



## DTG response to Ofcom's Call for Input on UK preparations for WRC-23

The DTG welcomes the opportunity to provide a contribution to help inform the UK position at WRC23 with regards to question 7.

DTG supports this work in its role as the industry association for digital television in the UK, and as the publisher of the Digital Terrestrial Television (DTT) Requirements for Interoperability in the UK ([DTG D-Book](#)).

Evidence from DTG cross-industry research into establishing a Pathway for Future UK Television (September 2022), shows that the emerging *IP-centric* market proposition needs significant improvement before it is a viable option at scale for UK citizens and industry. Our research demonstrates that characteristics of the IP-centric market sector are substantially different, more complex and involve a much wider group of stakeholders than broadcast television.

Additionally, the DTG's scope of activities coordination of PMSE interests between UK broadcasters and the British Entertainment Industry Radio Group (BEIRG) via the DTG PMSE Group.

This response reflects the general interest of the DTG membership including the more specific interests of the DTG PMSE group.

### Question 7

**What are your views on the proposed approach for 470-694 MHz, recognising the national decisions already in place and taken for DTT multiplex licensing in the band, and the additional and supplementary spectrum made available for UK PMSE usage?**

The DTG supports a "No Change" position on this agenda item for reasons set out in this response and is pleased that this is also the preliminary view of Ofcom.

The view of the DTG is that this position should be confirmed and robustly defended because any decision facilitating a co-primary allocation in 470-694 MHz could force the UK to move to clear DTT and PMSE services from part or all of the spectrum even if it does not wish to. The WRC decision making process is based on achieving consensus and Ofcom outlines in the CFI that several European countries are in a similar position to the UK with respect to the need for continued access to the 470 to 694 MHz band for DTT. The UK therefore has an opportunity to lead on policy-making globally by adopting a "No Change" position publicly. If the UK is not successful in defending this position, it is likely that co-primary allocations would be made and exploited by some of our neighbouring states to the detriment of UK consumers and industry.

In addition, DTG is aligned with the view of BEIRG as detailed in their response to the CFI that the Radio Regulations and the Geneva 2006 Regional Agreement for digital television broadcasting already provides the necessary flexibility for any country in Region 1 to introduce Mobile Services without affecting neighbouring states. Ofcom itself highlights this flexibility in relation to other Agenda Items set out in the CFI.

In supporting "no-change" DTG notes that there are claims that it is possible to sustain DTT and PMSE services in the UK if adjacent countries chose to use co-primary allocation to launch mobile

services, however in practice history demonstrates that this would be very challenging; previous co-primary allocations have resulted in a harmonised removal of PMSE and DTT from that spectrum, as highlighted in section 5.1.2 of the CFI. It follows that a co-primary allocation at WRC23 could unintentionally force the UK to move to clear PMSE and DTT from some or all of 470-694 MHz before any proper consideration has been given to the following:

- DTT broadcasting remains an essential means of primary TV reception for millions in the UK
- UK IP video infrastructure, systems, consumer premises equipment and the legislative framework that they sit within are unable to deliver content to mass audiences with the quality of experience, the level of trust and consumer protection of DTT
- DTT multiplex licences have recently been renewed until 2034 and there is no plan for transitioning from DTT broadcast services to other means of public service content delivery
- Recent experience of DTT not being available in areas such as during the Bilsdale transmitter outage in August 2021 demonstrate just how unprepared the UK is for a migration away from broadcast delivery in UHF
- Clearances of DTT and PMSE from 800 MHz and 700 MHz bands reduced capacity for these services to an extent such that further loss of UHF spectrum would not be possible without reducing current operations with the consequential serious damage to the UK's creative industries and impact on consumer choice
- There is insufficient evidence to support the case for allocating further UHF spectrum for mobile broadband use<sup>1</sup>
- The 470-694 MHz band provides harmonised access to spectrum for PMSE in Europe and the rest of the world, providing significant benefit to UK production companies operating abroad; loss of the 470-694 MHz band would inhibit these companies both at home and outside the UK, its loss would significantly increase cost
- PMSE users have had two un-planned replacements of equipment imposed upon them in recent years, the economic impact of which was only partly covered by Government compensation schemes leaving users to absorb the considerable cost over-run for little or no benefit
- There is no alternative spectrum available in the UK which supports all current PMSE applications (see Annex 1)

## **Conclusion**

DTG supports Ofcom in its position for “No Change” on Agenda Item 1.5. DTG's view is that this position should be ‘non-negotiable’ and any change of use, for example to a co-primary designation with IMT, could result in the UK losing control over future use of the 470-694 MHz band. It is not necessary to consider any move to clear DTT and PMSE from the band, or parts of it in order to

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<sup>1</sup> The results of a recent ITU questionnaire (<https://www.itu.int/pub/R-REP-BT.2302-1-2021>) provide evidence that the mobile industry does not need extra spectrum - only 10 of 120 countries across ITU Region 1 indicated a need for more spectrum for mobile services. This is in contrast to the 95 countries that responded with a preference for reserving the spectrum in question for broadcasting use only.

accommodate mobile broadband and there is insufficient evidence to support the case that further UHF spectrum allocations are needed for mobile broadband services.

## Annex 1

### **Access to additional spectrum for PMSE audio**

Section 5.1.5 of the CFI highlights access to additional spectrum made available for audio PMSE (960-1164 MHz) following the reallocation of the 700 MHz band to mobile services. Ofcom's study on the impact of the loss of 700 MHz<sup>2</sup> to IMT highlighted the following in respect of post-clearance for very large events: "there is a risk that in some areas spectrum supply might be sufficiently low that some events might fall into the critical category. This impact would be especially acute in the case of touring shows.". The mitigation for the reduction in available spectrum for audio PMSE following 700 MHz reallocation was the introduction of the 960-1164 MHz band n.b. this was not due to inefficiencies in spectrum usage of audio PMSE equipment as implied in the CFI. The PMSE industry has successfully adopted digital audio equipment for professional use in the 960-1164 MHz band in the UK however the loss of further UHF spectrum for PMSE such as the 600 MHz band would place the PMSE industry in an even worse position to that prior to the 960-1164 MHz allocation in terms of the risk of spectrum shortages for large events and studio complexes.

### **Impact on UK DTT and PMSE of European use of mobile broadband in 470-694 MHz**

Section 5.1.11 of the CFI states that "We do not consider that the UK's use of PMSE in the 470-694 MHz band, would be materially affected by any potential European use of the band for mobile broadband whilst our use of the band for DTT is retained.". As highlighted above, the 470-694 MHz band provides harmonised access to spectrum for PMSE in Europe and the rest of the world, providing significant benefit to UK production companies operating abroad; loss of the 470-694 MHz band would inhibit these companies both at home and outside the UK, and would significantly increase cost. As such, we consider that the UK's use of PMSE in the 470-694 MHz band *would* be materially affected by any potential European use of the band for mobile broadband. Additionally, the 960-1164 MHz band introduced to mitigate previous spectrum reallocations to mobile, is a UK-specific solution, so further loss of UHF spectrum to audio PMSE would be more acutely felt by UK businesses operating audio PMSE services in EU countries.

Section 5.1.11 also states that the UK would retain its broadcasting channel allocations if there were an IMT allocation in the 470-694 MHz band. However, no country can act completely unilaterally with regards to spectrum use. Ofcom note in section 5.1.10 of the CFI that sharing of DTT and mobile services is not feasible in the same radio frequencies, and the UK is required to co-ordinate its use of spectrum with neighbouring countries to minimise cross-border interference. This is in line with Ofcom's statement that "We do however recognise that the UK's continued use of DTT in the band could limit the potential of several geographically close European countries from being able to deploy mobile broadband in the band because of the interfering levels from high power broadcasting assignments.". As such, any IMT allocation in 470-694 MHz and subsequent European use of the band for mobile broadband would create immense pressure on the UK to follow the same

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<sup>2</sup> [https://www.ofcom.org.uk/\\_\\_data/assets/pdf\\_file/0025/28492/consultation-future-use-700MHz-band.pdf](https://www.ofcom.org.uk/__data/assets/pdf_file/0025/28492/consultation-future-use-700MHz-band.pdf)



path as for 700 MHz and 800 MHz bands and clear them of broadcasting to “to make the widest and most rapid possible deployment of mobile broadband services” (section 5.1.10 of the CFI). Ofcom’s own position with regards to the 3.3-3.4 GHz band (sections 4.2.5 and 4.2.6 of the CFI) is that “No Change” is needed to protect the UK’s national position for ongoing use of the band for radar and a consistent approach is needed for the 470-694 MHz band.