



ECC initiatives on spectrum for Programme Making and Special Events - PMSE

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CEPT, ECC and ECO .Who we are



European Conference of Postal
and Telecommunications Administrations

- 48 European countries cooperating to regulate posts, radio
spectrum and communications networks

regulatory agencies and/or
ministries



The ECC is the part of the CEPT that
deals with radio spectrum.



ECO: permanent office in
Copenhagen.



ECC: Background



- Harmonise efficient use of the radio spectrum, satellite orbits and numbering resources across the 48 CEPT countries
- ECC Decisions
 - ✓ Aim at harmonisation of the spectrum use through designation of frequency bands for defined purpose.
 - ✓ Voluntary basis: Members implementing the Decision commit themselves
- ECC Recommendations
 - ✓ Measures which administrations are encouraged to apply
 - ✓ Harmonisation measures for those matters where Decisions are not yet relevant or to provide guidance to national administrations
- ECC Reports: Result of studies by the ECC normally in support of a harmonisation measure
- CEPT Reports: Result of studies by the ECC in response to Mandates from the EC.



Background for PMSE in Europe



- Spectrum generally identified on a tuning range basis
 - ✓ frequency bands, from where countries may assign specific sub-bands or particular frequencies for PMSE links subject to availability, actual demand and sharing arrangements with primary services using those bands
 - ✓ equipment should be capable of being operated within the whole tuning range
- Recommendation 25-10 (2003) identifies tuning ranges for PMSE applications



Background for PMSE in Europe



Type of link	Recommended frequencies
	Tuning ranges
Radio microphones and In-ear monitors	174-216 MHz 470-862 MHz 1785-1800 MHz
Portable audio links and Mobile audio links and temporary point-to-point audio links	VHF/UHF
Cordless cameras	2025-2110/2200-2500 MHz 10.0-10.60 GHz 21.2-24.5 GHz 47.2-50.2 GHz
Portable video links	2025-2110/2200-2500 MHz 2500-2690 MHz 10.0-10.60 GHz
Mobile video links (airborne and vehicular)	2025-2110/2200-2500 MHz 2500-2690 MHz 3400-3600 MHz
Temporary point-to-point video links	Fixed service bands (Note 6) 10.0-10.68 GHz 21.2-24.5 GHz

- Most wireless microphones interleaved in UHF (TV) spectrum 470-862 MHz;
- Cordless cameras and video links use a variety of frequencies (typically above 2 GHz, and 3.4-3.6 MHz)



Need for initiatives for spectrum for PMSE in Europe



- Many changes in the spectrum usage (e.g. the ongoing growth of mobile broadband requirements) prompts need to identify stable homes for PMSE
- ECC sets up PT FM51
- ✓ ECC Report 204 (to be sent to public consultation in October 2013):
 - Replaces ECC Report 002 (from 2002)
 - Describes PMSE applications, spectrum requirements and technical developments
 - Spectrum requirements cover regular and special events
 - Specific annexes for audio links, video links and service links
- ✓ Recommendation 25-10 under review



Current activities on spectrum for audio links and wireless microphones



- 823-832 MHz and 1785-1805 MHz: Bands identified for wireless microphones. CEPT Report 50 in response to EC Mandate. Harmonised technical conditions and usability of the band for wireless microphones.
- 694-790 MHz: work in response to EC Mandate on wireless broadband communications. PMSE needs to be taken into account.
- 470-694 MHz: long term strategy for the UHF band. PMSE needs to be taken into account together with terrestrial broadcasting and broadband mobile.
- 1492-1525 MHz: studies ongoing on the technical conditions for the introduction of wireless microphones.



Current activities on spectrum for video links and cordless cameras



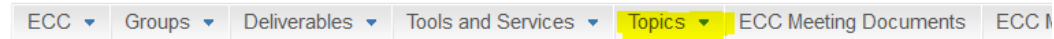
- 2300-2400 MHz: define regulatory and technical conditions for the introduction of mobile broadband on a shared basis (LSA, License Shared Access) with incumbent, including PMSE.
- CEPT Report 51 in response to EC Mandate on technical conditions and bands for cordless cameras and associated video links.
- ✓ 1900-1920 MHz/2010-2025 MHz: PMSE candidate application for the bands. Potential extension of the current 2 GHz tuning range.
- ✓ New bands under study – technical compatibility with existing use
 - 2700-3400 MHz: main existing use, radiolocation, radionavigation
 - 4400-5000 MHz: military applications
 - Bands within the 7-8 GHz range: Fixed links.



Source of information on PMSE



- Dedicated webpage on the [ECC website](http://cept.org/ecc/topics/programme-making-and-special-events-applications-%28pmse%29) (Topics):
<http://cept.org/ecc/topics/programme-making-and-special-events-applications-%28pmse%29>
- List of national administration contact points
- Results of questionnaire
- Summary of activities



ECC > Topics > Programme making and special events applications (PMSE)

Programme making and special events applications (PMSE)

This page provides information on the regulatory and technical conditions for the use of spectrum for PMSE across the CEPT countries and summarises the various spectrum management activities related to PMSE.



Thanks for your attention

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- www.cept.org/ecc





Annex: Three main players in spectrum regulation in Europe

European Commission:

Single market issues
Binding regulations through 'comitology' procedures with MS

ECC:

Spectrum allocation and technical conditions for its use
48 member countries acting together
Technical expertise used by EC

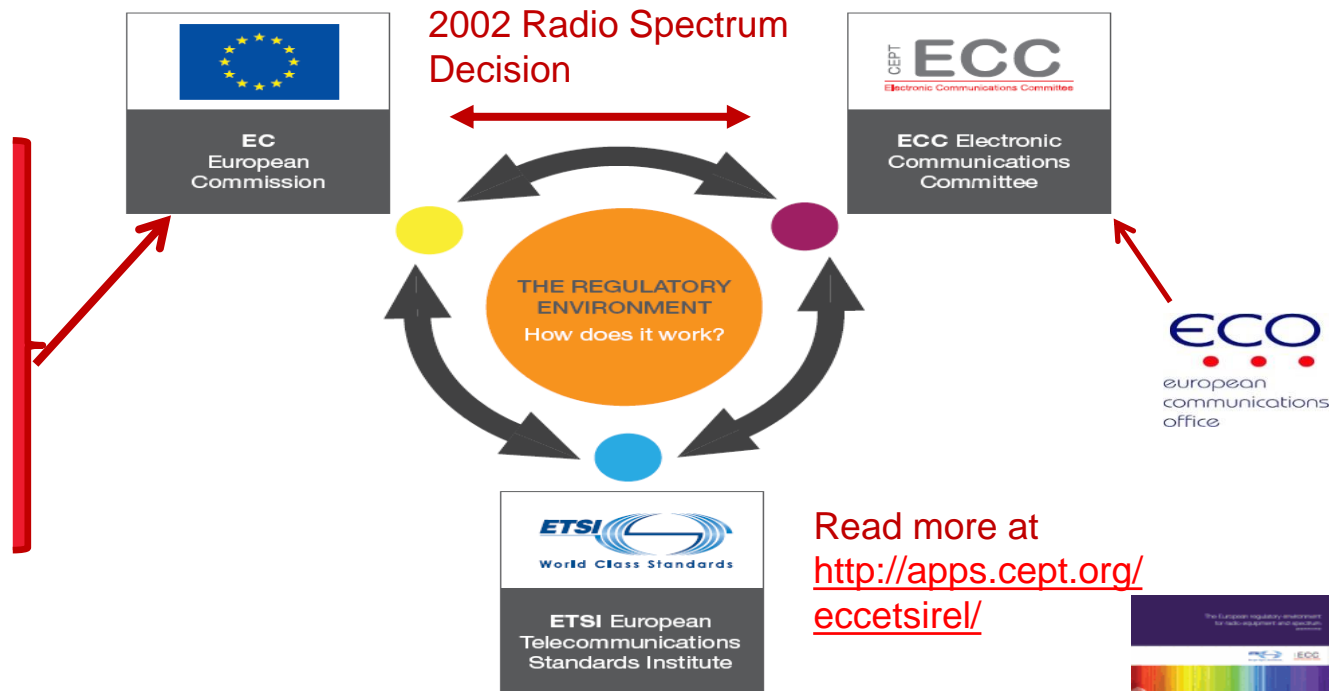
ETSI:

Equipment and system specifications: including 'spectrum use' characteristics
Recognised standards body for 'harmonised standards'
Makes 'System Reference Documents' which inform and trigger much of the ECC work
Largely industry-driven; 'bottom up'



Annex: European Frequency Management Framework

- RSComm
 - RSPG
- 'EU Telecomms package':
Commission
Parliament
Council
Radio Spectrum
Policy Programme
(RSPP)



Read more at
<http://apps.cept.org/eccetsirel/>



Annex: Role of the ECC in Europe

Consensus and voluntary character: flexible instrument of the national administrations

- Technical expertise (2002 Radio Spectrum Decision)
- EU mechanisms recognise that **most regulatory responsibilities are applied at a national level**
(European Commission focuses on single market issues)
- Range of subjects: 'high profile' and 'low profile':
...all are important
- Geographical reach
- Information focal point





Annex: EFIS (ECO Frequency Information System)



Developed by the ECO recognised by the EC as the tool on the harmonized availability of information regarding spectrum use in Europe

Tables of frequency available in EFIS (www.efis.dk):

42 countries, including all EU member states

- ITU-R Region 1
- European Common Allocation (ECA) Table (also available as document: ERC Report 25)

Data types in EFIS:

1. Allocations (RR, ECA and all the National Tables of Frequency Allocation)
2. Applications (National Frequency Utilisation Plans)
3. Radio interfaces (mostly ECS and reference documents for unlicensed usage)
4. Documents (related to spectrum usage)
5. Right of use info (individual authorisations, mostly for ECS bands)