MANDATE TO CEPT
ON TECHNICAL CONDITIONS REGARDING SPECTRUM HARMONISATION OPTIONS FOR
WIRELESS RADIO MICROPHONES AND CORDLESS VIDEO-CAMERAS (PMSE EQUIPMENT)

1. PURPOSE

This mandate is a follow-up to the commitment made by the Commission in the Communication on the digital dividend\(^1\) and in the proposal for a Radio Spectrum Policy Programme.\(^2\) The main objective of this mandate is to identify technical conditions and options to make EU harmonised spectrum available for wireless radio microphones and cordless video-cameras. The aim is not to satisfy all the spectrum requirements\(^3\) of the relevant users, but rather to create a baseline for economies of scale and the functioning of the internal market.

Programme Making and Special Events (PMSE) applications fulfil an important role supporting social and cultural activities, ranging from local to EU-wide events and broadcasts, which also make a significant economic contribution. Various types of equipment are involved, such as wireless microphone applications, in-ear systems, cordless video-cameras and remote control systems, used in both professional and non-professional environments.

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\(^1\) Communication from the Commission to the European Parliament, the Council, the European Economic and Social Committee and the Committee of the Regions – Transforming the digital dividend into social benefits and economic growth /*COM/2009/0586 final*/


\(^3\) Large events may have much higher spectrum requirements. However, these are very local and may vary over time. Consequently, they are best addressed through national case by case solutions on the base of appropriate equipment standards that specify tuning ranges for equipment.
2. **JUSTIFICATION**

Pursuant to Article 4 of the Radio Spectrum Decision\(^4\) the Commission may issue mandates to the CEPT for the development of technical implementing measures with a view to ensuring harmonised conditions for the availability and efficient use of radio spectrum; such mandates shall set the task to be performed and the timetable therefore.

Without prejudice to the final text to be adopted by the European Parliament and the Council, the draft Radio Spectrum Policy Programme states that Member States shall examine ways and, where appropriate, take technical and regulatory measures, to ensure that the freeing of the 800 MHz band does not adversely affect PMSE users. In addition it states that Member States shall, in cooperation with the Commission, seek to ensure the necessary frequency bands for PMSE, according to the Union's objectives to improve the integration of the internal market and access to culture.

CEPT Report 32\(^5\) concludes that:

- The historic use of PMSE of the 470-862 MHz band will need to be adapted.
- PMSE demand for spectrum is expected to continue to rise in the medium term.
- Interleaved channels/white spaces in the UHF band are the principal spectrum for wide band audio applications. Therefore, the 470 MHz to 790 MHz range should be maintained for PMSE allowing them to operate on a temporary basis in areas where broadcasting is not yet used.
- New frequency bands could be made available to PMSE in addition to 470-790 MHz.

In order to address in particular non-professional applications and a substantial amount of professional applications, and while recognising that it is not the aim to address all spectrum requirements, there is considerable justification for harmonising the band 821-832 MHz for wireless microphones.

Furthermore, the identification of detailed technical conditions for the use of band 1785-1805 MHz by wireless radio microphones is required before considering a possible harmonisation measure which includes EU-wide operations (this could include for example indoor and outdoor use and the variety of professional and non-professional situations).

In addition to the audio applications (wireless microphones) there is another important category of PMSE equipment, cordless video-cameras, which may face spectrum access issues. Currently, cordless video-cameras are often operating in the 2.3 GHz band and additional in the 2.6 GHz band. The fact that the 2.6 GHz band has been harmonised for terrestrial systems providing electronic communications services under new conditions of use and that some Member States are contemplating the use of the 2.3 GHz in the same way, makes it necessary to consider an alternative and sustainable solution for spectrum

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\(^5\) 30 October 2009.
access for cordless video-cameras. Therefore, options or alternatives for spectrum use by cordless video-cameras need to be developed. It would be desirable to investigate new bands for cordless video-cameras use and sharing opportunities.

Considering the above and taking into account the fact that EU-wide operations (such as touring shows) as well as ordinary citizens using wireless microphone equipment for non-professional purposes, could both benefit from harmonisation, the Commission believes that an additional mandate is justified. The mandate should concentrate on the analysis of the 821-832 MHz and 1785-1805 MHz bands for wireless microphones and on clarifying technical options to address future needs for cordless video-cameras.

3. **MAIN EU POLICY OBJECTIVES**

With this mandate, the Commission issues guidance to the CEPT to continue developing technical conditions and studies serving policy objectives which contributes to an improvement of efficient use of spectrum resulting in positive economic, social and cultural benefits in the EU. These main policy objectives include:

- To ensure the availability of core spectrum for some categories of PMSE equipment, respectively wireless radio microphones and cordless video-cameras, with a view to supporting the development of media and entertainment industry (PMSE);

- To strengthen the Internal Market dimension for potential single market services and PMSE equipment, that can improve frequency management, in relation to PMSE use as well as to improve the spectrum efficiency of PMSE equipment.

- To exploit the socio-economic and cultural benefit for EU citizens and PMSE users to the fullest extent by facilitating economies of scale, lower prices and foster cross-border portability and interoperability.

4. **TASK ORDER AND SCHEDULE**

Through this mandate, the CEPT is requested:

1. To identify the technical conditions for the use of the band 821-832 MHz for wireless radio microphones (which optionally include in-ear systems and control systems) in the EU. This should take into account the technical conditions specified in EC Decision 2010/267/EU on the EU harmonisation of the 800 MHz band as well as any relevant outcomes of WRC-12.

2. To identify the technical conditions resulting in a harmonisation of technical parameters in the band 1785-1805 MHz for the use of wireless radio microphones (which optionally include in-ear systems and control systems).

3. To identify the technical conditions and the necessary frequency bands for ensuring the sustainable operation of cordless video-cameras in the EU, including spectrum sharing opportunities possible through technological developments.
To identify technical conditions which can contribute to facilitate the use of wireless radio microphone and cordless video-camera-equipment for EU-wide operations, including specific aspects to improve the frequency management and the overall spectrum efficiency of equipment,

The Commission may provide CEPT with further guidance on this mandate.

The deliverable for this mandate will be two reports A and B:

- Report A on the technical conditions for the use of the bands 821-832 MHz and 1785-1805 MHz for wireless radio microphones in the EU, including the technical conditions which can contribute to facilitate the PMSE equipment for EU-wide operations;

- Report B on the technical conditions for ensuring the sustainable operation of cordless video-cameras in the EU.

The following delivery dates are scheduled:

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<th>Delivery date</th>
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<tbody>
<tr>
<td>3/07/12</td>
<td>For RSC#40 Progress report A</td>
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<tr>
<td>4/12/12</td>
<td>For RSC#42 Progress report B</td>
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<tr>
<td>4/12/12</td>
<td>For RSC#42 Draft final report A, subject to public consultation</td>
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<tr>
<td>11/03/13</td>
<td>Final report A delivery</td>
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<tr>
<td>July 2013</td>
<td>For RSC#44 Draft final report B, subject to public consultation</td>
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<tr>
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In implementing this mandate, the CEPT shall, where relevant, take the utmost account of Community law applicable and support the principles of technological neutrality, non-discrimination and proportionality insofar as technically possible.

The Commission, with the assistance of the Radio Spectrum Committee pursuant to the Radio Spectrum decision, may consider applying the results of this mandate in the EU, pursuant to Article 4 of the Radio Spectrum Decision.

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