

CEPT Activity Summary – WG-SE and WG-FM – Feb2025

13th February 2025

1) CEPT WG-SE

In the CEPT Spectrum Engineering working group the key topics we are engaged in are Wireless Power Transfer (potential impact in the LF and HF bands) and UWB technologies in the GHz bands. Project Team SE24 is a key group carrying out spectrum compatibility studies on the following topic areas:

- SE24_60: Unwanted emissions from WPT-EV (Electric Vehicle charging)
- SE24_77: Generic Wireless Power Transmission systems
- SE24_76: ECC Report on Micro Wave Security Scanners (MWSSc) in 3.6-10.6 GHz using UWB
- SE24_78: Addendum to ECC Report 344 on Outdoor security scanners in the 76.5–80.5 GHz band
- SE24_79: ECC Report on UWB band extension 8.5 GHz to 10.6 GHz
- SE24_80: Radiodetermination systems for Industry automation in Shielded environments (RDI-S) operating indoor and outdoor in the frequency band 260-1000 GHz

The work items on WPT (WI's 60 and 77) have proven particularly challenging. The results of the studies are used to develop regulatory recommendations and decisions regarding in-band and out of band emissions that have an impact on our LF and HF bands. Strong stakeholders are in play from the automotive industry and regulatory bodies and often compromises are needed to find solutions to provide adequate protection for the radio communications services.

The work items on UWB technologies (Wi's 76, 78 and 79) have included consideration of the amateur services in these higher frequency ranges. Generally speaking the studies show there is a small possibility for interference into amateur services but the probability is low and requires very specific alignment which is unlikely. Indoor UWB systems benefit from additional building shielding which helps to mitigate any concerns.

In recent times WG-SE has completed work on similar studies for UWB vehicle radar systems are published reports ECC 350 and 351 refer.

The quantity of work taking place in SE24 requires engagement in a number of correspondence groups which puts pressure on our resources available to engage in every meeting.

The report from the WG-SE meeting attached to this summary provides further detail on the current state of play.

2) CEPT WG-FM

In the CEPT Frequency Management working group the key topics IARU is engaged in include regulatory decisions concerning the protection of the European Galileo satellite navigation system in the 23cm band and decisions and recommendations resulting from coexistence studies on WPT. In addition the IARU chairs the Radio Amateur Forum Group in WG-FM that maintains the amateur service deliverables on HAREC and the CEPT licence.

CEPT has now drafted an ECC Decision to designate the relevant frequencies for Galileo including the range 1258-1300 MHz. The same Decision also identifies constraints on amateur and amateur satellite service operation in this range to minimise the potential for interference into the Galileo receivers. This work is the European follow up to the work in ITU-R up to WRC-23. The draft Decision will undergo [public consultation](#) during February and the draft can be downloaded from the ECC consultation page.

CEPT WG-FM approved for publication the new Recommendation ECC Rec(25)01 on emission limit requirements for Wireless Power Transmission (WPT). The IARU was heavily involved in contributing to this work and it has been challenging to finalise the unwanted emission limits at levels considered satisfactory to fully protect amateur radio services.

3) CEPT Deliverables of Interest

ECC Reports:

ECC Report 315 - Feasibility of spectrum sharing between High-Definition Ground Based Synthetic Aperture Radar (HD-GBSAR) application using 1 GHz bandwidth within 74-81 GHz and existing services and applications

ECC Report 333 - Non-beam Wireless Power Transmission (WPT) applications other than WPT-EV operating in various frequency bands below 30 MHz

ECC Report 344 - Sharing and compatibility studies of Security Scanners (SSCs) within frequency range 60-82 GHz

ECC Report 350 - Radiodetermination equipment for ground based vehicular applications in 77-81 GHz

ECC Report 351 - UWB radiodetermination applications within the frequency range 116 GHz to 148.5 GHz for vehicular use

ECC Report 359 - Coexistence between the radionavigation-satellite and the amateur services in the frequency range 1240-1300 MHz

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