

2022 Digital UK and Freesat Accessible EPG Report

1. Introduction

About Digital UK

- 1.1 Digital UK is the joint venture leading the operations and strategy of the UK's two main free-to-air TV platforms, Freeview and Freesat. Owned by the main public service broadcasters – the BBC, ITV, Channel 4 and Channel 5 – we provide every home in the UK with subscription-free access to high-quality television.
- 1.2 Freeview is the UK's largest TV service. It is used in 16 million homes (60% of TV households) and is the main platform in more than 10 million homes. Originating as a broadcast TV service delivered by aerial, it now also offers Freeview Play, a hybrid broadcast/on-demand TV service built into a significant proportion of TVs sold in the UK. Freesat provides free-to-air broadcast TV services by satellite in 2 million homes on Samsung, LG and Sony TVs and via set-top boxes. There is no equivalent of Freeview Play on smart TVs although on-demand services are provided on Freesat's own Ultra HD set-top box.
- 1.3 Freeview and Freesat's consumer offerings both also include mobile applications (for iOS and Android) and websites, which provide searchable TV channel guides and give audiences access to both live and on-demand programmes by linking to the Freeview channels' own TV websites and apps.
- 1.4 We are responsible for day-to-day operational platform management, including the Freeview and Freesat electronic programme guides, and lead on developing platform strategy, working with our broadcast partners and industry.
- 1.5 Digital UK holds two Ofcom EPG provider licences for Freeview: a DTAS licence which covers service information (EPG data) that is broadcast via DTT, and a complementary TLCS licence for the enhanced service information delivered over IP for Freeview Play receivers, along with two TLCS licences for Freesat and Freesat HD.
- 1.6 Following Digital UK's completion of the acquisition of Freesat from its shareholders in July 2021, this is the first Accessible EPG report covering both platforms.

Background to Statement

- 1.7 Given their scale and universal availability, Freeview and Freesat aim to cater for the widest possible range of audience requirements, and Digital UK is committed to delivering improvements in the accessibility of Freeview and Freesat products and services every year, both in terms of their technical capabilities and availability across devices. This is done in collaboration with our partners – including manufacturers of receivers, content providers who make their channels and services available to our audiences, and increasingly third-party operating system (OS) providers to whom manufacturers may choose to outsource UI design.
- 1.8 It must be stressed that Digital UK operates within a horizontal market with regards to Freeview-compatible devices (set-top boxes and TVs). We define product

operating rules for devices that include Freeview/Freeview Play, but we do not have direct control of receivers and do not produce any devices of our own.

Manufacturers of Freeview/Freeview Play devices own the development of their native UIs, including EPGs, with Digital UK aiming to drive improvements through careful cooperation and engagement with our partners. In contrast, Freesat developed itself a range of Ultra HD set-top boxes and is now the main supplier of devices after the withdrawal from the market of some older devices made by third-party manufacturers (some older HD devices are still available from third-party manufacturers).

- 1.9 For both Freeview and Freesat, a key principle is that our ability to make progress is dependent in part on how much we can do ourselves and how much we are reliant on partners. We are able to do more, and to move more quickly, when we directly control the software and hardware. Looking ahead, this means that Digital UK can progress its roadmap for Freesat – and in particular its plans to raise accessibility functionality on Freesat to the same standards as on Freeview Play devices (as described in Chapter 4) – with certainty.

2. Executive Summary

- 2.1 Digital UK firmly believes in the need to provide UK viewers with fit-for-purpose, accessible TV on the Freeview and Freesat platforms. Following Digital UK's completion of the acquisition of Freesat from its shareholders in July 2021, this is the first Accessible EPG report covering both platforms.
- 2.2 We welcomed Ofcom's amendments to the EPG Code in 2018 and – as our previous reports for Freeview have shown – we have been committed to delivering these in a way that offers maximum benefit to the viewer.
- 2.3 In response to Ofcom's amendments, we launched our award-winning Accessible TV Guide (ATVG) solution in October 2020 on connected Freeview Play devices, which is available via channel 555. This separate, additional guide to the standard linear EPG is designed to comply with the four priority accessibility requirements outlined in the EPG code: magnification, filtering, high contrast and text-to-speech (TTS).
- 2.4 [3<] Digital UK has now completed the evaluation of Freesat's roadmap and work has been underway to improve access service support on Freesat's own current devices.

Freeview

- 2.5 The ATVG initially launched to 53% of connected Freeview Play devices in October 2020, and had reached 91% coverage of connected Freeview Play devices in the market by September 2021. In the last year, we have made further progress in driving reach, so that by the beginning of November 2022 the full or modified ATVG – the latter being a variant that we specified due to the technical complexity of implementing TTS on some devices – was available in 98% of Freeview Play devices, an increase of 7 percentage points year-on-year.
- 2.6 Of the 98% total, the full version of the ATVG was available on 66% of devices, an increase of 9 points year-on-year. The other 32% of devices offered the modified version of the ATVG without TTS – a drop of 2 points on last year, reflecting our success this year in driving reach of the full ATVG, including upgrading some non-TTS devices to include this functionality.
- 2.7 Technical and commercial factors are likely to prevent us from reaching the final 2% of existing devices without any ATVG, while the limited power or configuration of older TV sets that do not currently allow TTS means that upgrading these devices to enable TTS is unlikely to be possible. We still expect coverage to improve over time as older devices are replaced.
- 2.8 Device compatibility with the ATVG was added to the Freeview Play conformance process in January 2021. Almost all new models since then have included access to the ATVG, and going forward we expect all future Freeview Play devices to meet our conformance requirements, therefore having access to the full ATVG.
- 2.9 The response to the ATVG from users has been hugely positive, with the product being promoted and/or reviewed by prominent advocacy groups. Usage of ATVG has doubled since 2021, at approximately 70,000 monthly users based on Google Analytics.

- 2.10 Given the highly positive feedback we received on the original ATVG, the focus of our investment over the course of 2022 has been on extending reach as a priority over refinement, helping us to drive up coverage rates. One of the areas for future work cited in last year's report was a demo video; this is now available on YouTube and can also be viewed [here](#). Over the next year, we will consult further with special interest groups and will consider making changes to the ATVG's functionality depending on the feedback we receive.
- 2.11 We are also continuing to encourage our manufacturer partners to include accessibility features within the native UIs wherever possible, via our Freeview Play requirements documents. Manufacturers have made some progress over the last year, with Hisense adding text-to-speech functionality to their full UI on TVs with their VIDDA operating system, while TVP/Philips has added magnification to their native TV Guide.
- 2.12 However, as Digital UK highlighted in past reports, we do not own the native UIs of Freeview Play devices and cannot guarantee the implementation of these features. We believe the ATVG is a suitable alternative measure and are therefore focusing our resource on supporting and enhancing the ATVG product as the preferred means to deliver accessible EPG services to our viewers.
- 2.13 We strongly believe in maintaining full transparency with our viewers and have included a full list of compatible devices on our [website](#) (see also Annex A). This clearly differentiates between those models with and without TTS to enable consumers to make informed purchase decisions based on their specific accessibility needs.
- 2.14 In addition to this, we will continue to support accessibility across all our customer touchpoints and have accessibility support built into our web, mobile and customer support channels, following best practice accessibility guidelines.

Freesat

- 2.15 Over the last year, the acquisition of Freesat by Digital UK has required a period of evaluation of the Freesat product roadmap, during which few new feature releases have taken place. Having now completed this roadmap evaluation, Digital UK has prioritised improving access service support on Freesat's own current devices. Over time, this is intended to bring Freesat TVs and set-top boxes up to the same high standard as Freeview Play. The roll-out of the enhancements will begin soon, with a software update to Freesat's current 'G3' set-top boxes, which is due in H1 2023. Freesat's connected devices will then support the following:
- i. Magnification of the TV Guide for live TV,
 - ii. Magnification of content rails for on-demand content on the home screen,
 - iii. Accessible Filtering (for easy discovery of programming with appropriate access services),
 - iv. High contrast User Interface (UI), and
 - v. Beep assistance for discovery of content featuring access services.

- 2.16 Over time, Freesat may adopt a similar approach to Freeview, with the ATVG on channel 555, though this is subject to addressing technical challenges as the underlying software is different and metadata integration is not straightforward. As with Freeview, there are additional challenges in implementing text-to-speech. Digital UK is evaluating the addition of TTS to the entire set-top box user interface, for inclusion in a future major release to the G3 set-top boxes.
- 2.17 In the meantime, the native device UIs of Freesat set-top boxes go a long way towards contributing to the four accessibility requirements. Current Freesat-supporting televisions and 4K set-top boxes have a range of accessibility functions to ensure that customers can enjoy television, as follows:
- i. **Audio description and subtitles** are available for selected programmes,
 - ii. Metadata flags are used to **indicate subtitles, audio description and sign language support** on the EPG,
 - iii. When a user navigates the EPG or browses channels on a Freesat set-top box, an **audio beep** will sound to indicate when audio descriptions are available,
 - iv. **SUB and AD remote control buttons** provide an easy on/off toggle, and
 - v. Freesat 4K set-top boxes include the standard version of the full EPG with a contrast ratio of over 7:1 and a dedicated **high contrast UI** of at least 18:1.
- 2.18 These features contribute to two of the four accessibility requirements: a high contrast UI and, in a more limited way, easy discovery of programming with appropriate access services (with metatags in the EPG descriptions but without filtering capabilities). Our roadmap for accessibility features addresses the two accessibility requirements that are not currently available.
- 2.19 In addition to this, we have extended our working relationships with content partners to raise awareness of gaps in metadata for the Freesat as well Freeview programme guide. As part of our accessibility support across all our customer touchpoints, we plan to integrate the Freeview and Freesat websites and mobile apps so that Freesat users will be offered the same high standard of access services currently available only to Freeview users.
- 2.20 [3<]

3. Freeview: The Accessible TV Guide (ATVG)

Overview

- 3.1 In response to Ofcom's 2018 amendments to the EPG code, Digital UK have developed an accessible EPG solution for Freeview that we call the "Accessible TV Guide" (ATVG). This is a separate, additional guide to the standard linear EPG, designed in collaboration with accessibility groups specifically for those with accessibility needs.
- 3.2 The ATVG is an application built using HbbTV technology which, to viewers with a connected Freeview Play TV or set-top box, appears simply as an additional channel,

accessed via keying 555 on a remote control. This channel number was chosen due to the raised node that often appears on the number 5 button on a remote control.

- 3.3 The ATVG has been designed to comply with all four priority accessibility requirements outlined in the EPG code:
- i. Magnification,
 - ii. Filtering (for easy discovery of programming with appropriate access services),
 - iii. High contrast User Interface (UI), and
 - iv. Talking EPG: text-to-speech (TTS).
- 3.4 We have worked in close collaboration with accessibility user groups such as RNIB, DAC and AbilityNet throughout development to ensure the ATVG is effective in each of these areas. For more detail on how the ATVG meets these four requirements and to see accompanying visuals of the ATVG user interface, please see Annex B.
- 3.5 For those consumers who do not currently have a Freeview Play device (or are in the minority of consumers with an existing Freeview Play device that is not compatible with the ATVG), advertised devices are available from as little as £80 (see Annex A for full list of compatible devices).

Availability of the Accessible TV Guide on existing Freeview Play devices

- 3.6 The ATVG was successfully launched to 53% of connected Freeview Play devices in October 2020 (based on market share at that time). In September 2021, we launched the full version of the ATVG to further devices, giving a total of 57% of connected Freeview Play devices (based on October 2021 market share). A modified version of the ATVG (without TTS) was available at that point on a further 34% of devices, resulting in 91% coverage of connected Freeview Play devices in the market.
- 3.7 In the last year, we have made further progress in driving reach for the full ATVG. By the beginning of November 2022, the full or modified ATVG was available in 98% of Freeview Play devices, an increase of 7 percentage points year-on-year – meaning we have now achieved almost complete coverage. Of the 98%, the full version of the ATVG was available on 66% of devices, an increase of 9 points year-on-year. The other 32% of devices offered the modified version of the ATVG without TTS – a drop of 2 points on last year, reflecting the success we have made this year in driving reach of the full ATVG, including upgrading some non-TTS devices to include this functionality.
- 3.8 In last year's report, we committed to holding further conversations with manufacturers about releasing the ATVG to what was, a year ago, the final 9% of existing connected devices and upgrading non-TTS versions to the full ATVG product. Our work in this area was effective, enabling us to achieve the overall coverage figure for the full or modified ATVG that is now approaching 100%.
- 3.9 Our original decision to launch a non-TTS version of the ATVG was a practical solution that reflected the technical complexity of implementing a product across a wide range of devices with different technical set-ups. There are particular technical challenges relating to TTS that make it harder to implement than the other three

accessibility requirements. Digital UK's business model offers its partners flexibility when implementing Freeview Play product requirements. This allows those partners to retain clear brand identity and the ability to differentiate in the competitive consumer electronics market. This approach is integral to the commercial value exchange we agree with our partners, and as a result technical implementations of Freeview Play can vary from manufacturer to manufacturer due to factors beyond our control. Whilst TTS is an incredibly important feature, and a key part of the ATVG design, we felt strongly that the complexity around its implementation should not inhibit the ability of consumers to access the wider benefits that the ATVG design offers. We remain of the view that decision to develop and release a modified non-TTS version was pragmatic and ultimately beneficial to users.

- 3.10 Looking ahead, unfortunately the limited power or configuration of older TV sets that do not currently allow TTS means that upgrading these devices to enable TTS is unlikely ever to be possible on these devices. Similarly, technical and commercial factors prevent us from reaching the final 2% of existing devices without any ATVG. We have therefore achieved as much as we think is feasible in driving reach of the ATVG across current Freeview devices. Nonetheless, we still expect the coverage figures to continue to improve over time: the number of devices in use without the full ATVG will naturally decline over time as older devices are replaced, manufacturers roll out new models with up-to-date technology each year and more people buy more recent models of smart TVs.
- 3.11 Consumers can see a full list of compatible devices on our [website](#) (also listed in Annex A). This differentiates between those models with and without TTS to enable consumers to make informed purchase decisions based on their specific accessibility needs.

Availability of the Accessible TV Guide on future Freeview Play devices

- 3.12 In January 2021 the ATVG was added to the Freeview Play conformance process (the device test manufacturers must take before we give new device models the Freeview Play trademark), meaning new device models may be rejected if they are unable to support this feature.
- 3.13 In 2021, as we reported last year, all new device models from every manufacturer bar one included access to the ATVG. Of these, two new models launched with the modified non-TTS version due to the complexities around TTS described in the previous section (though as high-end models, these devices still include TTS as part of their native UI). Collectively these models represented a small minority of devices in the market, and we committed last year to working closely with the manufacturers in the hope of resolving this issue.
- 3.14 Going forward, we expect all future Freeview Play devices to meet our conformance requirements, therefore having access to the full ATVG. We will continue to update the list of compatible devices on our website accordingly as a resource for users.

Response to the launch of the Accessible TV Guide

- 3.15 The response to the ATVG from users has been hugely positive, with the product being promoted and / or reviewed by several prominent advocacy groups such as [AbilityNet](#), [Henshaws](#) and [Hearing Link](#).
- 3.16 Usage of ATVG has doubled since 2021, at approximately 70,000 monthly users based on Google Analytics. We continue to consult with advocacy groups, including the RNIB and VLC, to monitor the effectiveness of the solution.

Future developments

- 3.17 In last year's report, we set out a number of areas for future work:
- i. Further work on TTS implementation, as the initial priority
 - ii. Further enhancing the ATVG service through the inclusion of on-demand content – dependent on readiness of the content providers
 - iii. Work to refine core features following further user feedback, and to explore incorporating additional accessibility features such as audio feedback enhancements and different colour modes / stylesheets to reflect the needs of varying visual impairments
 - iv. Improve the user journey by producing a demo video to help consumers understand the product functionality.
- 3.18 Given the highly positive feedback we received on the original ATVG, the focus of our investment over the course of 2022 has been on extending reach as a priority over refinement. This helped us to drive up coverage rates (as cited above) and, in particular, to deliver an increase of 9 percentage points in the proportion of devices with full ATVG functionality including TTS.
- 3.19 The demo video cited in point (iv) is available on YouTube; it can be viewed [here](#).
- 3.20 Over the next year, we will be consulting with special interest groups to assess their satisfaction. We will consider making changes to the ATVG's functionality depending on the outcome of the consultation, to make sure it best suits users' needs.

EPG accessibility on Freeview native device UIs (traditional EPG)

- 3.21 Digital UK continues to include native UI accessibility requirements in its requirements document for Freeview Play (the Product Overview Document) and encourages manufacturer partners to adhere to these guidelines wherever possible.
- 3.22 Manufacturers have made some progress over the last year: Hisense (the world's second largest TV manufacturer) has added text-to-speech functionality to their full UI on TVs with their VIDDA operating system, building on Digital UK's Accessible TV Guide technology, while TVP/Philips has added magnification to their native TV Guide.
- 3.23 As we do not own the native UIs of Freeview Play devices, we cannot guarantee the implementation of these features, and have therefore focused our resource on supporting and enhancing the ATVG service as the means to deliver accessible EPG services to our viewers.

Additional Commitments to Accessibility: content provider engagement and accessibility across all customer touchpoints

- 3.24 Our additional commitments relate to:
- i. Our engagement with content providers, and
 - ii. Our aim to ensure accessibility across all customer touchpoints.
- 3.25 On the first commitment, the success of the ATVG – as with any accessibility interface that involves highlighting or filtering content – is entirely dependent on the metadata associated with the accessible content being made available by content providers. Poor or incomplete metadata inevitably compromises the accuracy and usefulness of the ATVG – put simply, if a content provider does not tell us that their content includes audio description, for example, then we cannot highlight this information to users seeking audio described content.
- 3.26 We will continue to work closely with content provider partners to raise awareness of gaps in metadata, to ensure that the ATVG is as accurate and complete as possible on an ongoing basis.
- 3.27 Turning to the second commitment, customers may engage with us across a number of touchpoints, including the Freeview website and mobile app and support services such as the Freeview Advice line. We aim to provide our viewers with accessible services across all Freeview customer touchpoints, regardless of how they choose to engage with us or watch TV:
- i. Our website takes best practice web accessibility guidelines into account, including the W3C Web Content Accessibility Guidelines 2.1 standard. The site features an online EPG which offers the user a choice of three different views: grid (by default), list and accessible. The accessible view flags content offering audio description (AD), subtitles (S), and sign language (SL) available via a user's TV.
 - ii. Accessibility, inclusive design and SEO best practice form a key part of our Business As Usual continuous improvement work sitewide. We also regularly benchmark site performance against Google's Core Web Vitals (CWV) metrics to ensure the best possible user experience via loading experience (LCP), interactivity (FID), and visual stability (CLS) of web page content.
 - iii. The Freeview mobile app is fully compatible with Apple and Android in-built accessibility functionality, including magnification, high contrast display and "dark mode" (an alternative UI style recognised as a better experience for those with visual impairments). Freeview's app-specific icons and user experience are in-line with Apple's accessibility guidelines, and the mobile TV guide can become a talking EPG if the user switches on iOS Voice Over or Android TalkBack. Access services flags (S, SL & AD) are included on the "more programme information" screen, highlighting accessible programming available via a user's TV.
 - iv. Our support services function across multiple channels depending on user preference or need – these comprise the Freeview Advice line over the phone, webchat on the Freeview website, and FAQs/how to videos for those

who prefer to self-help (available online at [freeview.co.uk](https://www.freeview.co.uk)). Our contact centre staff have received disability awareness training to better support those with accessibility requirements, and have been fully trained to support the ATVG via the advice line, social media and email channels.

- 3.28 With the linear TV guide being available on Freeview's mobile and web platforms, the provision of accessibility features within these services means viewers have an alternative way of discovering content if they are unable to access features via their TV's native UI.

4. Freesat: Roadmap towards the Accessible TV Guide (ATVG)

Overview

- 4.1 With more than 170 channels, Freesat offers a larger range of linear TV content than Freeview. The linear TV channels on the platform provide the same access service capabilities as Freeview – namely, subtitling, signing and audio description – meaning that Freesat offers a greater range of content than Freeview for people who wish to use these access services.
- 4.2 However, we must begin by acknowledging that the provision of accessibility services around the EPG are currently less well developed on Freesat than on Freeview, making it harder for customers to find programmes that meet their criteria. This has an impact on the overall appeal of Freesat, as it is now, for customers who wish to use access services.
- 4.3 Over the last year, the acquisition of Freesat by Digital UK has required a period of evaluation of the Freesat product roadmap, during which few new feature releases have taken place. Having now completed this roadmap evaluation, Digital UK has prioritised improving access service support on Freesat’s own current devices. Over time, this is intended to bring Freesat TVs and set-top boxes up to the same high standard as Freeview Play. The roll-out of the enhancements will begin soon, with a software update to Freesat’s current ‘G3’ set-top boxes, which is due in H1 2023. Freesat’s connected devices will then support the following:
 - i. Magnification of the TV Guide for live TV,
 - ii. Magnification of content rails for on-demand content on the home screen,
 - iii. Accessible Filtering (for easy discovery of programming with appropriate access services),
 - iv. High contrast User Interface (UI), and
 - v. Beep assistance for discovery of content featuring access services.
- 4.4 In time, Freesat may adopt a similar approach to Freeview, with the ATVG on channel 555. However, there are particular challenges as the underlying software is different, which means that the metadata integration is not straightforward. The work required to deliver items (i) to (v) on Freesat set-top boxes has been approved by Digital UK and is currently underway.
- 4.5 As with Freeview, there are additional challenges in implementing TTS. To address this, Digital UK is evaluating the addition of the text-to-speech feature to the entire set-top box user interface, for inclusion in a future major release to the G3 set-top boxes.
- 4.6 [3<]
- 4.7 In the meantime, as the next two sections set out, the native device UIs of Freesat set-top boxes go a long way towards contributing to the four accessibility requirements.

EPG accessibility on Freesat native device UIs (traditional EPG)

- 4.8 While the new functionality remains in the development phase, the existing range of Freesat-supporting televisions and 4K set-top boxes have a range of accessibility functions to ensure that customers can enjoy television, as follows:
- i. **Audio description and subtitles** are available for selected programmes on Freesat where a broadcaster makes them available. All Freesat products allow access to audio description and subtitles for both live and recorded programmes.
 - ii. When a programme is highlighted in the EPG, metadata flags are used to **indicate subtitles, audio description and sign language support**.
 - iii. In addition, when a user navigates the EPG or browses channels on one of the Freesat set-top boxes, and has the feature enabled, an **audio beep** will sound to indicate when audio descriptions are available for the highlighted or selected programme.
 - iv. Dedicated **SUB and AD remote control buttons** provide an easy on/off toggle function for customers.
 - v. The Freesat 4K set-top boxes include the standard version of the full EPG with a contrast ratio of at least 7:1 (around 7.7:1), as well as a dedicated **high contrast UI** with a contrast ratio of at least 18:1 (around 18.15:1).
- 4.9 Together, these features contribute to two of the four accessibility requirements: a high contrast UI and, in a more limited way, easy discovery of programming with appropriate access services (with metatags in the EPG descriptions but without filtering capabilities).

Future developments

- 4.10 The key future development will be to continue to develop the UI of its set-top boxes. As Freesat noted in last year's report, its next generation of set-top boxes are easier to update and hence able to incorporate additional accessibility features over time.
- 4.11 Our ongoing roadmap for accessibility features addresses the two accessibility requirements that are not currently available: filtering and magnification, with a research and development investigation into text-to-speech.

Response to the plans regarding the launch of the Accessible TV Guide

- 4.12 A research and development investigation has suggested that it may be possible to run the Accessible TV Guide on the Freesat Ultra HD set-top boxes, but considerable work would be required to use the proprietary metadata platform serving Freesat smart TVs and set-top boxes. A further investigation is underway to review the operation or integration of the Freewatch Play and Freesat metadata aggregation and distribution systems, and this work may support such an implementation of the ATVG on Freesat devices.

Additional Commitments to Accessibility: content provider engagement and accessibility across all customer touchpoints

- 4.13 As we implement an accessibility solution for Freesat, as with Freeview we have additional commitments that relate to:
- i. Our engagement with content providers, and
 - ii. Our aim to ensure accessibility across all customer touchpoints.
- 4.14 On the first commitment, the success of the planned ATVG will be entirely dependent on the metadata associated with the accessible content being made available by content providers. Poor or incomplete metadata inevitably compromises the accuracy and usefulness of the ATVG – put simply, if a content provider does not tell us that their content includes audio description, for example, then we cannot highlight this information to users seeking audio described content. Such issues already apply to Freesat in relation to the programme guide available on the Freesat website and mobile apps.
- 4.15 We already work closely with content provider partners to raise awareness of gaps in metadata for Freeview’s programme guide, and following the Freesat acquisition we have now extended our working relationships with these content partners to cover the Freesat programme guide.
- 4.16 Turning to the second commitment, customers may engage with us across a number of touchpoints. We have taken the decision that the Freesat website and mobile apps will no longer receive any development, as our plan is instead to provide future integration into a single platform with Freeview. Once this is implemented, Freeview and Freesat users will be offered the same high standard of access services currently available only to Freeview users (see Chapter 3), including the talking EPG functionality if the user switches on iOS Voice Over or Android TalkBack.

Annex A: Device Models with Accessible TV Guide

Freeview devices (Correct as of 3 October 2022)*

Note: Devices newly added to the list since the previous report, or moved to the “with text-to-speech” column, are shown in red.

Brand	ATVG with text-to-speech	ATVG without text-to-speech
Avtex	2018 TVs	
Bauhn	2022 Android TVs	
Blaupunkt	2022 TVs 2020 Android 2K TVs	2020 Android 4K TVs
Bush	2022 non-Roku TVs 2020 non-Android TVs 2020 Android 2K TVs 2019 TVs	2020 / 2022 Roku TVs 2020 Android 4K TVs 2016 / 2017 / 2018 TVs
Celcus		2016 / 2018 TVs
Cello	2019 Android TVs 2020 Android TVs	
Digihome	2020 non-Android TVs 2019 non-Android TVs	2016 / 2017 / 2018 TVs 2020 Android TVs
EDUK		2018 TVs
ElectriQ	2019 TVs	2016 / 2017 / 2018 TVs
Emotion	2020 Android 2K TVs	2020 Android 4K TVs
Eternity	2020 Android 2K TVs	2020 Android 4K TVs
Ferguson	2020 Fire TVs	
Finlux	2019 TVs	2016 / 2017 / 2018 TVs
Hisense	Some 2022 TVs 2016 / Some 2019 / 2020 / 2021 TVs	2018 / some 2019 TVs 2017 TVs
Hitachi	2020 non-Android TVs 2019 non-Android TVs	2020 Android TVs 2016 / 2017 / 2018 TVs
Humax	All Freeview Play boxes	
JVC	2020 / 2021 / 2022 TVs 2019 TVs	2016 / 2017 / 2018 TVs
Laurus		2016 / 2017 / 2018 TVs
LG	All Freeview Play TVs except 2022 K8LP models	2022 K8LP models

Brand	ATVG with text-to-speech	ATVG without text-to-speech
Linsar	Some 2018 TVs Some 2020 TVs	2016 / 2017 TVs Some 2018 / Some 2020 TVs
Loewe	All Freeview Play TVs	
Logik	2020 TVs 2019 TVs	2016 / 2017 / 2018 TVs
Luxor	2020 TVs 2019 TVs	2016 / 2017 / 2018 TVs
M&B	2019 TVs	2017 / 2018 TVs
Manhattan	All Freeview Play boxes	
Marlin	2019 TVs	2018 TVs
Medion	2020 non-Android TVs 2019 TVs	2020 Android TVs 2017 / 2018 TVs
Mitchell & Brown	2020 TVs 2019 TVs	2016 / 2017 / 2018 TVs
Netgem	All Freeview Play boxes	
Nordmende	2020 TVs 2019 TVs	2017 / 2018 TVs
Panasonic	2021 / 2022 TVs 2020 non-Android TVs 2015 / 2016 / some 2017 / some 2018 / some 2019 TVs	2020 Android TVs Recorder box Some 2017 / some 2018 TVs
Philips	2022 TVs 2020 Android TVs 2019 / 2021 Android TVs	2017 / 2018 TVs
Polaroid	2022 TVs 2020 non-Android TVs 2020 Android 2K TVs 2019 TVs Some 2018 TVs	2020 Android 4K TVs 2016 / 2017 / some 2018 TVs
RCA	2020 Android TVs	
Rediffusion	2020 Android TVs	
Sharp	2021 / 2022 TVs 2018 TVs 2020 Android 2K TVs	2020 Android 4K TVs 2017 TVs
Smart Tech	2022 TVs	
Solas	2019 TVs	

Brand	ATVG with text-to-speech	ATVG without text-to-speech
Sony	All Sony Freeview Play Android TVs	All Sony Freeview Play non-Android TVs
TCL	2021 Android TVs 2020 Android TVs 2018 / 2019 TVs	2020 / 2022 Roku TVs
Technika	2022 TVs 2020 Android 2K TVs	2020 Android 4K TVs
Techwood	2020 TVs 2019 TVs	2016 / 2017 / 2018 TVs
Telefunken		2016 TVs
Toshiba	2022 TVs 2020 non-Android TVs 2019 TVs	2020 Android TVs 2016 / 2017 / 2018 TVs
UMC	2020 Android 2K TVs	2020 Android 4K TVs
Veltech	2020 Android TVs	
Vistech	2020 TVs	2016 / 2017 / 2018 TVs
Walker	2020 TVs 2019 TVs	2016 / 2017 / 2018 TVs
Westinghouse	2020 Android TVs	

*Live list of compatible models can be found at www.freeview.co.uk/help/accessible-tv-guide

Annex B: Freeview Accessible TV Guide Feature Detail & Visuals

The Freeview Accessible TV Guide (ATVG) provides the four accessibility features identified in the EPG code in the following ways:

i. Magnification

- If viewers wish to magnify text on the traditional EPG listing, they can switch to the EPG on Channel 555 to see the text enlarged.
- The ATVG displays text content 2 times the size of normal text presentation. This can be up to 48pt font size on a normal HD (720p) resolution TV, and 33% larger than this on Full HD models (1080p).

ii. High Contrast Display

- As per the guidance set out in Ofcom's statement on EPG Accessibility, the ATVG has a 7:1 contrast ratio as a minimum, with many areas displaying an even higher contrast following engagement and feedback with users during the design review stage.
- The ATVG has a simple UI which avoids superfluous elements with aesthetic value only, to allow for easier navigation using the arrow buttons on a remote control
- The magnification and high contrast display are illustrated in Figure 1.

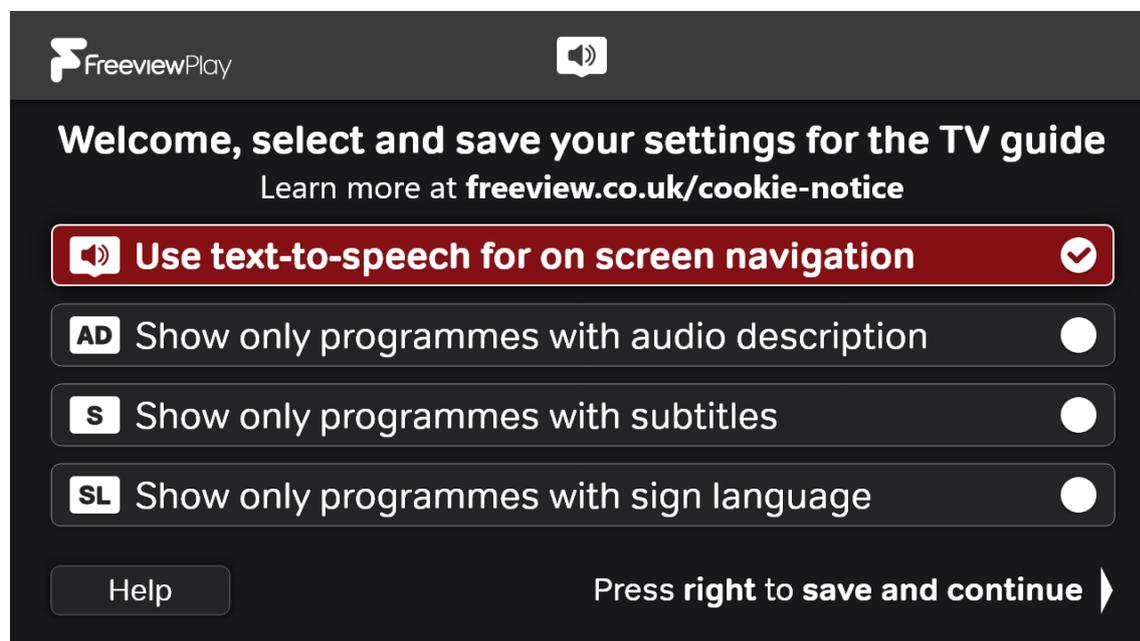
Fig 1: EPG Screen on Channel 555



iii. Highlighting and Filtering

- On first use of the ATVG, users are invited to set their accessibility preferences. This includes setting up text-to-speech and options to only show programmes with audio description, subtitles and/or sign language (see Figure 2 below).

- The ATVG will remember these settings when returning to the guide. Should they wish to, users are able to easily access “Settings” to change their accessibility preferences at any time.

Fig 2: Accessibility Preferences Screen

iv. Text-to-Speech (TTS)

- The ATVG TTS system is designed to provide natural and contextual aural cues as users navigate the service. Rather than reading everything on screen as many TTS implementations do, it reads specific elements to aid the navigation and discovery of programmes consistently through the User Interface (UI).
- On first use of the ATVG, TTS will automatically be active on the accessibility preferences page to allow users to easily turn the feature on for future use. For those who do not want this feature, TTS will automatically stop after this step unless the user actively chooses to turn it on.
- The TTS experience can be further adapted to suit a user’s needs by changing the gender of voice or speed; the latter allowing for varying levels of experience using TTS software (see Figure 3).

Fig 3: Text-to-Speech Settings

