

## Communications Consumer Panel and ACOD's response to Ofcom's consultation on the UK preparations for the World Radiocommunication Conference 2015 (WRC-15)

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### Introduction

The Communications Consumer Panel and ACOD welcome the opportunity to comment on Ofcom's consultation on the UK preparations for the World Radiocommunication Conference 2015 (WRC-15).

The Panel works to protect and promote people's interests in the communications sector. We are an independent body, established by the Communications Act 2003. The Panel carries out research, provides advice and encourages Ofcom, Government, the EU, industry and others to look at issues through the eyes of consumers, citizens and micro businesses. The Panel pays particular attention to the needs of older people and people with disabilities, the needs of people in rural areas and people on low incomes, and the needs of micro businesses, which face many of the same problems as individual consumers. There are four members of the Panel who represent the interests of consumers in England, Northern Ireland, Scotland and Wales respectively.

Following the alignment of the Advisory Committee for Older and Disabled People with the Panel, the Panel is more alert than ever to the interests of older and disabled consumers and citizens.

### Introductory remarks

We recognise that the last WRC in 2012 agreed to a co-primary mobile allocation for the 700 MHz band - subject to the necessary technical studies - and that, following discussion on the use of the 700 MHz band (i.e. 694 - 790 MHz) for mobile broadband, a final decision will be taken at WRC-15.

While Ofcom on behalf of the UK supports the change and see the benefits this brings to support the further development of mobile broadband at international level, it also wants to ensure the continued protection of adjacent Digital Terrestrial Television (DTT) platform use of channel 48 (centred upon 690 MHz).

We also note that Ofcom expects the 470 - 694 MHz band to be the subject of debate at WRC-15. In most countries, this band is predominantly used for broadcast television services, as is the case in the UK.

As the Panel noted in its recent response to Ofcom's consultation on the future use of the 700 MHz band (Annex1), the likely global harmonisation of 700 MHz for mobile broadband has the potential to bring about benefits for UK consumers. The Panel notes that the use of this lower frequency spectrum should enable fewer masts to be required to provide call coverage and carry mobile data - resulting in better quality of service for consumers and potentially lower prices resulting from the lower operating costs for providers. The case is put forward that harmonisation of 700 MHz internationally also has the potential to deliver economic benefits to consumers in terms of internationally compatible equipment, including mobile handsets, and the related lower costs for manufacturers. The Panel welcomes, too, Ofcom's consideration of possible future options in respect of using some of the 700 MHz band to deliver multimedia based emergency services applications.

However there are risks for consumers associated with this proposed harmonisation of the 700 MHz band - and even potentially the 470 - 694 MHz band - in terms of their access to DTT, additional costs (as a result of the need for new aerials and potentially filters) and confusion.

Internet Protocol television (IPTV) is not currently a viable alternative to DTT, regardless of the issue of whether viewers' broadband services are adequate for carriage - or even whether viewers have a broadband connection at all. We urge caution therefore in the wider context when considering reallocation of spectrum that might have an adverse impact on consumers and citizens.

## Response

### *The case for reallocation*

As a general observation, whilst the Panel recognises the increase in mobile device ownership, we are unsure about the evidence base behind demand predictions - the reliability of which we do not believe can be certain. Although it is important that consumers and citizens can enjoy the mobile data services they want and need, there are also sections of society who will not benefit to such an extent from improvements to mobile services. It is important that a balance is struck between the potentially competing needs of these groups. Given the costs of change and potential consumer impact of the required modifications to DTT, especially to more vulnerable customers, we have advised that Ofcom should proceed with some caution concerning the proposed changes to the 700 MHz band, with a robust and sustainable validation of the case for what currently seems to be a very generalised statement of possible benefits.

The benefits of lower cost internationally compatible equipment would seem to be already fully available to consumers, given that these terminals are also compatible with the current 800 MHz, 900 MHz, 1800 MHz and 2100 MHz deployments, and are likely to remain so. The suggested benefits to consumers generally are, therefore, speculative at this stage

- so we would again urge caution when considering and assessing the broad consumer impact.

We remain extremely sceptical about the case that, even if 800 MHz provides the right coverage, the extra spectrum at 700 MHz will be needed for capacity reasons. In the UK, there is already 30 (x 2 MHz) of the 800 MHz band available, with a pair of 5MHz licences yet to be deployed by licence holders. In addition, the reuse of 900 MHz at these sites provides further significant local capacity, and the deployment of higher frequency bands (1800, 2100 etc) at cell centres further increases capacity.

We welcome the recent report by former European Commissioner Pascal Lamy which highlights the need for sufficient lead time to ensure a transition path that minimises cost for spectrum users and citizens if 700 MHz is reallocated ; that regulatory stability should be ensured for broadcasting to continue its current use of the band 470-694 MHz until 2030 and that, in order to take into account the evolving change in consumer demand as well as new technologies, a stock-taking exercise of UHF spectrum use should be done conducted by 2025.

### *DTT Viewers*

As the Panel has noted in its recent response to Ofcom's consultation on the future use of the 700 MHz band, the DTT platform has an important role in providing low-cost, near-universal access to the public service TV channels, contributing to inter-platform competition and in sustaining viewer choice. Given that Ofcom's consultation on 700 MHz noted that any change will involve substantial infrastructure costs, it is vital that the DTT platform can remain viable, innovative and competitive so that the interests of consumers and citizens who are not on a payTV platform are protected.

We continue to urge therefore that careful consideration is given to the impact that any change in spectrum allocation could have on DTT consumers - especially more vulnerable people. Over 75% of households use the DTT platform through Freeview and YouView, with 40% of households using it on their main TV set. This year's *Communications Market Report*<sup>1</sup> notes that DTT had the highest proportion of all the digital platforms for people aged 65+, and the highest proportion of those from DE households. Individuals in DTT-only households watched on average 4.0 hours of television per day, higher than the viewing average across those households with digital satellite or digital cable - this is probably due to the older demographic skew. As stated in last year's *Disabled consumers' ownership of communications services*<sup>2</sup> and as illustrated in the figure below, there is a lower ownership of pay TV among people with a disability, regardless of socio-economic group. Disabled people are less likely to have pay TV (46% compared to 55%), whether satellite or cable.

This is also a consumer expectation highlighted in the Kantar study - that TV equipment sold from now on will be future proof. Respondents expected clear information about

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<sup>1</sup> <http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr14/>

<sup>2</sup> <http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/tce-disabled-13/>

what technologies would last and those that would require updates or potentially be rendered redundant or obsolete by any changes to DTT.

Age and disability do not necessarily confer vulnerability but we believe that, in the context of the proposal, the position of vulnerable consumers must be a very high priority. They should not be at any disadvantage because of a change that may have no direct benefit to them.

We therefore welcome the statement that Ofcom sees an important role for DTT in the UK for many years, and is monitoring developments carefully - but has a current expectation that it would resist a co-primary mobile allocation in the 470 - 694 MHz band at WRC-15.

In view of our ongoing concerns about network coverage, the Panel welcomes the possibility of improved indoor coverage. Given that the benefits case for the release of the 700 MHz band to mobile services is, to a significant degree, based on the improvements in performance that mobile users would experience - particularly for indoors and in rural areas - we have strongly urged Ofcom to impose very high, near universal coverage obligations for voice and data on the awards of 700 MHz spectrum, along with meaningful sanctions if they are not met.

Ultimately, the Panel believes that the costs associated with any change in spectrum allocation should be borne by businesses that benefit rather than consumers. Although, as Ofcom predicts, there will probably be some benefits to consumers, the primary benefit, in terms of profit and technological opportunities, will be to the phone manufacturers and network operators - they should therefore, in our view, bear the cost of any change. We have also encouraged Ofcom to work with operators to ensure that they are using their allocated spectrum to best and most efficient effect as part of any process to make further spectrum available.

### *Summary*

- The likely global harmonisation of 700 MHz for mobile broadband has the potential to bring about benefits for UK consumers.
- However there are risks for consumers associated with this proposed harmonisation of the 700 MHz band - and even potentially the 470 - 694 MHz band - in terms of their access to DTT, additional costs (as a result of the need for new aerials and potentially filters) and confusion. Internet Protocol television (IPTV) is not currently a viable alternative to DTT.
- We are unsure about the evidence base behind demand predictions - the reliability of which we do not believe can be certain.
- Given the costs of change and potential consumer impact of the potentially required modifications to DTT, especially to more vulnerable customers, we have advised that Ofcom should proceed with some caution concerning the proposed changes to the 700 MHz band, with a robust and sustainable validation of the case for what currently seems to be a very generalised statement of possible benefits.
- The benefits of lower cost internationally compatible equipment would seem to be already fully available to consumers and we remain extremely sceptical about the

case that, even if 800 MHz provides the right coverage, the extra spectrum at 700 MHz will be needed for capacity reasons.

- The DTT platform has an important role in providing low-cost, near-universal access to the public service TV channels, contributing to inter-platform competition and in sustaining viewer choice.
- It is vital that the DTT platform can remain viable, innovative and competitive so that the interests of consumers and citizens who are not on a payTV platform are protected. We continue to urge therefore that careful consideration is given to the impact that any change in spectrum allocation could have on DTT consumers - especially more vulnerable people.
- We have strongly urged Ofcom to impose very high, near universal coverage obligations for voice and data on any awards of 700 MHz spectrum, along with meaningful sanctions if they are not met.
- Ultimately, the Panel believes that the costs associated with any change in spectrum allocation should be borne by businesses that benefit rather than consumers.
- We have also encouraged Ofcom to work with operators to ensure that they are using their allocated spectrum to best and most efficient effect as part of any process to make further spectrum available.



## Communications Consumer Panel and ACOD's response to Ofcom's consultation on future use of the 700 MHz band

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### Introduction

The Communications Consumer Panel and ACOD welcome the opportunity to comment on Ofcom's consultation on the future use of the 700 MHz band.

The Panel works to protect and promote people's interests in the communications sector. We are an independent body, established by the Communications Act 2003. The Panel carries out research, provides advice and encourages Ofcom, Government, the EU, industry and others to look at issues through the eyes of consumers, citizens and micro businesses. The Panel pays particular attention to the needs of older people and people with disabilities, the needs of people in rural areas and people on low incomes, and the needs of micro businesses, which face many of the same problems as individual consumers. There are four members of the Panel who represent the interests of consumers in England, Northern Ireland, Scotland and Wales respectively.

Following the alignment of the Advisory Committee for Older and Disabled People with the Panel, the Panel is more alert than ever to the interests of older and disabled consumers and citizens.

### Introductory remarks

The likely global harmonisation of 700 MHz for mobile broadband has the potential to bring about benefits for UK consumers. The Panel notes that the use of this lower frequency spectrum should enable fewer masts to be required to provide call coverage and carry mobile data - resulting in better quality of service for consumers and potentially lower prices resulting from the lower operating costs for providers. The case is put forward that harmonisation of 700 MHz internationally also has the potential to deliver economic benefits to consumers in terms of internationally compatible equipment, including mobile handsets, and the related lower costs for manufacturers. The Panel also welcomes Ofcom's consideration of possible future options in respect of using some of the 700 MHz band to deliver multimedia based emergency services applications.

However there are also risks for consumers associated with this proposed harmonisation of the 700 MHz band - in terms of their access to digital terrestrial television (DTT), additional costs (as a result of the need for new aerials and potentially filters) and confusion.

The DTT platform has an important role in providing low-cost, near-universal access to the public service TV channels, contributing to inter-platform competition and in sustaining viewer choice. Given that the consultation notes that the change to 700 MHz will involve substantial infrastructure costs, it is vital that the DTT platform can remain viable, innovative and competitive so that the interests of consumers and citizens who are not on a payTV platform are protected. Programme Making and Special Events (PMSE) applications also deliver significant cultural benefits to the UK and it is important that the efficacy of these applications is not diminished. We urge that this is given due attention if the proposal goes ahead.

Internet Protocol television (IPTV) is not currently a viable alternative to DTT, regardless of the issue of whether viewers' broadband services are adequate for carriage - or even whether viewers have a broadband connection at all. We urge caution therefore in the wider context when considering reallocation of spectrum that might have an adverse impact on consumers and citizens.

Ultimately, the Panel believes that the costs associated with any change in spectrum allocation should be borne by businesses that benefit rather than consumers. Although, as Ofcom predicts, there will probably be some benefits to consumers, the primary benefit, in terms of profit and technological opportunities, will be to the phone manufacturers and network operators - they should therefore, in our view, bear the cost of any change. We would also encourage Ofcom to work with operators to ensure that they are using their allocated spectrum to best and most efficient effect as part of any process to make the reallocated 700 MHz band available.

## Response

As a general observation, whilst the Panel recognises the increase in mobile device ownership, we are unsure about the evidence base behind the demand predictions - the reliability of which we do not believe can be certain. Although it is important that consumers and citizens can enjoy the mobile data services they want and need, there are also sections of society who will not benefit to such an extent from improvements to mobile services. It is important that a balance is struck between the potentially competing needs of these groups. While the Panel recognises the case Ofcom makes for reuse of 700 MHz band for mobile use, given the costs of change and potential consumer impact of the required modifications to DTT, especially to more vulnerable customers, we think that Ofcom should proceed with some caution, really validating the benefits case.

### *The potential benefits*

We note that the potential benefits of the change have been quantified at between £870m and £1.25bn whilst the costs are estimated at between £475m and £585m. We would be

interested to know more about the proposed end of project review to see if the benefits and cost outlined in the assessment case are realised, particularly those relating to consumers.

Whilst the Panel acknowledges that harmonisation amongst countries and continents is important to the spread of technology and economies of scale Ofcom's proposals, if followed through, would require two sectors - consumers and PMSE operators - to experience disruption not long after they were required to adjust their equipment or retune their apparatus. We note, and welcome, the benefits of a potential reduction in mobile costs as a result of the harmonisation of mobile bands between countries; but we note too that it is not yet clear that there will be a global move to allocate 700 MHz for mobile use. The benefits of lower cost internationally compatible equipment would seem to be already fully available to consumers given that these terminals are also compatible with the current 800 MHz, 900 MHz, 1800 MHz and 2100 MHz deployments, and are likely to remain so. The suggested benefits to consumers generally are, therefore, speculative at this stage - so we would again urge caution when considering and assessing the broad consumer impact.

More importantly, the case Ofcom makes for reduced network deployment costs due to more extensive coverage per site seems challenging to deliver at a practical level. All UK MNOs publically claim to be racing to deploy a very extensive rural coverage plan using 800 MHz, either as a result of 4G licence obligations, or competitive pressures. The 800 MHz physical site configuration will be completed in the next couple of years and be in place for twenty years or more, making any savings from a slightly more sparsely positioned 700 MHz network difficult to access for a number of years. Such an incremental repositioning of sites, given the marginally greater coverage of 700 MHz versus 800 MHz, to achieve lower cost is especially difficult to achieve, given that in theory most masts would have to be relocated. Either these savings are unlikely to be achieved, and therefore not passed on to consumers, or even worse, there has to be a risk that some operators without the 4G coverage obligation choose to delay their final rural deployment until 700 MHz becomes available, putting back the provision of ubiquitous rural mobile internet coverage even further.

The case might be made that even if 800 MHz provides the right coverage, the extra spectrum at 700 MHz will be needed for capacity. We remain extremely sceptical of this case. There is already 30 (x 2) MHz of 800 MHz available, with a pair of 5MHz licences yet to be deployed by licence holders. In addition, the reuse of 900 MHz at these sites provides further significant local capacity, plus the deployment of higher spectra (1800, 2100 etc) at cell centre further increases capacity.

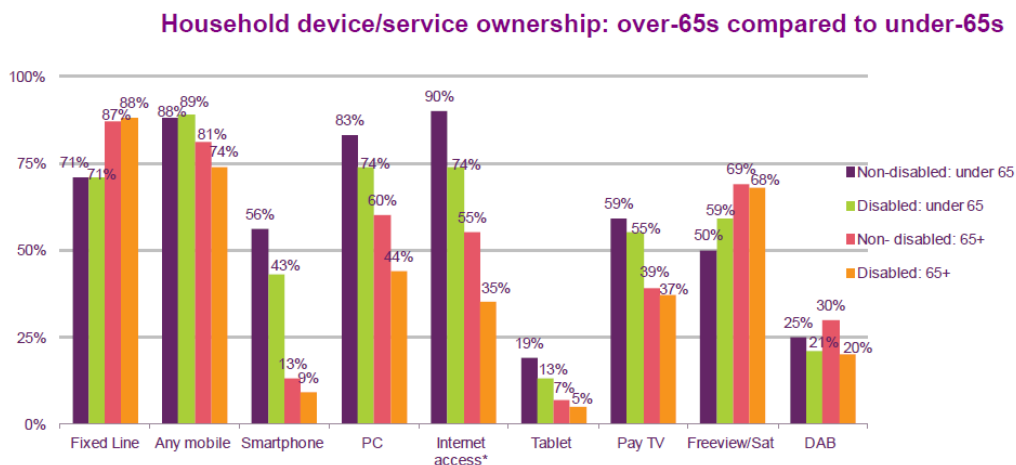
### *DTT viewers*

As noted above, we appreciate and understand the benefits that the allocation of the 700 MHz band to mobile services could bring, but continue to urge that careful consideration is given to the impact that the change could have on DTT consumers - especially more vulnerable people. As the consultation notes, over 75% of households use the DTT platform through Freeview and YouView, with 40% of households using it on their main TV set. This



year's *Communications Market Report*<sup>3</sup> notes that DTT had the highest proportion of all the digital platforms of people aged 65+, and the highest proportion of those from DE households. Individuals in DTT-only households watched on average 4.0 hours of television per day, higher than the viewing average across those households with digital satellite or digital cable - this is probably due to the older demographic skew. As stated in last year's *Disabled consumers' ownership of communications services*<sup>4</sup> and as illustrated in the figure below, there is a lower ownership of pay TV among people with a disability, regardless of socio-economic group. Disabled people are less likely to have pay TV (46% compared to 55%), whether satellite or cable.

Age and disability do not necessarily confer vulnerability but we believe that, in the context of the proposal, the position of vulnerable consumers must be a very high priority. They should not be at any disadvantage because of a change that may have no direct benefit to them.



Source: British Population Survey, 2012: July - September 2012

Base: non-disabled under 65: 14,396, disabled under 65: 2,101, non-disabled 65+: 3,016, disabled 65+: 1,994

\*Internet access is based on personal access anywhere – other services and devices are based on presence in home rather than individual ownership.

Source: *Disabled consumers' ownership of communications services*

## Impact

The Panel notes that the use of 700 MHz for mobile broadband would require a frequency re-plan of the existing DTT platform and that one element of this is that it could create a need for some DTT households to use a wideband aerial - estimated at 0.5% of households using DTT. It is estimated that if a change of use happened in 2020, it would require between 105,000 and 110,000 consumers to replace their aerials at an estimated cost of £3-£6 million, in order to receive public service broadcasting (PSB) and commercial

<sup>3</sup> <http://stakeholders.ofcom.org.uk/market-data-research/market-data/communications-market-reports/cmr14/>

<sup>4</sup> <http://stakeholders.ofcom.org.uk/market-data-research/other/telecoms-research/tce-disabled-13/>

multiplex channels. We would, in due course, welcome more detail on how the affected households might be identified and targeted for support. Whilst the percentage is small, the absolute number is significant and those who are affected deserve a high level of assistance, information and support.

The Panel welcomes the consultation's acknowledgment that any reallocation of 700 MHz would have an impact on consumers, either in terms of:

- retuning for the majority (as noted above);
- the installation of wideband aerials for fewer people; or
- the fitting of a filter (or improving DTT installations or replacing equipment) for a small proportion of viewers to avoid interference.

Associated with this, we welcome the consultation's quantification of the time consumers will need to take to retune or arrange upgrading of aerials.

### ***Information and support***

The Panel considers that the digital switchover was well managed, especially for older and disabled people. We have also been impressed with the planning and, so far, the execution of work to mitigate potential interference at 800 MHz. We recognise that both of these projects were large scale but we hope that they will be used to inform how best to provide support to consumers following any re-allocation of 700 MHz.

We welcome the consultation's acknowledgement that vulnerable consumers will need particular consideration and information during any transition. The consultation refers to the intention, should Ofcom proceed with the proposed changes, to work with Government, broadcasters and mobile operators. We would also stress the importance, as in digital switchover, of working with consumer support organisations - particularly in relation to support for more vulnerable consumers. The need for this is highlighted by the March 2013 Mendip and Winter Hill transmission areas retune data research which, although it noted that 79% of viewers said they would feel confident about retuning equipment, suggests that just over a fifth of viewers *did not* say that they would be confident. Whilst the consultation notes (in paragraph 6.7) that Ofcom recognises that some viewers might find the retuning process challenging, it does not give further detail on what solutions might be explored. Similarly, some consumers will need assistance in identifying why interference is occurring and potentially the fitting of a filter or other measures to resolve interference. As noted above, we would expect any costs relating to the upgrading of aerials, and provision and fitting of filters or new equipment, to be borne by industry rather than consumers - particularly given the demographic skew to older and lower income households in DTT ownership.

### ***Wider preparation***

In its previous response, the Panel highlighted the need for the pre-emptive installation of wideband aerials rather than narrow band, where aerial replacement is occurring. We are therefore heartened by Ofcom's work with industry stakeholders, and in particular the

Confederation of Aerial Industries (CAI) to ensure that the promotion of future-proofed antennae. However we are concerned by the suggestion that in the order of 10% of newly installed antennae may not be future-proofed.

We would continue to encourage Ofcom to work with receiver manufacturers to inform them of the potential 700 MHz harmonisation issues, particularly as this would be a pan-European situation, so that new equipment can include appropriate filtering solutions. This is also a consumer expectation highlighted in the Kantar study that TV equipment sold from now on will be future proof. Respondents expected clear information about what technologies would last and which would require updates or potentially be rendered redundant by any changes to DTT.

### *Obligations*

In view of our ongoing concerns about network coverage, the Panel welcomes the possibility of improved indoor coverage. Given that the benefits case for the release of the 700 MHz band to mobile services is, to a significant degree, based on the improvements in performance that mobile users would experience, particularly for indoors and in rural areas, we would strongly urge Ofcom to impose very high, near universal coverage obligations for voice and data on the awards of 700 MHz spectrum, along with meaningful sanctions if they are not met.