

# **Proposed improvements to EPG accessibility for people with visual impairments**

## **1. About us**

As the largest organisation of blind and partially sighted people in the UK, RNIB is pleased to have the opportunity to respond to this consultation. We are a membership organisation with over 10,000 members who are blind, partially sighted or the friends and family of people with sight loss. 80 per cent of our Trustees and Assembly Members are blind or partially sighted. We encourage members to be involved in our work and regularly consult with them on government policy and their ideas for change. As a campaigning organisation of blind and partially sighted people, we fight for the rights of people with sight loss in each of the UK's countries. Our priorities are to:

- Stop people losing their sight unnecessarily
- Support independent living for blind and partially sighted people
- Create a society that is inclusive of blind and partially sighted people's interests and needs.

We also provide expert knowledge to business and the public sector through consultancy on improving the accessibility of the built environment, technology, products and services.

## **2. Importance of TV to blind and partially sighted users**

Since our Needs Survey in 1991 showed that a large majority of blind and partially sighted people watch television<sup>1</sup>, RNIB has taken an active role in highlighting TV access issues. It has worked to try to ensure

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<sup>1</sup> RNIB Needs Survey (1991) Blind and partially sighted adults in Britain: the RNIB Survey Volume 1, by Ian Bruce, Aubrey McKennell and Errol Walker

access to programmes, services and equipment, both by direct work with broadcasters and manufacturers and by influencing legislation and regulation.

In this digital age, being able to watch TV remains important to blind and partially sighted people. In 2006 Research by the University of Birmingham<sup>2</sup> found that around 87 per cent of blind and partially sighted people regularly watch TV and videos or DVDs. The media plays an important role in the lives of blind and partially sighted people by providing access to news, information and entertainment.

In RNIB's "Update on the inclusive society 2013" report respondents were asked to select from a list of statements about what kind of impact fully accessible television and radio would have on their lives:

- 56% said that it would make them more independent;
- 56% said it would make them happier about life;
- 56% said it would make them feel less socially isolated;
- 51% said it would make them feel better about their sight loss

In addition 68% of respondents selected at least one of these impact statements and 38% selected all four of them.

### **3. Consultation Response**

#### **Q1. Do you agree with the range of potential benefits of TTS for TV viewers with visual impairments described in paragraph 3.5? Do you have any information that would help to quantify the potential benefits?**

RNIB agrees with the range of benefits listed in paragraph 3.5.

Additional information that would help to quantify the potential benefits would be:

The number of people in the UK with sight loss is set to increase dramatically. It is predicted that by 2050 the number of people with sight loss in the UK will double to nearly four million.<sup>3</sup>

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<sup>2</sup> Douglas, G., Corcoran, C., Pavey, S. (August 2006) Network 1000: Opinions and circumstances of visually impaired people in Britain: report based on over 1000 interviews.

<sup>3</sup> [https://www.rnib.org.uk/sites/default/files/FSUK\\_Report.pdf](https://www.rnib.org.uk/sites/default/files/FSUK_Report.pdf) last accessed 19/10/15

Sight loss affects people of all ages. As we get older we are increasingly likely to experience sight loss. In the UK:

One in five people aged 75 and over are living with sight loss

One in two people aged 90 and over are living with sight loss<sup>4</sup>

Although the impetus for speaking EPGs is accessibility, RNIB notes that other groups will benefit. Users who don't have English as their first language will benefit from hearing the words spoken out loud. There is also a growing expectation for speech access and multimodal access to devices such as the introduction of voice assistants in phones and the Alexa interface in the Amazon Echo. A speaking EPG is likely to be used by far more people than just those with sight loss.

## **Q2. Do you have any information that would help to quantify the additional costs that EPG providers and TV receiver manufacturers would face in providing TTS capability in multi-functional TV receivers?**

RNIB was involved in some of the pioneering work for talking TV equipment. One such project integrated a speech engine with an existing set-top box for around £80k and another project created a talking set top box from scratch for around £300k. These figures do not include the TTS engine licensing costs but also represent the costs of integrating a speech engine without the benefit of an operating system with an accessibility SDK (such as Android TV). Since these were pioneering projects RNIB considers them to be upper bounds and is certain that the cost of providing an equivalent level of speech to a similar platform will now be much lower.

In addition to this, there are two manufacturers Panasonic and Samsung who have built text to speech into their TVs as standard which demonstrates that the cost is not onerous.

Panasonic announced that their Televisions would include TTS across the range in 2012 and have continued to include this important feature since.

Samsung are in their second year of providing text to speech and have taken advantage of the accessibility features of Tizen to provide speech

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<sup>4</sup> [https://www.rnib.org.uk/sites/default/files/FSUK\\_Report.pdf](https://www.rnib.org.uk/sites/default/files/FSUK_Report.pdf) last accessed 19/10/15

across the entire TV interface. With more manufacturers using operating systems such as Android, which were designed for smartphones, this becomes a viable strategy to many as text to speech capability is built in as standard to these operating systems.

For these reasons RNIB feels that providing text to speech is not only commercially viable but that it is becoming more so.

**Q3. Do you agree that the EPG Code should be amended as proposed in Annex 5 to require that EPG providers use their best endeavours to secure that TTS-enabled EPGs are incorporated in multi-functional TV receivers?**

Being able to access the EPG is integral to being able to discover which programs to watch on television, accessing synopses and for someone who can't see the screen, TTS is integral to accessing the EPG and operating the device as any other user would.

RNIB believes that the Code should be amended to **require** EPG providers to incorporate the requirements set out in the new paragraph 6B.

*“In addition, EPG providers that provide or intend to provide EPGs suitable for multi-functional TV receivers should use their best endeavours to secure that those TV receivers incorporate the options for users to:*

- a) render text needed for EPG navigation and the provision of information on channels and programmes included in the EPG as speech;*
- b) highlight or list separately programmes with audio description, and with signing;*
- c) adjust the display of EPG information so that it can be magnified, or the text enlarged; and*
- d) select a ‘high contrast’ display.”*

We consider that the use of “best endeavours” is insufficient to ensure that EPG providers make the necessary changes and therefore the Code needs to oblige providers to incorporate these features within a set period of time i.e. three years. We note that in the United States of America the Federal Communications Commission (FCC) have mandated the incorporation of accessibility requirements within three years, and blind and partially sighted people in the USA are now beginning to enjoy fully accessible EPGs. RNIB believes that this

demonstrates that when providers are required to do this, they can and do comply.

As the consultation document makes clear, EPG providers have been extremely reluctant to build accessibility features in to their EPGs or ensure that these features are available to end users; despite developments in technology, developments in the sector and considerable lobbying from disability organisations over a number of years.

It is not at all clear how the requirement to use “best endeavours” will result in a change to this approach, unless Ofcom proposes to actively monitor providers to ensure that they are, in fact, complying with the “best endeavours” requirements and if they are not, then they risk having their licenses revoked. Taking steps short of mandating this is unlikely to produce the desired result in this context, given the history and the providers previously stated opposition.

We note that the Code has been amended to remove the requirement to produce an annual statement of the steps taken to facilitate the use of the EPGs by disabled people. We believe that if Ofcom wishes to use “best endeavours” rather than requiring the inclusion of access features, then Ofcom **must** monitor compliance. The Code will need to set out precisely what Ofcom means by “best endeavours” in this context and how a provider demonstrates that they have used their “best endeavours”.

We believe that each provider should be required to report annually on the exercise of their “best endeavours” and Ofcom will need to assess the adequacy of these statements which should be published and shared with disability groups. RNIB is concerned that providers did not take the reporting requirements seriously previously and due to this, the reporting requirements did not impact on greater levels of accessibility; also Ofcom’s monitoring of this requirement was insufficient.

**Q4. Do you have any information that would help to quantify the additional costs that EPG providers and TV receiver manufacturers would face in providing the ability to highlight or list separately programmes with audio description and signing in multi-functional TV receivers?**

RNIB do not have any data on this. However we note that as long as the correct metadata is available this is not computationally difficult and should be relatively easy to implement for new systems.

**Q5. Do you agree that the EPG Code should be amended as proposed in Annex 5 to require that EPG providers use their best endeavours to secure that EPGs in multi-functional TV receivers enable users to highlight or list separately programmes with (a) audio description and (b) signing?**

Audio description is vital to the participation and enjoyment of its users. AD however is available on an average of 26%<sup>5</sup> of broadcast TV programmes. The difficulty of AD users locating programmes with the service can mean that even after a programme has been described it may not benefit the target audience because they are unaware that it is accessible to them. Making accessible content easier to discover better enables users to take advantage of access services.

Refer to our response to question 3, in respect to the use of “best endeavours”.

**Q6. Do you have any information that would help to quantify the additional costs that EPG providers and TV receiver manufacturers would face in providing the ability to enlarge text or magnify portions of the EPG in multi-functional TV receivers?**

RNIB do not have any direct data regarding this however we do note that YouView, Sky and Samsung have all incorporated features that enlarge part of the interface or screen for partially sighted viewers, demonstrating that this provision is commercially viable.

There is also a zoom function built into Android which may be usable by manufacturers using the Android Operating System for their TV receivers.

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<sup>5</sup> 25.91% is the average Audio description achieved by non-exempt Level 1 channels listed in Ofcom's 2014 Access report <http://stakeholders.ofcom.org.uk/market-data-research/market-data/tv-sector-data/tv-access-services-reports/tv-access-services-2014> last accessed 19/10/15

**Q7. Do you agree that the EPG Code should be amended as proposed in Annex 5 to require that EPG providers use their best endeavours to secure that EPGs in multi-functional TV receivers enable users to adjust the display of EPG information so that it can be magnified or the text enlarged?**

Refer to our response to question 3, in respect to the use of “best endeavours”.

**Q8. Do you have any information that would help to quantify the additional costs that EPG providers and TV receiver manufacturers would face in offering the ability to select a high contrast display of the EPG in multi-functional TV receivers?**

RNIB have no direct data on this however we do note that many TV interfaces are programmed using either web technologies or operating systems derived from a smartphone operating systems, such as Android. Both of these technologies include alternate colour schemes through either style sheets or, in the case of Android, a negative colours accessibility setting.

**Q9. Do you agree that the EPG Code should be amended as proposed in Annex 5 to specify that EPG providers use their best endeavours to secure that EPGs in multi-functional TV receivers enable users to have the option of switching to high contrast displays? Do you agree that a minimum contrast ratio of 7:1 would be appropriate for high contrast displays?**

People with residual vision will often find text easier to read if the text is in high contrast. The contrast ratio of 7:1 is a measure of tonal contrast and as such also ensures a good contrast level for people with colour blindness as well.

Refer to our response to question 3, in respect to the use of “best endeavours”.

**Q10 Do you agree that, for the time being, the EPG Code should be amended as proposed in Annex 5 to require that EPG providers use their best endeavours to secure that the additional accessibility features (i.e., text-to-speech, filtering or highlighting, magnification and high contrast displays) are incorporated in EPGs for multi-functional TV receivers?**

RNIB is disappointed in Ofcom's decision to exempt cheaper TV receivers, developed in the future, especially as the definition of a multi-functional TV receiver is "...one that provides both access to on-demand programming and the facility to record programmes."

Blind and partially sighted people are less likely to be in work and Douglas et al found in 2006 that 66% of people registered as blind or partially sighted were unemployed<sup>6</sup>, and therefore would be less likely to afford these higher end devices.

In addition, the majority of on-demand programming does not currently carry audio description when accessed through a TV app and at present no on-demand TV apps support text-to-speech. So a TV receiver made accessible through the suggested code would currently not enable blind and partially sighted people to access AD on on-demand programming

RNIB agrees that over time more TV receivers will fall under the category of multi-functional TV receivers as defined in the consultation document. We trust that this will lead to cheaper accessible TV receivers over time and would urge manufacturers to offer affordable accessible models as soon as possible even if the code doesn't mandate this.

Refer to our response to question 3, in respect to the use of "best endeavours".

**Q11 Do you agree that EPG providers should be required to use their best endeavours to secure that specified accessibility features are incorporated in multi-functional TV receivers?**

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<sup>6</sup> [https://www.rnib.org.uk/sites/default/files/Network\\_1000\\_Opinions.doc](https://www.rnib.org.uk/sites/default/files/Network_1000_Opinions.doc) last accessed 19/10/15

Refer to our response to question 3, in respect to the use of “best endeavours”.

We believe that these changes, if implemented properly, will make a considerable difference to the lives of blind and partially sighted people.

**Q12. Do you agree that, absent regulation, the proposed accessibility features might not be included in all new multi-functional TV receivers whose core specifications are determined by the EPG provider or otherwise agreed between the EPG provider and the manufacturer?**

RNIB does agree that the proposed accessibility features would not be included in all new multi-functional TV receivers without regulation. In 2010 Goodmans brought out the Smart Talk box. This provided a speaking EPG and demonstrated that text to speech could be built into a set-top box. Five years later only two TV receiver manufacturers have shown a commitment to making their products accessible through speech despite considerable efforts by RNIB. This demonstrates that the TV receiver market as a whole will not adopt accessibility features into their devices without regulation.

However, RNIB is concerned, as outlined above, that the “regulation” proposed by Ofcom does not go far enough and that the Code should in fact **require** the incorporation of accessibility features within a set period of time i.e. within three years (the period that the FCC considered reasonable).

We do not consider that the consultation document and impact assessment provide a convincing argument as to why Ofcom cannot go further, in requiring providers to make their EPG’s accessible. The reason given is that EPG licensees do not “necessarily” have total control over all the elements needed to deliver the accessibility features proposed. However, the consultation document accepts that the nature and extent of the influence varies and that some providers do have this control. RNIB considers that, if necessary, it would be possible to recognise these differences within any mandating requirement by, for example, making the requirement subject to “achievability” as the FCC has done and outlining in the Code the factors which may affect achievability.

The impact assessment does not appear to assess the risk of providers not complying if there is no mandating requirement, or even detail the steps that Ofcom would need to take to ensure that providers use their “best endeavours”, for example by monitoring.

### **Q13 Do you agree that the EPG Code should be amended as shown in Annex 5?**

As outlined above, RNIB disagrees with the removal of the monitoring requirements at paragraph 9. We believe that monitoring will be especially important if Ofcom continues with its proposal to use “best endeavours”. This monitoring must be robust and targeted in order to secure the necessary changes.

We also believe that the Code needs to be strengthened with regard to the requirement for consultation with disability groups. To date, RNIB has found that providers are happy to talk to disability organisations about the need for accessibility features but are very reluctant to take account of the advice that we give. To remedy this we would suggest that as part of any monitoring requirements, providers specify what consultation with disability groups has been undertaken, the advice/response that they have received, whether or not this advice/response has been acted upon and if not, detail the reasons why.

The accessibility of television is something that matters to our members and RNIB welcomes Ofcom’s determination to take action on this matter. However, as noted above we would wish to see a strengthening of the requirements placed on EPG providers and would like to see accessibility extended to all EPGs.

In paragraphs 3.25 and 3.26 of Appendix 3 it says:

*“Ofcom accepts that TV guide apps are useful for blind and partially-sighted people who feel confident using touch-screen technology and can afford a suitable mobile device. ...However, Ofcom’s initial view is that TTS-enabled TV guide apps are not a sufficient substitute for speaking EPGs...”*

RNIB fully agrees with this. Blind and partially sighted people who use TTS functionality on smartphones have found companion apps to greatly increase the accessibility of the target TV receivers. However, navigating

a smartphone without sight is complex, has a steep learning curve and requires a certain degree of manual dexterity. It usually also requires receiver equipment to be connected to a Local Area Network (LAN) and in some implementations can require an internet connection.

In addition, one in five people aged 75 and over are living with sight loss<sup>7</sup> and research from Deloitte<sup>8</sup> showed that only 34% of people aged 65 and over in developed countries had a smartphone and of these only 29% had ever downloaded an app. Ofcom's own research showed that only 9% of partially sighted people over 65 owned a smart phone<sup>9</sup>. It is unreasonable to expect this older demographic to adopt and learn to use smartphones to operate their TV.

RNIB believes that the proposed wording for the EPG code of practice does not necessarily preclude the use of apps to provide the required accessibility features. RNIB would like to see it explicitly stated in the code that smartphone apps are not an acceptable substitute.

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<sup>7</sup> [https://www.rnib.org.uk/sites/default/files/FSUK\\_Report.pdf](https://www.rnib.org.uk/sites/default/files/FSUK_Report.pdf) last accessed 19/10/15

<sup>8</sup> <http://www2.deloitte.com/content/dam/Deloitte/global/Documents/Technology-Media-Telecommunications/gx-tmt-2014prediction-smartphone.pdf> last accessed 19/10/15

<sup>9</sup> *Disabled consumers' ownership of communications services*, Ofcom, 25 September 2013 (<http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/tce-disabled-13/>)