code to ensure the maximum benefit for those with visual impairments. We strongly encourage the continuation of work with user representatives such as the RNIB in the development of these features (see below).

Additional areas

Market Context

- 3.27 Digital UK, Freesat and YouView all highlighted within their reports that they operate within a ‘horizontal’ market and do not have direct control over the manufacturing process and distribution of the set-top boxes their EPG is provided on.
- 3.28 Digital UK stated that they will specify the new Ofcom mandated features (including TTS) as part of their new accessibility rules for 2020 FreeView Play products.
- 3.29 Digital UK said that they have been exploring the possibility of the Code’s accessibility requirements being included in the “D-Book”. The D-Book is the UK technical specification, published by the Digital TV Group (DTG) for digital television receivers – it sets the interoperability requirements that enables manufactures to develop products compatible with the UK environment. Freesat also referred to specifications for TV manufacturers¹⁹.

¹⁷ [BT response, page 1.](#)

¹⁸ [YouView response, page 1.](#)

¹⁹ [Digital UK response, page 6.](#) [Freesat response, page 1.](#)

However, Digital UK highlighted that introduction of more costly features like TTS into the D-Book risked upward price pressures.

Ofcom response

- 3.30 Our 2018 statement acknowledged that there will be circumstances, particularly in a horizontal market, where EPG providers may find it more challenging to ensure the inclusion of accessibility features in their set top boxes. While we welcome Digital UK's commitment to including these features in their product specification, we appreciate that in reality the specification is subject to individual discussion and negotiation with device manufacturers.
- 3.31 We therefore agree with Digital UK and Freesat that the inclusion of these features in the D-Book should be explored and welcome their attempts to do so. However, we also understand concerns that mandating the costlier features across-the-board may push up prices and affect the availability of 'entry-level' set top boxes. We also acknowledge Digital UK's work with the DTG and RNIB (and Ofcom) to reflect Ofcom's requirements in the next iteration of the "U-Book", which complements the DTG D-Book and provides detailed usability and accessibility guidelines for manufacturers.²⁰
- 3.32 The U-Book does not mandate specific accessibility features. Without specification in the D-Book, implementation of these features will depend on individual discussions with manufacturers. By the time of the next reporting deadline (November 2019) we hope to be in a better position to assess the outcomes of these conversations with manufacturers.²¹ While we do not wish to disrupt the market for entry-level, cheaper devices, we do wish to see the requisite features rolled out across as wide a range of receivers as possible, particularly given that some people with visual impairments will not be able to afford higher-end devices.

Engagement with consumer groups and charities

- 3.33 A number of providers highlighted that they had engaged with consumer groups and charities (including the RNIB) when it came to product development.
- 3.34 YouView stated that it had worked alongside the RNIB and the DTG Accessibility Group to develop both its zoom and high contrast display functionality²², which had also been user tested by the Digital Accessibility Centre.
- 3.35 Sky said that they have worked with the RNIB in a number of areas including their campaigns to increase awareness of the accessibility services they offer and alternative formats of customer correspondence. They also highlight that they continue to work with accessibility consultants from the RNIB to improve accessible design, service delivery and to provide extra training for staff across their UK locations. Sky had increased the pool of

²⁰ [Digital UK response, page 4.](#)

²¹ [Digital UK response, page 5.](#) [Freesat response, page 2.](#) [YouView response, page 1.](#)

²² [YouView response, page 2.](#)

customer testers with accessibility issues to test products prior to launch and that they have been working on a research project alongside the RNIB.²³

- 3.36 Virgin Media said that they are currently undertaking an independent review alongside the Disability Action Centre on the development of their new platform ('Horizon') to ensure it is usable by those with visual impairments.

Ofcom response

- 3.37 We view user testing as a vital part of this process and encourage EPG providers to consult with users and user representatives at an early stage of product development.
- 3.38 As set out in our 2018 statement, the changes to the EPG Code allow providers to introduce 'equally effective' features to those specified in the Code – this is because we believe that providers should be able to use innovative methods to increase accessibility. However, user testing is particularly important in relation to such methods.
- 3.39 In determining what is – or is not – an 'equally effective' measure, the user perspective is vital. This includes both whether the measure involves increased cost to consumers, but also its ease of use and reliability. In future reporting on the development and use of such features (for example alternative to built-in TTS like mobile or HbbTV apps and use of voice technologies) we would expect EPG providers to set out relevant evidence from user testing to support the assertion that a method is 'equally effective'.
- 3.40 Ofcom will also consider how best to involve users and user representatives in its future assessment of providers' annual reports.

Next Steps

- 3.41 Following the publication of this report, we will be engaging individually with all EPG providers in the coming months to learn more of their plans ahead of receiving their first full year reports before the end of 2019.
- 3.42 We will be encouraging providers to consider the following points in relation to future reporting:
- a) Timeframes given for development should be as specific as possible
 - b) Confidential elements of responses should be kept to the minimum necessary to protect commercial sensitivities, bearing in mind the value to consumers of receiving clear information on plans to develop accessibility features.
 - c) If EPG providers aim to introduce 'equally effective' features to those specified in the Code, they should provide evidence from user testing / consultation, to support the efficacy of these features.

²³ [Sky response, page 5.](#)

A1. Relevant EPG Code provisions

- A1.1 The EPG Code²⁴ sets out the following in relation to assistance to people with hearing and/or visual disabilities:
- a) general principles with which EPG providers must comply. Amongst these is a required practice to make such adjustments to their EPGs as are practicable to secure that they can be used by people with disabilities affecting their sight or hearing for all the same purposes as they are used by other people (paragraph 6(a));
 - b) an expectation that the needs of people with disabilities affecting their sight or hearing should be an integral part of planning for the future development of EPGs. To this end, Ofcom expects EPG providers to consult disability groups about the way they meet their obligations under the code, and to work with disability groups, broadcasters and set-top box manufacturers on ways of improving usability (paragraph 7);
 - c) that EPG providers should use ‘reasonable endeavours so far as practicable’ to secure accessibility features or ‘equally effective measures’ including text-to-speech, highlighting or listing, display adjustments for magnification or text enlargement and high contrast displays (paragraph 8);**
 - d) an expectation that EPG providers work with manufacturers of TV receivers to make the accessibility features listed in paragraph 8 available in new models and any subsequent models, unless the associated estimated costs show that the adoption of any specific accessibility feature would be unduly burdensome; (paragraph 9)
 - e) a practice for EPG providers to produce annual statements of the steps they have taken and plan to take to facilitate the use of their EPGs by disabled people, specifying which steps they have taken to comply with paragraph 8 (paragraph 10);**
 - f) a reminder of the obligations EPG providers have under the Equality Act 2010 to make reasonable adjustments in the provision of facilities and the delivery of services so as to make these accessible to disabled people (paragraph 11);
 - g) a practice for EPG providers to ensure that programme information denotes whether access services are provided, using standard acronyms: S (subtitling), SL (sign language) and AD (audio description) (paragraph 12);
 - h) a practice for EPG providers to provide information for people with disabilities about assistance in relation to programmes (e.g. how to use the EPG) (paragraph 13); and
 - i) a practice for EPG providers to work with broadcasters, platform providers and disability groups to publicise the information and facilities available on EPGs to assist disabled people (paragraph 14).

²⁴ [The EPG Code, Ofcom.](#)

A2. Summary of features provided

EPG Provider	Accessibility features currently available			
	TTS	Filtering/Highlighting	Magnification	High Contrast Displays
BT	X	X	✓	✓
EETV (also provided by BT)	X	X	X	X
Digital UK (Freeview)	✓ on smart TVs only	✓ on Samsung smart TVs only	✓ on Samsung smart TVs only	✓
Freesat	✓ on smart TVs only	✓ on Samsung smart TVs only	✓ on Samsung smart TVs only	X on some models
Sky	X but available through second screen device/app	✓	✓ (limited)	✓
Virgin Media	X but available through second screen device/app	✓	✓	✓
YouView	X but available through second screen device/app	X	✓	✓