

Status of CEPT preparations for WRC-15

Steve Bond
CPG-15 Chairman

Structure of CPG-15

- The Conference Preparatory Group (CPG-15) of CEPT/ECC is responsible for developing the ECPs and Briefs for WRC-15 and RA-15
- The CPG management team is:
 - Chairman: Stephen Bond, UK
 - Vice-Chairmen: Alexander Kühn, Germany
Gerlof Osinga, the Netherlands
 - Secretary: Wesley Milton, UK

CPG-15 Project Teams

- **PTA (chairman Alexander Kühn, Germany):**
AI 1.3; 1.11; 1.12; 1.13; 1.14; 2; 4; 8; 9.1.4; 9.1.6; 9.1.7;
9.1.8; 10; RA15/RAG related matters
- **PTB (co-chairmen Alexandre Vallet, France), Victor Glusko, Russian Fed.:**
AI 1.6; 1.7; 1.8; 1.9; 1.10; 7; 9.1.1; 9.1.2; 9.1.3; 9.1.5; 9.3
- **PTC (chairman Gerlof Osinga, Netherlands):**
AI 1.4; 1.5; 1.15; 1.16; 1.17; 1.18
- **PTD (chairman Didier Chauveau, France):**
AI 1.1; 1.2

Agenda Item 1.1 (drafted by CPG PTD-2)

Preliminary CEPT position:

- *Spectrum estimates should be based ITU-R studies*
- *Additional frequency bands for IMT should be identified on global basis*
- *Existing sharing studies for the candidate bands should be taken into account, as appropriate*

Background:

CEPT is developing positions on:

- spectrum estimates,
- suitable frequency ranges/candidate bands and
- sharing issues.

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CEPT Coordinator: Pasi Toivonen (Finland)

Agenda Item 1.2 (drafted by CPG PTD-2)

Preliminary CEPT position:

CEPT will support studies according to Resolution 232

Background:

CEPT will study positions on key issues:

- options for refinement of the lower edge of the mobile allocation;
- channelling arrangements for the mobile service;
- spectrum requirements in the 700 MHz band for broadcasting and mobile; and
- applications ancillary to broadcasting

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CEPT Coordinator: Steve Green (UK)

Agenda Item 1.3 (developed within CG)

Preliminary CEPT position:

TBD

Background:

CEPT is working on the European harmonisation of BB PPDR spectrum. A first Report (ECC Report 199) dealing with PPDR applications, spectrum calculations and the need of interoperability is currently under public consultation. As PPDR requirements vary significantly between CEPT countries, a flexible regulation concept is needed to ensure different ways of implementation.

A second Report dealing among others with spectrum harmonisation options and flexible regulation options is scheduled for 2014.

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CEPT Coordinator: Peter Buttenschön (Germany)

Agenda Item 1.4 (approved by CPG-15-2)

Issue:

*to consider possible new allocation to the amateur service on a secondary basis within the band 5 250-5 450 kHz in accordance with Resolution **649 (WRC-12)***

Preliminary CEPT position:

TBD

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CEPT Coordinator: Hans Blondeel Timmerman (Netherlands)

Agenda Item 1.5 (approved by CPG-15-2)

Issue:

*to consider the use of frequency bands allocated to the fixed-satellite service not subject to Appendices **30**, **30A** and **30B** for the control and non-payload communications of unmanned aircraft systems (UAS) in non-segregated airspaces, in accordance with Resolution **153 (WRC-12)**;*

Preliminary CEPT position:

CEPT supports conducting, the necessary studies leading to technical, regulatory and operational recommendations to the WRC-15, enabling that Conference to decide on the usage of FSS for the CNPC links for the safe operation of UAS in non-segregated airspace

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CEPT Coordinator: TBD

Agenda Item 1.6 (approved by CPG-15-2)

Preliminary CEPT position:

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Background :

Due to the rapid growth in demand for fixed-satellite services worldwide, WRC-12 has considered an issue on additional primary spectrum allocations to this service and adopted two new resolutions (**Resolutions 151 (WRC-12) and 152 (WRC-12)**)) proposing to consider possible additional primary allocations to unplanned FSS to address the asymmetry in Earth-to-space and space-to-Earth FSS allocations in Regions 2 and 3, and also to consider possible additional primary allocations to the unplanned FSS (Earth-to-space and space-to-Earth) in Region 1.

A number of studies should be conducted for the purpose of possible allocation of additional spectrum of 250 MHz to the fixed-satellite service (Earth-to-space and space-to-Earth) in frequency bands between 10 and 17 GHz in Region 1 and of 250 MHz to the fixed-satellite service (Earth-to-space) in Region 2 and of 300 MHz in Region 3 within the range 13-17 GHz **according to Res. 151 (WRC-12) and 152 (WRC-12)**).

CEPT Coordinator: Mikhail Simonov (Russian Federation)

Agenda Item 1.9 (approved by CPG-15-2)

Preliminary CEPT position:

CEPT supports the on-going ITU-R studies with a view of making a new allocation to the FSS in the bands 7 150-7 250 MHz (space-to-Earth) and 8 400-8 500 MHz (Earth-to-space) and a new allocation to the MMSS in the bands 7 375-7 750 MHz (space-to-Earth) and 8 025-8 400 MHz (Earth-to-space), condition to the fact that not putting undue constraints to and to ensure protection of the services already allocated in these frequency bands.

Regarding 1.9.2, CEPT is also of the opinion that a more detailed understanding of the requirements/justification and technical parameters of maritime-mobile satellite service (MMSS) are required before it can give a preliminary view on the CEPT position.

Background:

The frequency bands 7 250-7 750 MHz (s-E) and 7 900-8 400 MHz (E-s) are currently allocated worldwide to the FSS.

The frequency bands 7 250-7 375 MHz (s-E) and 7 900-8 025 MHz (E-s) are also allocated to the MSS on a primary basis, subject to agreement obtained under No 9.21 (see No. 5.461).

Regarding the FSS and MMSS, some administrations have reported a shortfall of spectrum available for their current and future applications in these bands. FSS additional bandwidth requirements for data transmission on the next-generation satellites are estimated to be around a maximum of 100 MHz.

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CEPT Coordinator : Mr Alexandre Guérin (France)

Agenda Item 1.10 (approved by CPG-15-2)

Preliminary CEPT position:

CEPT sees some difficulties for allocations within these bands and is unlikely to support additional allocations. At present CEPT does not see a need for additional spectrum requirements and therefore CEPT sees a need for justification for possible spectrum allocations for the MSS in the band 22-26 GHz.

Background:

The frequency range 22-26 GHz is allocated to a large number of radiocommunication services. Some of them are of considerable importance to European Administrations, i. e. the FS, EESS, RAS and SRS. Within 22-26 GHz, no areas could be identified where MSS services may operate, without causing interference to current services or constraining their development.

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CEPT Coordinator Juergen Nitschke (Germany)

Agenda Item 1.11 (approved by CPG-15-2)

Preliminary CEPT position:

CEPT supports the on-going studies with a view of having a primary allocation to EESS(E-s) in the 7-8 GHz range while ensuring an adequate protection of other space and terrestrial services in the 7-8 GHz band, and in particular of the Space Research Services (SRS) within the band 7 145 – 7 235 MHz. Other frequencies in the range 7-8 GHz should be considered if sharing with SRS is not found to be feasible.

Background:

- The high concentration of satellites using the band 2025-2110 MHz (E-s) and 2200-2290 MHz (s-E) for TT&C is making the satellites coordination in these bands rather difficult. EESS currently can only use the allocation at 2 025-2 110 MHz for the Earth to space transmissions, because no other uplink allocations are available at higher frequencies.
- The EESS (s-E) allocations at higher frequencies (8025-8400 MHz and 25.5-27 GHz) do not have any corresponding EESS (E-s) allocation and therefore in practice can be used only for payload data transmission and not for TT&C.
- An EESS (E-s) allocation in the 7-8 GHz range would allow its use for TT&C in combination with the existing EESS uplink allocation in the band 8 025-8 400 MHz, thereby alleviating the congestion problem in S-Band, mitigating the frequency coordination problem, and eventually leading to a simplified on-board architecture and operational concept for future EESS missions.

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CEPT Coordinator: Elena Daganzo-Eusebio (Netherlands)

Agenda Item 1.12 (approved by CPG-15-2)

Preliminary CEPT position:

The addition of 600 MHz to the existing allocation is supported provided that

- studies show compatibility with existing radio services
- RAS, the SRS (active and passive), and the EESS (passive) in nearby allocations are adequately protected from unwanted emissions

Background:

- The characteristics of the intended new wideband 9 GHz EESS SAR are provided as PDN Rec. ITU-R RS.[EESS-9GHz-CHAR]
- EESS sharing studies with SRS (near Earth) and EESS(p) show compatibility
- Studies for SRS (deep space) in progress for next WP7C
- EESS sharing studies with FS and MS show compatibility, for AS yet on-going
- EESS sharing with radars (RLS/RNS) in progress for next WP7C

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CEPT Coordinator: Mr. Hanspeter Kühlen (Germany)

Agenda Item 1.13 (approved by CPG-15-2)

Preliminary CEPT position: *CEPT support studies on the issue.*

CEPT is of the view that a removal or relaxation of the distance limitation within RR No. 5.268 could be beneficial for SRS space-to-space applications.

Background:

Resolution 652 (WRC-12) invites ITU-R to conduct sharing studies between SRS (space-to-space) systems communicating in the proximity of orbiting manned space vehicles and systems operating in the fixed and mobile (except aeronautical mobile) services in the band 410-420 MHz.

It also stated clearly in the *resolves to invite WRC-15* that a possible removal or relaxation of the 5 km distance limitation has to be made without modifying the current pfd limits.

Furthermore WRC-15 has to decide to allow a more general use of the 410-420 MHz band for SRS (space-to-space) systems beyond extra-vehicular activities.

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Agenda Item 1.14 (approved by CPG-15-2)

Issue:

to consider the feasibility of achieving a continuous reference time-scale, whether by the modification of coordinated universal time (UTC) or some other method, and take appropriate action, in accordance with Resolution 653 (WRC-12)

Preliminary CEPT position:

- *CEPT supports the necessary studies on the feasibility of achieving a continuous reference time-scale, by modification of UTC or by other method, for dissemination by radiocommunication systems.*
- *CEPT also supports study on issues related to the possible implementation of a continuous reference time-scale (including technical and operational factors)*

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Agenda Item 1.15 (approved by CPG-15-2)

Issue:

*to consider spectrum demands for on-board communication stations in the maritime mobile service in accordance with Resolution **358 (WRC-12)***

Preliminary CEPT position:

TBD

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CEPT Coordinator: Richard Rees (UK)

Agenda Item 1.16 (approved by CPG-15-2)

Issue:

*to consider regulatory provisions and spectrum allocations to enable possible new Automatic Identification System (AIS) technology applications and possible new applications to improve maritime radiocommunication in accordance with Resolution **360 (WRC 12)***

Preliminary CEPT position:

- *CEPT is of the view that the implementation of new digital communication such as AIS type technology, VHF data exchange (VDE) and certain satellite communication components would enhance the maritime radio communications for maritime safety.*
- *CEPT is of the view that no modifications should be required to existing AIS equipment on board existing vessels and that the integrity of the original operational purpose of AIS as the primary function on the existing AIS frequencies should be protected*

Agenda Item 1.17 (approved by CPG-15-2)

Issue:

to consider possible spectrum requirements and regulatory actions, including appropriate aeronautical allocations, to support wireless avionics intra-communications (WAIC), in accordance with Resolution 423 (WRC-12)

Preliminary CEPT position:

- *WAIC communication is considered to be an application of a safety service as defined in RR 1.59. Consequently WAIC is an application of the Aeronautical Mobile (Route) Service (AM(R)S).*
- *CEPT supports the spectrum requirement of [239] MHz for WAIC as determined in the PDNR ITU-R M. [WAIC_CHAR_SPEC].*
- *CEPT supports the identification of [239] MHz of frequency spectrum under the AM(R)S, for the harmonized usage of WAIC.*

CEPT Coordinator: Uwe Schwark (Germany)

Agenda Item 1.18 (approved by CPG-15-2)

Issue:

*to consider a primary allocation to the radiolocation service for automotive applications in the 77.5 – 78.0 GHz frequency band in accordance with Resolution **654 (WRC12)***

Preliminary CEPT position:

- *CEPT supports a primary allocation to the radiolocation service in the frequency band 77.5 to 78.0 GHz to enable automotive short-range high-resolution radar operations*

Agenda Item 4 (approved by CPG-15-2)

Preliminary CEPT position:

CEPT encourages the constant review of Resolutions and Recommendations from previous conferences and will follow activities, in particular of ITU, associated with this effort.

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CEPT Coordinator: Karel Antousek (Czech Republic)

Agenda Item 7 (approved by CPG-15-2)

Preliminary CEPT position:

TBD

Background:

CEPT is discussing the way how to carry out regulatory studies to bring full clarity to the current Bureau procedure for publication of information relating to the bringing into use and suspension of frequency assignments to satellite networks.

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CEPT Coordinator: Steve Limb (UK)

Agenda Item 8 (approved by CPG-15-2)

Preliminary CEPT position:

Issue A – Deletion of country footnotes or country names from footnotes:

- *CEPT supports Administrations taking the initiative to review their footnotes and to propose the deletion of their country names or the deletion of country footnotes, if no longer required.*

Issue B – Addition of country names into footnotes or new country footnotes

- *This agenda item shall not be used for adding country names into footnotes unless in accordance with [further resolves 3] Resolution 26 (Rev. WRC-07);*
- *Proposals for the addition of new country footnotes for national allocations which are not related to agenda items [shall/should] not be considered by WRC.*

Agenda Item 9.1.1 (approved by CPG-15-2)

Preliminary CEPT position:

CEPT supports the on-going ITU-R studies with a view of having an adequate protection to the MSS band 406-406.1 MHz while not putting undue constraints to the radio services allocated in the adjacent frequency bands.

Background

1. RR 5.267, “Any emission capable of causing harmful interference to the authorized uses of the band 406-406.1 MHz is prohibited”.
2. Commercial land mobile systems planned for operation in the vicinity of the 406-406.1 MHz MSS band ⇒ ensure protection from **possible harmful interference into the band 406-406.1 MHz.**
3. ITU-R WP 4C: preliminary document providing the **maximum permissible level of interference** for both narrowband and wideband emissions for the **three orbital components: LEO, GEO and MEO** for the frequency range 390-420 MHz.
4. Ongoing studies to adequately address **the consequence of aggregate emissions from transmitters operating in adjacent bands to search and rescue operations for the LEO, MEO and GEO space components.**

Agenda Item 9.1.2 (approved by CPG-15-2)

Preliminary CEPT position: *CEPT will actively participate to the ITU-R studies called by Resolution 756 with a view of improving the satellite coordination process*

Background: Resolution 756 (WRC-12) – Studies on possible reduction of the coordination arc and technical criteria used in application of No. 9.41 in respect of coordination under No. 9.7

Under WRC-12 agenda item 7, CEPT submitted the following proposals:

- reduce the coordination arc to 6 degrees in C band and 5 degrees in Ku band
- replace the DT/T criterion by a C/I ratio criterion in applying No. 9.41
- introduce pfd limits that, if met, leads to a favourable finding under No. 11.32A

WRC-12 decided to:

- reduce the coordination arc to 8 degrees in C band and 7 degrees in Ku band
- adopt Resolution 756 (WRC-12) to call for further studies on these issues

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CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 9.1.3 (approved by CPG-15-2)

Preliminary CEPT position: *CEPT follows the ITU-R studies on this aspect.*

Background: Resolution 11 (WRC-12) – Use of satellite orbital positions and associated frequency spectrum to deliver international public telecommunication services in developing countries

- Following an African common proposal under WRC-12 agenda item 8.1.2, WRC-12 adopted Resolution 11 (WRC-12), which resolves “that ITU-R continue to collaborate with, and provide information when requested by, ITU-D, on satellite technologies and applications as defined in ITU R Recommendations and Reports and on satellite regulatory procedures in the Radio Regulations that will help developing countries with development and implementation of satellite networks and services” and “that ITU R undertakes studies to determine whether it might be necessary to apply additional regulatory measures to enhance the availability of public international telecommunication services delivered through satellite technology”.

Agenda Item 9.1.5 (approved by CPG-15-2)

Preliminary CEPT position: *CEPT follows the ITU-R studies on this aspect.*

Background: Resolution 154 (WRC-12) – Consideration of technical and regulatory actions in order to support existing and future operation of fixed satellite service earth stations within the band 3 400-4 200 MHz, as an aid to the safe operation of aircraft and reliable distribution of meteorological information in some countries in Region 1

- Following an African common proposal under WRC-12 agenda item 8.2, WRC-12 adopted Resolution 154 (WRC-12), which resolves to invite ITU-R “to study possible technical and regulatory measures in some countries in Region 1 to support the existing and future FSS earth stations in the 3 400-4 200 MHz band used for satellite communications related to safe operation of aircraft and reliable distribution of meteorological information referred to in considering c)”.

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CEPT Coordinator: TBD

Agenda Item 9.1.6 (approved by CPG-15-2)

Preliminary CEPT position:

CEPT is of the view that there is no need to modify the existing definitions of fixed service, fixed station and mobile station. Furthermore CEPT opposes any modification which may have any negative regulatory impact on existing allocations to radiocommunication services.

Background:

WRC-12 adopted a Resolution which resolves to review the definitions of fixed service, fixed station and mobile station for possible modification. The implementation of any new or modified definition should be in agreement with the system of RR definitions to ensure absence of (logical) contradictions between existing and modified (new) definitions.

CEPT Coordinator: Anders Jonsson (Sweden)

Agenda Item 9.1.8 (approved by CPG-15-2)

Preliminary CEPT position:

CEPT follows the ITU-R studies on this aspect.

Background:

Following proposals from 12 CEPT members, WRC-12 decided to put on the WRC-18 preliminary agenda the issue of nano- and picosatellites: “2.2 the appropriate regulatory procedures for notifying satellite networks needed to facilitate the deployment and operation of nano- and picosatellites, in accordance with Resolution 757 (WRC 12)”. Resolution 757 (WRC-12) invites ITU-R to undertake the relevant studies and furthermore instructs the Director of the Radiocommunication Bureau to report to WRC-15 on the results of these studies.

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CEPT Coordinator: Wouter Jan Ubbels (Netherlands)

Agenda items yet to be addressed:

- AI 1.3
- AI 1.7
- AI 1.8
- AI 2
- AI 9.1.4
- AI 9.1.7

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Next meetings

CPG will meet on 23-26 September 2013, Zagreb (Croatia)

Its next project team meetings are:

- 2nd PTA: 25-28 March 2013, Copenhagen (Denmark)
- 2nd PTB: 19-21 March 2013, Copenhagen (Denmark)
- 2nd PTC: 16-19 April 2013, London (UK)
- 3rd PTD: 6-8 May 2013, Berlin (Germany)

We look forward to welcoming representatives from the other Regional Organisations to these meetings

THANK YOU

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