EBU

OPERATING EUROVISION AND EURORADIO

29 September 2017

EBU Response to RSPG Consultation

Draft Opinion on a long-term strategy on future spectrum needs and use of wireless audio and video PMSE applications

The EBU thanks the RSPG for its work on a long-term spectrum strategy for PMSE, and welcomes the opportunity to provide comments on behalf of its 73 members across 56 countries in Europe and the surrounding region.

EBU members make extensive use of audio and video PMSE for both radio and TV broadcasting. In activities as diverse as newsgathering, sports coverage at outside broadcast locations and studio-based productions, modern broadcasting would be unrecognisable without access to spectrum used for radio cameras and microphones, as well as in-ear monitors and talkback systems.

Cultural and creative industries in Europe provide more than 12 million full-time jobs, which amounts to 7.5 % of the EU's work force, creating approximately EUR 509 billion in value added to GDP (5.3 % of the EU's total GVA)[1]. The EU audiovisual sector is a core component of Europe's cultural and creative fabric. It generates a turnover of about EUR130 billion every year, and creates high added-value jobs which are deeply rooted in local cultures and economies. EBU members are proud to contribute to that through our programme production activities. Much of this would not be possible without PMSE services.

However, in recent years, as programme production becomes more demanding, the spectrum available for PMSE has been squeezed as never before. Major events, like the 2012 Olympic Games in London, have demanded highly complex spectrum management processes to be put in place to cope with the demands for spectrum from broadcasters, news crews and the Games organisers themselves (all of which could be considered as PMSE), as well as from civil authorities, security forces and so on. . The spectrum supply in London for the 2012 Olympic Games was made possible by occurring during the UK digital switchover programme which ensured that additional UHF spectrum was available for PMSE services, and such conditions would not apply if such an event was to be repeated in future. The RSPG rightly recognises that such events demand bespoke solutions and cannot be treated in the same way as "everyday" use.

In parallel with the increasingly complex production events, however, the spectrum resources available to broadcasters for PMSE use have been reduced with, for example, the re-purposing of parts of the UHF spectrum for mobile, as well as further re-allocations of the 2.3 GHz and 3.4-3.6 GHz bands.

Partly to cope with this, the RSPG has identified the concept of "harmonised tuning ranges" as a suitable means to maximise inter-operability of PMSE equipment between countries. In some cases, these harmonised tuning ranges have also become de facto harmonised bands for PMSE use across Europe. The EBU welcomes this, and supports the RSPG in encouraging administrations to continue with this process as far as possible. For example, the proposed use of parts of the band 960-1164 MHz is being considered in CEPT, and offers potential as a further harmonised tuning range. However, the EBU also notes that this harmonised tuning approach does not increase the actual capacity of spectrum to support PMSE services.

[1] European Parliament Report on a coherent EU policy for cultural and creative industries (2016/2072(INI)) http://www.europarl.europa.eu/sides/getDoc.do?pubRef=-//EP//TEXT+REPORT+A8-2016-0357+0+DOC+XML+V0//EN

Furthermore, it is essential that within the tuning ranges a sufficient amount of spectrum is available to PMSE where stringent production requirements can be met, in particular for high-quality content.

The EBU notes that the RSPG does not propose to do any further review of spectrum availability for PMSE until around 2025. The RSPG appears to have concluded that until that date, improvements in spectrum efficiency through improved technology can match any increased demand for PMSE use. The EBU has concerns that this may not be the case, and that the technological improvements necessary to make it so are, in many cases, still unproven. We would therefore encourage RSPG to consider more frequent reviews, in consultation with stakeholders, on whether PMSE spectrum supply is meeting demand.

Research in 5G technology could offer potential in meeting some of these requirements and we note the PMSE-xG project currently underway in Germany. We believe that the work of this project has wider applicability than Germany, and would propose that administrations, manufacturers and PMSE users from across the EU should collaborate in this area to ensure solutions developed meet the technical user requirements and overcome the considerable economic hurdles in adopting 5G technologies. Concerns remain regarding the Quality of Service factors including guaranteed availability when sharing future 5G spectrum and infrastructure. PMSE users already successfully use 3G and 4G spectrum and infrastructure for critical and non-critical applications and only to supplement their preferred spectrum and technologies. While research continues into the potential of 5G technology it is important that these as yet unproven possibilities are not used as an argument against continued PMSE access to existing spectrum. Of particular importance are the 'tuning ranges' in 2GHz spectrum which the RSPG recognise are vital to meeting peak demand for large events across Member States. Therefore, the EBU supports the RSPG's call that R&D funding should be provided to the PMSE industries to explore advances in technology to improve spectrum efficiency, in particular how digital systems can be developed that offer spectrum efficiency while meeting PMSE requirements for high quality and low latency for both audio and video PMSE. Further, we also welcome the call that manufacturers should aim to enlarge the tuning ranges within which their equipment can operate.

The EBU also welcomes the RSPG's opinion that Member States should retain flexibility in use of the 2 GHz range for wireless cameras, but we have concerns that the 7 GHz band is considered equivalent to the 2 GHz band for this use. Our members' experience is that 7 GHz is considerably more restricted in its use, being limited to line of sight operations. The provision of R&D funding to the PMSE industries would allow new suitable products to be developed, particularly in higher frequency bands, including 7 GHz and above for video PMSE.

Finally, the EBU would like to emphasise that above all these detailed considerations, the need for long-term stability and regulatory certainty is paramount.

About the EBU

The European Broadcasting Union (EBU) is the world's leading alliance of public service media (PSM). We have 73 Members in 56 countries in Europe, and an additional 33 Associates in Asia, Africa and the Americas. Our Members operate almost 2,000 television, radio and online channels and services, and offer a wealth of content across other platforms. Together they reach an audience of more than one billion people around the world, broadcasting in more than 120 languages. The EBU operates Eurovision and Euroradio services.

In the EU, EBU Members in 2015 were reaching 330 million EU viewers every week, over two-thirds of the total EU population. PSM in the EU invest yearly €16.6 billion in content and 84% of their programmes are 'made-in-Europe'.