



OFCOM CONSULTATION: Digital Dividend Clearing the 800MHz Band BECTU Response

BACKGROUND

1. The Broadcasting, Entertainment, Cinematograph, and Theatre Union has 26,000 members working in the creative sector across a range of industries. Among them are several hundred who are currently involved in implementing the DTT digital switchover, and thousands who directly and indirectly have regular contact with radio microphones and other wireless devices in the entertainment industry.
2. In the current consultation our principal interest is the future of PMSE wireless devices in the UK, although we also have views on the likely transfer of a significant block of spectrum in UHF Band V to the mobile telecoms sector, which are expressed below.
3. BECTU has consistently argued throughout the DDR consultation that spectrum should continue to be made available to the PMSE sector to allow the use of radio microphones, both in the form of a dedicated UHF channel, and access to interleave channels on a geographic basis within the DTT frequency plan. We have expressed the near-unanimous view of practitioners in the sector that the preferred outcome of the consultation process is that the status quo should endure.
4. However, we have also observed that, should any migration away from the current dedicated PMSE Channel 69 occur, it should be planned and carefully managed, and we therefore welcome Ofcom's initiative in conducting an in-depth consultation on the use of Channel 38 for PMSE applications.

CHANNELS 61-69

5. On the issue of whether consumer interests will be furthered by the alignment of C.61, C.62, and C.69 with the emerging digital dividend frequency allocation elsewhere in Europe (Question 1), we are not equipped to comment in depth. We would point out though, as we have done previously, that the current plan for DTT allows the launch of High Definition TV services on such a restricted basis that they will be more an engineering novelty than a consumer gain, compared with the comprehensive availability of HD channels expected soon on cable and satellite.

6. This, we have argued, will cause the Freeview platform gradually to wither on the vine unless more HD capacity is added to the network, jeopardising the existence of a free-to-air TV distribution system in the UK. One possible option for creation of this capacity would be TV operators securing spectrum at auction, and then adding HD services via the DVB T-2 standard, which should begin appearing in consumer equipment later this year. DVB T-2 is already Ofcom's planned standard for Freeview Mux B, the only DTT multiplex due to offer HD services in the foreseeable future.
7. Any decision to pre-ordain the use of 790-862 MHz by the mobile telecoms sector will not only conflict with Ofcom's cherished principles of technology and application neutrality when disposing of spectrum, but will also restrict the disposable bandwidth available for HD broadcast television use, should any interested parties exist to submit bids for the use of released spectrum for DTT.
8. If Ofcom sees fit to dedicate C.61-C.69 to mobile telecoms, the regulator will need to address the inevitable calls for similar dedication of spectrum in the released lower sub-band channels to the TV broadcasting industry, where DTT could be expanded using DVB T-2 on Single Frequency Networks.
9. We agree with the proposed migration criteria (Question 2) but would like to see the interests of the PMSE sector explicitly included, obliging Ofcom to secure the continued access of users in the sector to a dedicated channel for wireless devices, and the remaining DTT interleave channels post-DSO. We note though that the needs of the PMSE sector are comprehensively covered elsewhere in the 800MHz consultation.
10. We would also like to see a criterion calling for any replanning of the DTT network to take account of developments in technology (e.g. DVB T-2) and the desirability of offering a wide range of HD services to consumers via the Freeview platform.
11. BECTU would hope that the technical arrangements for clearing the 800MHz band present broadcasters, PMSE users, and consumers with as little disruption and difficulty as possible, and believe that the "hybrid" option comes closest to achieving this (Question 3). We have reservations about the DSO-integrated implementation of this, or any other option (Question 4). Our preference would be for a re-cast DSO frequency plan, notwithstanding the delay this may introduce, since this would allow time for further assessment of the scope for SFNs and extended HD services on Freeview, both within the planned DTT spectrum, and in some of the released spectrum.
12. We have no view on the governance arrangements outlined in 4.56 (Question 5). Nor are we able to comment on the costs associated with

migrating C.61 and C.62 into the lower sub-band (Question 6 and Question 7).

MIGRATION OUT OF CHANNEL 69

13. In defining criteria to inform any decision about moving PMSE users from C.69 to C.38, we believe that 5.24 should be expanded to add the usage of C.39 and C.40 as a factor in determining whether the migration is reasonable (Question 8). Ofcom has clearly taken account of the current practice, especially for theatre entertainment and large TV and other events, of using equipment which tunes to C.69, and two adjacent channels, 67 and 68.
14. Although it may be expected that technological developments may by now have expanded tuning ranges beyond the traditional 24 MHz that prevails, issues of miniaturisation and antenna design militate against any significant expansion. This situation is markedly exacerbated by the uncertainty, and potential financial collapse, facing the UK's specialist manufacturers of PMSE equipment, who are unable to invest in research and development at a time when customers have dramatically cut back on buying new devices.
15. Our technical understanding about alternatives to C.69 is that a combination of C.38, coupled with access to DTT interleave, is the least bad option available, although without rehearsing once again old arguments, our preferred outcome would still be the status quo (Question 9). We are in no position to comment authoritatively on Ofcom's financial analysis of the migration from C.69 (Question 10).
16. In answer to (Question 11), we would agree that, in the circumstances and on balance, C.38 is the best alternative to C.69, despite anecdotal reports from some practitioners about interference and propagation problems with equipment tuned to the lower sub-band. However, this view needs to be qualified, for example by knowledge of DTT usage in C.39 and C.40, as well as knowledge of the application to be implemented in C.37. Until interference problems have been thoroughly assessed it is impossible to state definitively that C.38 is the best alternative.
17. If Channel 38 is eventually to be the dedicated PMSE channel, we agree it would be entirely logical to award it to the proposed Band Manager on the same terms as C.69 would have been (pace our previously-expressed views on the detailed regime within which the Band Manager would have to operate) (Question 12). Similarly, we support the continued access of the PMSE sector to Channel 36, Channel 69, and the current interleave, on the basis proposed (Question 13).

COMPENSATION TO PMSE EQUIPMENT OWNERS

18. Ofcom's plans for compensation of PMSE users who are forced to migrate from C.69 probably cause the greatest concerns to BECTU, and present the greatest financial challenge to the sector as a whole (Question 14).
19. Understandably we welcome Ofcom's willingness, in principle, to incorporate some mechanism for compensation to be paid to owners of equipment rendered redundant by the migration from C.69, including lone operators, hire companies, and larger entities like broadcasters and theatre companies.
20. However, the eligibility criteria for compensation fall hopelessly short of the arrangements that will be needed to effect an orderly and disciplined exit from Channel 69 without an enormous, and in some cases fatal, financial blow being suffered by the sector. In setting out compensation only for equipment bought before 02.02.09, ruling out any compensation for equipment operating in the interleave spectrum, and assuming a 10-year write-down period for kit, Ofcom has overlooked points that have been made repeatedly and articulately by the sector throughout the long DDR consultation.
21. We wish to make three key points on compensation:
 - a) The cut-off date in February 2009 is an artificial threshold that takes no account of the fact those businesses and operators who depend on wireless devices will continue having to operate in the existing spectrum until the migration from Channel 69 is implemented. During this time normal business, in the form of expanded demand and equipment failure, will require the purchase and replacement of wireless devices, irrespective of the short lifespan they are likely to enjoy due to the DDR changes and their imminent obsolescence. We are unaware of any equipment suitable for re-tuning to C.38 being available at present, so any new equipment bought after February 2009 will still become obsolete in the near future, yet there are circumstances where it must be purchased. Ofcom therefore has a simple choice: either commit to compensation for any equipment which cannot be used on C.38 regardless of purchase date, or risk paralysing the entire wireless arm of the PMSE sector, including the manufacturers who serve it.
 - b) The exclusion from any compensation scheme of equipment operating on interleave frequencies, as opposed to C.69, seems to us perverse, and will be a crippling financial burden to hire companies, broadcasters, theatres, and other PMSE equipment owners who need more than the 8-10 spot frequencies that Channel 69 offers. They have made legitimate use of TV interleave spectrum for over 50 years and can claim with the

same justification as users in Channel 69 that the migration will impose a significant re-equipping cost that must be met from somewhere. Those that survive the financial shock will have to pass on this cost, meaning that money will simply disappear out of the industries they serve, leading to consumer detriment, rather than gain, amongst TV and film viewers, theatre goers, and others who patronise the sector. Ofcom's differentiation of Channel 69 equipment from interleave frequency devices on the basis that the latter have operated on a grace and favour basis for half a century is an example of casuistry at its worst.

- c) Adoption of an assumed 10-year life cycle for wireless equipment is a serious underestimate of the actual lifespan of radio microphone equipment in particular. Our members, and their direct or indirect employers, have invested significant sums by purchasing top-end, well-engineered, professional equipment, in the interests of reliability, quality, and best performance. The manufacturing standards of this kit ensure that it continues to operate perfectly for as long as 20 years, and many of our lone operator sound members have large inventories of equipment well over 10 years old which is still used in high-quality environments on a daily basis. We believe that Ofcom should acknowledge the reality of the UK's installed base of radio mic and wireless PMSE equipment, and base compensation payments on an assumed life of 15-20 years.
22. Overall, on the question of compensation for obsolete kit, we believe it is in the interests of Ofcom to devise arrangements which not only allow PMSE users to invest in new equipment, but also mop up the enormous stock of radio microphones which will cease to be legal, but in the wrong hands could cause interference problems both for DTT broadcasters and viewers, licensed PMSE operators, and any new occupants of the released spectrum, including the mobile operators in C.61-69.
23. The mooted three-year period for migration from Channel 69 will, as Ofcom observes, be challenging (Question 15), and we would prefer as much notice, and as long a transfer period, as possible. Having said that, Ofcom must bring an end to the uncertainty over both migration and compensation. The loss of business, apart from enforced purchases of new equipment as outlined above, is posing a threat to the sustainability of the UK's manufacturers and the future economic survival of operators and hire companies will be jeopardised if plans for a fair but adequate compensation scheme are not made known soon.

CONCLUSION

24. Although BECTU would have supported continuation of the status quo arrangements for wireless devices' access to spectrum, we acknowledge that Ofcom has adopted a practical and proactive

approach to migration away from Channel 69. Provided the issue of compensation for current equipment owners is resolved satisfactorily, the sector should manage to absorb the change without significant disruption if enough time is allowed. We are aware though that the loss of interleave spectrum under the DDR will in some locations lead to spectrum scarcity in the future.

25. We would, however, prefer a thoughtful and measured approach to the wider implications of awarding C.61-69 to mobile and telecoms operators, since it could provide an opportunity to improve the services available to DTT Freview users, even within the pre-planned spectrum that broadcasters retain. A re-casting of DSO would enable policy makers and spectrum planners to take advantage of new technologies which have emerged since the DDR consultation began, and could offer consumers a tangible and welcome benefit from the process.