techUK response to the Ofcom consultation on EPG Accessibility: Proposed improvements for people with visual impairments.

February 2018

Introduction

techUK represents the companies and technologies that are defining today the world that we will live in tomorrow. More than 950 companies are members of techUK. Collectively our members employ more than 750,000 people, which represents nearly half of all ICT sector jobs in the UK. These companies range from leading FTSE 100 companies to new innovative start-ups. The majority of techUK's members are small and medium sized businesses.

This response is made on behalf of techUK's device manufacturing members. We do not seek to represent the views of other members but where those views have been expressed they have been included.

Summary

techUK welcomes this review and, in addition to providing you with our recommendations and comments, would like to continue to have the opportunity of joint discussions as part of the overall review and future EPG guide specification setting process.

Device manufacturers continue to regard usability and accessibility for all user groups as of key importance when considering product design and specification. The constant evolution of product design has delivered many usability and accessibility features that have helped users in the operation of their consumer electronic devices. The consideration of user groups with visual impairments has always been an important consideration and device manufacturers can demonstrate a path of constant product development to aid the usage of electronic devices by visually impaired user groups.

We welcome Ofcom's recognition that it is neither cost effective nor possible to integrate these proposed features across all EPG enabled devices and therefore an approach of 'reasonable' rather than 'best' endeavours is proposed to allow manufacturers more flexibility on the accessibility feature sets by model. The definition of 'reasonable endeavours' is viewed by many as either unclear or open to interpretation. Ofcom will need to provide clear and detailed guidance on this instruction.

Where these feature sets are not currently available we would re-iterate our arguments made in the original consultation that the development of the full suite of feature sets as proposed within the consultation will require a high level of engineering development resource, additional cost and an increased component specification in terms of chipset processing power and memory capacity in some products, particularly entry products.

techUK does have concerns that this proposal could lead to the UK market setting unique specification requirements that require either UK specific versions or result in increased cost implications for models sold globally, even where there is no demand or requirement for these feature sets. This approach of market specific feature sets no longer sits with the global specification and production environment of consumer electronics. This approach fails to recognise the way the market works and fails to appreciate the very slim margins under which all consumer electronics producers operate.

The range of devices with EPGs is incredibly large and diverse. These proposals appear to presume that a 'one size fits all' approach is relevant and will be effective. Viewers commonly access EPGs on a range of devices from a smart phone with a 4" screen to a television with 65" screen. To suggest that the accessibility magnification and contrast enhancement requirements for these two devices should be the same is, in our opinion, wrong.

Manufacturers continue to invest heavily in ensuring that devices are accessible and easy to use for all their customers. All manufacturers recognise that they are serving a growing aged customer base who's demand for accessibility features will increase. A failure to serve this sector would most likely lead to reduced sales and higher returns as a result of the continuing extremely competitive global market place. The pace of continued development in the consumer electronics market has been a facet of the sector for over 100 years and is only accelerating.

techUK continues to believe that the manufacturers, their product designers and their engineering teams are best placed to research and implement the most suitable accessibility requirements that meet as broad a user base as possible. We do not believe a regulatory approach, as proposed, works in the best interest of customers. Quite the opposite, we believe that this approach is more likely to stifle innovation and reduce the choice of devices available on the UK marketplace.

Question 1 (Accessibility features)

Q1(a) - Do you agree that EPG providers should use reasonable endeavours to secure so far as practicable that their EPGs include options for users to use all or as many as possible of the following accessibility features: (a) 'text-to-speech', (b) 'filtering or highlighting', (c) 'magnification' and (d) 'high contrast' displays (i.e. with a contrast ratio of no less than 7:1)? If not, please explain why you do not agree giving reasons.

Device manufacturers already invest considerable time and resource as part of the product development process to ensure that EPGs are accessible and simple to use for all users, including those with visual impairments.

Whilst we understand that this second consultation is now proposing 'reasonable' endeavours as opposed to 'best' endeavours we remain of the view that the mandating of feature sets is not in the best interests of either an open and competitive market place nor does it lead to the development of the most suitable feature sets for users with disabilities.

techUK, and its device manufacturing members, are against the mandating of these feature sets across all products within the idTV, STB and PVR sectors. Device manufacturers remain committed to the continued development and roll out of feature sets that improve accessibility for visually impaired users.

Ofcom's own research (Figure 1, Page 8) demonstrates that manufacturers are already proactive in introducing feature sets that support the use of EPGs by those with visual impairments. We expect that these feature sets will continue to develop, however, it is impractical or impossible to introduce these features on every product offered to the market in the near or medium term and a mandatory approach is likely to act against the interests of the market as a whole.

The mandating of specific feature sets can result in the stifling of innovation in areas such as accessibility. Product and feature innovation is best left to the expertise of device manufacturers who are continually making huge investments in product research and development.

techUK does not believe that regulatory intervention is proven to support innovation, conversely it can have the opposite effect and stifle innovation as incentives to design and innovate are removed when feature sets are bound by rigid specification. For example, we can see developments currently in connectivity between devices such as televisions and smart phones where the smart phone can act as a controller and an enabler of additional feature sets. It is possible that the smart phone can enable increased accessibility features and we have concerns that the mandating of defined features and the method of delivery of these features acts against the best interest in delivering the strongest product and feature innovations.

Increasingly, content is delivered via a hybrid DTT/ IP distribution method. It is possible that some accessibility supported features, Text to Speech for example, may require an internet connection. This requirement could inadvertently prevent the sale of any non-connected devices which display EPGs, severely impacting entry level choice and pricing for consumers. We have concerns that the filtering and/ or highlighting of some accessibility feature sets could be complex to implement and many device and component specifications may not be able to support such feature development. Consideration also needs to be given to the information displayed by such a filter and whether this would result in a beneficial customer experience. We have concerns that the user experience

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may be poor should the meta data enabling the feature set be variable by programme within the EPG.

Magnification and text enlarging features can have a negative impact on the readability of displayed information if the method of implementation is not carefully and consistently specified. We would strongly recommend that a detailed analysis is made of the options in this area before any decisions are made.

techUK would also like to add that in the context of High Contrast displays the proposed ratio of 7:1 is excessive and the requirement defined in WCAG2.0 for level AA which defines the contrast ratio for regular sized text as 4.5:1 is better suited to mass market consumer devices.

techUK would also re-iterate our comments made in the previous consultation regarding agreed minimum specifications relating to all proposed features. Ofcom will need to consider how minimum standards of operability will be agreed upon and how it could be objectively measured.

For example, TTS solutions can vary greatly and therefore techUK sees no value in considering the recommendation of a solution without setting benchmark operational performances. This minimum specification needs to consider the language variances for TTS on offer and the level of TTS translation accuracy that is required to ensure that TTS functionality provides a level of description that is beneficial to the user.

Q1(b) – Do you agree with the changes to the EPG Code that we propose to make to implement these proposals? If not, please explain why you do not agree giving reasons.

techUK does not agree that the proposed changes to the EPG code should be made. We believe that our arguments made in the original consultation remain valid.

1) Enforced enablement of feature sets is likely to increase market pricing of devices. This can have impact on entry priced devices, disadvantaging those who do not require the feature set and/ or those on low incomes.
2) Enforcement of any feature set for a specific country/ market is likely to result in a reduction of choice for consumers as device manufacturers are forced to remove ranges and models from sale in the UK that cannot comply with the requirements.
3) The device manufacturing industry is a global industry. The majority of device specifications are set to meet multiple market requirements. We re-state the argument that the UK cannot operate as a separate and unique entity when setting technology standards and platform specifications that device manufacturers are then compelled

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to follow as this has a threefold effect of driving up cost and slowing the rate of technology adoption and new model development and production. Producers will need to comply with the European Accessibility Act and any changes agreed as part of this legislative process. We request that Ofcom do not set UK specifications that differ from other EU markets and that Ofcom engage with and follow pan European accessibility feature sets and device requirements.

We believe that Ofcom's assumption (A6.41) that 'viewers may face slightly higher prices for TV receivers' misses the key point that a number of low costs devices could be discontinued from the UK marketplace, considerably reducing choice as manufacturers are unlikely to create UK specific versions of lower cost devices for a single market which comprises of just a few percent of total global device volumes.

Question 2 (Rolling out to all TV receivers) - Do you agree that the proposed features should be rolled out on all new models of TV receivers commencing development from when the changes to the EPG Code that we are proposing enter into force, and any subsequent models (using reasonable endeavours, so far as practicable)? If not, please explain why you do not agree giving reasons.

techUK does not agree that these feature sets should be rolled out to all new models of TV receivers. This approach fails to recognise the realities of a global development and supply chain. Many models are built to a single specification to meet the needs of a number of markets. Many lower cost models are unlikely to have the specification capacity to integrate and operate some or all the proposed feature sets.

Requiring all models to follow the proposed specifications will result in significant costs for manufacturers. Costs incurred in chipsets, architecture, UI designs, logo certification and production costs for example. This approach fails to recognise the very long lead times for some model designs and the global nature of R&D and model design and engineering.

The most likely result of such an approach is a significant reduction in model choice available for UK viewers and a notable increase in costs for those models that are sold in the market, costs that are borne by all purchasers, whether they have a need for accessibility features or not.

This approach also fails to recognise that operating systems and UIs are sometimes developed in collaboration with global IP content providers. We do not believe that all global content providers would feel compelled to follow specific UK market requests, further reducing viewer content and device choices.

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We agree that a change from best to reasonable endeavours can provide more flexibility for manufacturers where feature set enablement is not possible or commercially viable. However, the definition of reasonable can be open to interpretation and therefore Ofcom must give some detailed guidance and advice on how you will define reasonableness. It would be highly unsatisfactory for manufacturers to have to go through a process of legal rigour for every model brought to market that does not include all of the requested features. This would be another unacceptable cost and time burden that manufacturers are unable to support in bringing new products to the UK market.

Question 3 (Reporting requirement) - Do you agree with our revised proposal to retain and amend paragraph 10 of the current EPG Code, which requires EPG licensees to produce an annual statement regarding accessibility? If not, please explain why you do not agree giving reasons.

techUK has concerns that requiring EPG licensees to produce an annual statement regarding accessibility could result in compliance pressures placed on manufacturers that places those that do not introduce such features having evaluated 'reasonable endeavours' being disadvantaged versus those that are able to introduce the feature sets. This could result in a distortion of fair market competition.

Question 4 (Further changes) - Do you agree that with the changes that we propose to make to paragraphs 7, 11 and 13 of the current EPG Code to simplify the Code? If not, please explain why you do not agree giving reasons.

techUK has no objection to this change proposal.

Question 5 (impact assessment): Do you agree with our assessment of the impact of our proposals, in terms of the benefits and costs associated with these proposals for consumers, EPG providers, and set top box manufacturers? Please explain the reason for your answer, providing supporting evidence on costs and/or benefits where available.

techUK believes that the impact assessment fails to recognise the amount of investment device manufacturers have made and are making to support improved accessibility and usability of EPG enabled devices for all users, including those with visual impairments. Figure 1 (Page 8) demonstrates that there are many devices on the market that support some or all the accessibility features under consideration. We believe that this is somewhat contradictory to the Ofcom statement that the market will not provide enough support for these features without a regulatory requirement. The number of models with accessibility feature sets is growing every year and we see no evidence that manufacturers are reducing their efforts or investment in this sector which raises the question of whether

Ofcom's reasoning that the market requires intervention to progress is sufficiently evidence based.

Whilst the impact assessment acknowledges that there is likely to be cost increases to meet these requirements on many devices, the impact assessment completely fails to recognise the negative impact risk on choice through imposing country/ market specific requirements within the global supply chain business model of device design, specification and production.

The major issue is not the impact of cost on devices of making the change, although that is real, it is the fact that adopting this approach is likely to discourage manufacturers from adapting or designing a number of models to meet specific and unique UK requirements, thus significantly reducing choice for UK customers when considering a new EPG enabled device. techUK made this point very clear in our original submission but we believe that Ofcom are completely failing to recognise this very real issue.

The Consumer Electronics market is one of continual improvement in terms of device performance and specification. That has nearly always been delivered with an increase in affordability of devices, making higher performing and specified devices available to a wider audience. We continue to believe that the competitive nature of the market place and the relative high number of manufacturers serving this market place will ensure that accessibility and usability is continued to be seen as a competitive selling benefit and that all manufacturers will continue to invest in features that improve accessibility for all users.

techUK continues to believe regulatory intervention in these areas is more likely to stifle rather than support improved accessibility and innovation and therefore we continue to argue for a 'light touch' approach to regulatory intervention.

Question 6 (equality impact assessment): Do you agree with our assessment of the impact of our proposals on the relevant equality groups? If not, please explain why you do not agree.

techUK believes that the impact assessment fails to recognise the pace of accessibility feature development that manufacturers are currently investing in without regulatory involvement.

We also re-iterate the very real likelihood of reduced choice for viewers that market specific feature sets are likely to create. We do not believe a reduction of choice is a benefit for any user group.

Question 7: Do you have any other comments on our analysis or proposals?

Whilst techUK is not supportive of a regulatory approach for feature development it does recognise and support the need for a collaborative approach across all stakeholders to ensure that feature sets, technology platforms and service access works across a broad a range of platforms and these platforms support common standards as much as possible. With this approach in mind we do believe that Ofcom has a role to play in ensuring the industry comes together to consider and develop solutions that meet the needs of viewers, particularly those with disabilities that can restrict ease of accessibility.

This consultation has cross over with the European Accessibility Act which is currently in debate within the Euopean Parliament. techUK are one of many organisations providing input into this directive which is expected to conclude in 2018. We would ask that Ofcom consider the potential opportunities for unified dialogue on these areas of accessibility and avoid conflict or divergence from a Pan European directive which manufacturers will want to see applied consistently across Europe and the UK.

We are surprised that little consideration has been given to the rapid development of voice control UIs that can provide major usability benefits to users with visual impairments. For example, a feature that enables a user to ask their device to describe the programmes coming up or those with audio description has the potential to be far more helpful than a UI display. These types of options are real possibilities and it would appear that the recommendations in this consultation focus mainly on changes to the UI world we see today, rather than considering the greater possibilities that this fast changing sector is rapidly moving towards.

techUK maintains that Ofcom can add value to the process by supporting a cross stakeholder approach in the following areas.

1) Researching current solutions on the market place and user preferences as to the pros and cons of available accessibility supporting solutions.
2) Cross industry collaboration to standardise current solutions where they can be applied across the widest possible range of services and devices.
3) A greater level of investigation into how the growth of connected devices, machine learning and artificial intelligence can support improved accessibility. This consultation appears to focus on technologies that exist today and neglects to explore emerging technologies that may provide more effective solutions.
4) More effective communications to targeted user groups on the accessibility features that are available, helping users make more informed choices.

Ofcom may also wish to consider how the specification/ Trade Mark licence requirements of propriety EPGs can restrict the options that device manufactures have in implementing

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accessibility solutions. The consultation refers to the potential benefits of Android TV's Accessibility SDK (A6.59). It is worth noting that at least one EPG provider does not allow the use of its EPG environment on Android TV. This makes it impossible for manufacturers to implement such a solution and comply with the Trade Mark Licence requirements of such EPG providers.

Ends