International Telecommunication Union

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2nd ITU INTER-REGIONAL WORKSHOP ON WRC-15 PREPARATION (Geneva, 12 – 13 November 2014)

Status of CEPT preparations for WRC-15

ECC CPG-15 October 2014





2nd ITU INTER-REGIONAL WORKSHOP ON WRC-15 PREPARATION

GENEVA, SWITZERLAND 12-13 NOVEMBER 2014

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Status of CEPT preparations for WRC-15

CPG-15-5 meeting October 2014



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: Alexander Kühn, Germany
 - Vice-Chairmen: Gerlof Osinga, The Netherlands Tony Azzarelli, UK
 - Secretary: Karsten Buckwitz, Germany

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CPG-15 Project Teams

PTA	PTB	PTC	PTD
Tony Azzarelli	Alexandre Vallet	Gerlof Osinga	Didier Chauveau
(UK)	(France) &	(the Netherlands)	(France)
 •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 	Victor Glushko, (Russian Fed.) •1.6 •1.7 •1.8 •1.9 •1.10 •7 •9.1.1; 9.1.2; 9.1.3; 9.1.5 •9.2 •9.3	 •1.4 •1.5 •1.15 •1.16 •1.17 •1.18 	•1.1 •1.2



CPG-15 Deliverables

• For both, WRC-15 and the RA-15:

• European Common Proposals (ECPs)

- At least 10 administrations in support
- No more than 6 opposing as a general guideline

CEPT Briefs

- Describe each agenda item
- Contains the CEPT view agreed by consensus at each stage

CEPT co-ordination in ITU-R meetings

- Agreed contributions (also for non-WRC issues)
- Co-ordination on which lines to take during the meetings



Agenda Item 1.1 (amended by CPG-5)

Issue: to consider additional spectrum allocations to the mobile service on a primary basis and identification of additional frequency bands for International Mobile Telecommunications (IMT) and related regulatory provisions, to facilitate the development of terrestrial mobile broadband applications, in accordance with Resolution **233** (WRC-12)

Preliminary CEPT position:

CEPT supports:

•the results of the ITU-R studies which indicate that by the year 2020, the total spectrum requirement for pre-IMT, IMT-2000 and its enhancements and for IMT-Advanced is between 1960MHz (for higher user density settings) and 1340MHz (for lower user density settings). However CEPT recognises that the national spectrum requirements may vary;

 harmonised allocations to the mobile service and identification for IMT to facilitate the global roaming and reduction of equipment-cost through economies of scale;
 that when considering identification of additional frequency bands for IMT, CEPT takes into account current use of these bands and the results of ECC and/or ITU-R sharing/compatibility studies with respect to existing services in those bands and adjacent bands.



Agenda Item 1.1 (amended by CPG-5)

Based on the available studies CEPT is currently of the view that:

• The following bands are supported as candidate bands for IMT: 1427-1452 MHz; 1452-1492 MHz; 1492–1518 MHz; 3400-3600 MHz; 3600-3800 MHz

• The following bands are subject to further consideration taking into account sharing and compatibility studies: 470 – 694 MHz; 5725-5850 MHz; 5925-6425 MHz

•The following bands are not supported for mobile broadband: 1300-1350 MHz; 1350-1400 MHz; 1518-1525 MHz; 1695-1710 MHz; 2025-2110 MHz; 2200-2290 MHz; 2700-2900 MHz; 2900-3100 MHz; 3300-3400 MHz; 3800-4200 MHz; 4400-4500 MHz; 4500-4800 MHz; 4800-5000 MHz; 5350-5470 MHz

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CEPT Coordinator: Mr Pasi Toivonen (Finland)



Agenda Item 1.1 (amended by CPG-5)

In addition CEPT supports the following regulatory provisions for candidate bands:

•Mandatory limits for unwanted emissions in the 1400-1427 MHz band for both mobile terminals and base stations operating in adjacent bands.

•Given that the 1427-1518 MHz is already allocated to mobile service no regulatory constrains shall be adopted by WRC-15 for Region 1 regarding the aeronautical mobile service and land mobile service.

•A pfd limit in Article 21 applicable to the broadcasting satellite service in the band 1452-1492 MHz, with possibility for countries wishing to do so to continue to apply coordination under No. 9.11 (e.g. for protection of specific applications such as aeronautical telemetry).

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CEPT Coordinator: Mr Pasi Toivonen (Finland)



Agenda Item 1.2 (amended by CPG15-5)

Issue: to examine the results of ITU-R studies, in accordance with Resolution 232 (WRC-12), on the use of the frequency band 694-790 MHz by the mobile, except aeronautical mobile, service in Region 1 and take the appropriate measures

Preliminary CEPT position:

•CEPT supports to set 694 MHz as the lower edge of the mobile allocation referred to in *resolves* 1 of Resolution 232 (WRC-12).

•CEPT supports that, for countries which are part of GE06, the existing procedures of that agreement shall apply to the coordination between mobile and broadcasting services and that this is sufficient to ensure the protection of broadcasting service. CEPT opposes further conditions in the RR (e.g. 9.21, thresholds other than GE06).

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CEPT Coordinator: Mr.Steve Green (UK)



Agenda Item 1.2 (amended by CPG15-5)

- Digital terrestrial television in the UHF band below 694 MHz in particular channel 48 (686-694 MHz), shall be protected.
 - Technical conditions applicable to IMT mobile terminals (user equipment) to ensure the protection of the broadcasting service below 694 MHz should be included in a new ITU-R Recommendation specifying the level of
 -42 dBm/8 MHz for the out-of-band emission limit in the band 470-694 MHz for IMT terminal operating in the band 694-790 MHz using a 10 MHz channel bandwidth or less
 - The revision of Recommendation ITU-R M.1036-4 should include harmonized channelling arrangements for the band 694-790 MHz in Region 1:
 - 2x30 MHz FDD (uplink 703-733 MHz and downlink 758-788 MHz) aligned with the lower duplexer of Recommendation ITU-R M.1036-4 frequency arrangement A5.
 - Up to 20 MHz (738-758 MHz) for supplemental downlink.

CEPT Coordinator: Mr.Steve Green (UK)



Agenda Item 1.2 (amended by CPG15-5)

- CEPT supports studies on solutions for applications ancillary to broadcasting including compatibility considerations as well as possible revisions of RR 5.296.
 CEPT considers conducting studies aiming at finding new tuning ranges for wireless microphones, e.g. within the band 1 350-1 400 MHz.
- CEPT supports equitable access at the border between countries.
- CEPT supports technical and regulatory conditions applicable to the mobile service for the protection of aeronautical radionavigation service.
- To ensure coexistence between ARNS and MS and to avoid undue separation distances and coordination burden, CEPT supports bilateral or multilateral agreements before WRC-15 based on a common coordination framework.

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Agenda Item 1.3 (amended by CPG-5)

Issue: to review and revise Resolution 646 (Rev.WRC-12) for broadband public protection and disaster relief (PPDR), in accordance with Resolution 648 (WRC-12)

Preliminary CEPT position:

CEPT supports studies on the revision of Res. 646 in accordance with Res. 648. Regarding the question of frequency ranges to be identified in Region 1, specific account should be given to the requirements of broadband PPDR. These ranges can then be compared within the ITU process to facilitate regional or worldwide interoperability and to maximise economies of scale and the consequential effect on any revisions needed in Res. 646.

CEPT is of the view that there should be no direct reference to any regionally harmonised frequency bands/ranges for PPDR operations in Resolution 646 (Rev. WRC 12), but there should be a cross reference to a revised ITU-R Recommendation M.2015 that would contain a direct reference to any regionally harmonised frequency bands/ranges for PPDR operations. This would enable these frequency bands/ranges to be reviewed and revised in the future without the need for a new WRC agenda item to be created to review and/or revise Resolution 646 (Rev. WRC 12). (This is reflected in Method C in current CPM text from WP5A but CEPT are also open to discuss a possible new compromise method D.)

CEPT Coordinator : Mr Andrew Gowans (UK)



Agenda Item 1.3 (amended by CPG-5)

CEPT is of the view, that any action at WRC-15 needs to reflect that PPDR related radiocommunication matters are an issue of sovereignty of the member states, and that PPDR requirements may vary to a significant extent from country to country. Therefore CEPT will consider future harmonization of PPDR only if the action is flexible enough to consider different national circumstances such as the PPDR scenarios, the amount of available spectrum and the type of network which may be a dedicated, a commercial or a hybrid solution.

With regards to this need for a flexible solution CEPT is of the view that the concept of "frequency range" already used in Resolution 646 (Rev. WRC-12) includes the possibility to offer full flexibility for administrations to decide on their PPDR spectrum use to meet national needs.

CEPT is also of the view that this concept should enable PPDR organizations that are adopting a common broadband technology (e.g. LTE) to enable seamless cross border operations between countries using a number of different frequency bands that the common technology is designed for use within. This could include the use of frequencies allocated on a national basis, to the different types of networks, which provide a dedicated, commercial or a hybrid PPDR network solution.



Agenda Item 1.4 (amended by CPG PTC-5)

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:

CEPT is of the view that the existing allocations in the frequency band $5\ 250 - 5\ 450\ \text{kHz}$ need to be protected. CEPT recognizes that the allocation of the frequency band $5\ 250 - 5\ 450\ \text{kHz}$ or any part thereof to the amateur service on a secondary basis will be extremely complicated as shown in supporting compatibility studies.

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CEPT Coordinator: Mr Hans Blondeel Timmerman (Netherlands)



Agenda Item 1.5 (amended by CPG PTC-5)

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 : Mr Hans-Jürgen Tscheulin (Germany)



Issue: to consider possible additional primary allocations:

•to the fixed-satellite service (Earth-to-space and space-to-Earth) of 250 MHz in the range between 10 GHz and 17 GHz in Region 1 (Issue 1.6.1);

Preliminary CEPT position on Al 1.6.1:

CEPT supports the need for additional primary allocations of 250 MHz (Earth-to-space and space-to-Earth) to the GSO-FSS in frequency bands between 10 and 17 GHz in Region 1. Studies should demonstrate compatibility with the existing services before a primary allocation is to be made to the FSS in a particular frequency band.

Based on the sharing studies results, CEPT identifies the following frequency bands as possible frequency bands for a new primary allocation of 250 MHz to GSO FSS subject to implementation of the relevant mitigation technique(s) if required (e.g. PFD mask, limitation of transmit antenna size, etc.).

FSS (space-to-Earth):

•13.4-13.75 GHz with preference to the band 13.4-13.65 GHz for the gap between the up-link FSS allocations in the band 13.75-14.5 GHz;

•14.8-15.35 GHz with preference to the band 14.85-15.1 GHz for the gap between the up-link FSS allocation in the band 14.5-14.8 GHz;



FSS (Earth-to-space):

•[14.5-14.8 GHz, with no additional constraints to the band 14.5-14.62 GHz and the constraint of a minimum antenna diameter of 2.4m to the band 14.62-14.8 GHz].

For both, up- and downlink cases, as listed above, mitigation measures need to be implemented to protect the Space Research service in the bands 13.4-13.75 GHz, 14.5-14.8 GHz, 14.8-15.35 GHz and RAS in the adjacent band 15.35-15.4 GHz (RR 5.340).

Moreover, the deployment of transmitting Earth stations for the ACES systems in the band 13.4-13.75 GHz operating under the standard frequency and time signal-satellite would need to be ensured without additional constraint that may result from the protection of FSS receiving Earth stations.

CEPT does not support additional allocation to FSS in frequency bands 10.6-10.68 GHz and 15.35-15.4 GHz due to the difficulty of sharing with passive services operating in these bands.

CEPT does not support additional allocation to FSS (Earth-to-space) in the frequency band 13.25-13.4 GHz due to the difficulty of sharing with RNS/ARNS operating in this band



- to the fixed-satellite service (Earth-to-space) of 250 MHz in Region 2 and 300 MHz in Region 3 within the range 13-17 GHz (Issue 1.6.2);
- and review the regulatory provisions on the current allocations to the fixed-satellite service within each range, taking into account the results of ITU-R studies, in accordance with Resolutions 151 (WRC-12) and 152 (WRC-12), respectively;

Preliminary CEPT Position on Agenda Item 1.6.2:

- CEPT supports a worldwide allocation for additional primary allocations (Earth-tospace) to the GSO-FSS in frequency bands between 13 and 17 GHz in all Regions. The band 14.5-14.8 GHz (Earth-to-space) could be considered.
- CEPT considers that the additional allocation of 250 MHz to FSS (Earth-to-space) in Region 2 and 300 MHz in Region 3 in frequency bands between 13 and 17 GHz could be made only while ensuring compatibility with existing services in these frequency bands, in particular to radio services also allocated in Region 1.
- CEPT does not support additional allocation to FSS (Earth-to-space) in the frequency bands 13.25-13.4 GHz and 15.35-15.4 GHz due to the difficulty of sharing with active and passive services operating in these bands.

CEPT Coordinator : Mr Mikhail Simonov (Russian Federation)



Issue: to review the use of the bans 5 091-5 150 MHz by the FSS (E-s) (limited to feeder links of NGSO MSS systems) in accordance with Resolution **114 (Rev. WRC-12)**

Preliminary CEPT position:

CEPT supports the single method contained in the draft CPM text for this agenda item.

CEPT supports to remove the time limitation to the primary allocation to the fixed-satellite service (Earth-to-space) in the band 5 091-5 150 MHz, limited to feeder links of non-geostationary satellite systems in the mobile-satellite service. **Resolution 114 (Rev.WRC-12)** shall continue to apply to this allocation with the necessary consequential amendments.

CEPT also supports revising Resolution **748 (Rev.WRC-12)** and Recommendation ITU-R M.1827 in order to provide improved momentation flexibility for AM(R)S.



Issue: to review the provisions relating to earth stations located on board vessels (ESVs), based on studies conducted in accordance with Resolution *909 (WRC-12)*

Preliminary CEPT position:

CEPT considers that possible modifications to Resolution 902 (WRC-03) with the purpose to reflect current ESV technologies and technical characteristics of the earth stations on board vessels (ESVs) should ensure that the other services are protected and should not limit their further development.

CEPT supports keeping the existing approach based on the use of protection distances to ensure sharing between ESVs and other services in the frequency bands specified in Resolution 902 (WRC-03). CEPT supports establishing of a set of different protection distances for different maximum e.i.r.p. density levels towards horizon with the aim to reduce protection distances taking into account various technologies of ESV.

CEPT considers that the values of protection distances from a vessel up to a coast line in the C and Ku bands should be determined for different ESV classes according to the maximum e.i.r.p densities levels towards horizon, to ensure the protection of the terrestrial services in the frequency bands 5925-6425 MHz and 14-14.5 GHz.



Agenda Item 1.9.1 (approved by CPG-15-4)

Issue: to consider, in accordance with Resolution 758 (WRC 12):

•possible new allocations to the fixed-satellite service in the frequency bands 7 150-7 250 MHz (space-to-Earth) and 8 400-8 500 MHz (Earth-to-space), subject to appropriate sharing conditions

Preliminary CEPT position:

CEPT supports new primary worldwide FSS allocations of 2*100 MHz in the bands 7 150-7 250 MHz (space-to-Earth) and 8 400-8 500 MHz (Earth-to-space) under the following conditions:

•The allocation is limited to geostationary FSS networks.

•FSS space stations in the band 7150-7235 shall comply with the technical criteria outlined in section 3.1.3.

•FSS earth stations in the band 7 150-7 235 MHz shall not claim protection from, nor constrain the use and development of earth stations in the space research service (Earth-to-space) and the space operation service (Earth-to-space) allocated in the Russian Federation under No. 5.459. No. 5.43A does not apply.



Agenda Item 1.9.1 (approved by CPG-15-4)

- FSS Earth stations in the band 8400-8500 MHz shall be limited to specific earth stations operating at specified fixed points with a minimum antenna diameter of 3.5 m and shall be subject to coordination under Nos. 9.17 and 9.17A.
- FSS space stations in the band 8 400-8 500 MHz shall not claim protection from space stations in the space research service. No. 5.43A does not apply.
- FSS earth stations in the band 8 400-8 500 MHz shall not constrain the use and development of earth stations in the space research service.

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CEPT Coordinator : Miss Soraya Contreras (France)



Agenda Item 1.9.2 (approved by CPG-15-4)

Issue: to consider, in accordance with Resolution 758 (WRC-12):

the possibility of allocating the bands 7 375-7 750 MHz and 8 025-8 400 MHz to the maritime-mobile satellite service and additional regulatory measures, depending on the results of appropriate studies

Preliminary CEPT position:

CEPT supports the results of the ITU-R studies on the possibility of making 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), subject to not placing undue constraints to and to ensuring protection of the services already allocated in these frequency bands. To this respect, CEPT does not support the usage of these bands for applications that could imply a deployment of a large number of Earth stations in the MMSS. In particular, CEPT does not support the usage of the bands 7 375-7 750 MHz (space-to-Earth) and 8 025-8 400 MHz (Earth-to-space) for e-navigation or GMDSS.

CEPT notes that the ITU-R and CEPT studies show that compatibility between EESS (spaceto-Earth) and MMSS in the band 8025-8400 MHz requires the establishment of large exclusion zones around the EESS earth stations. CEPT also notes that the maintenance of an exclusion zones database and the enforcement of these exclusion zones for a steadily growing number of EESS Earth stations makes such an allocation impracticable.



Agenda Item 1.9.2 (approved by CPG-15-4)

In addition, CEPT notes that the protection of SRS deep space stations in adjacent band would have to be ensured through a combination of unwanted emission limits and/or exclusions zones, therefore adding to the constraints on MMSS. Consequently CEPT doesn't support an allocation for MMSS in the band 8025-8400 MHz.

Taking into account that the sharing studies showed compatibility between the MMSS (space-to-Earth) and the existing services in the band 7 375-7 750 MHz, CEPT <u>supports the allocation</u> to the MMSS (space-to-Earth) in this band with the condition that MMSS does not claim protection from the existing services in this band.

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CEPT Coordinator : Miss Soraya Contreras (France)



Issue: to consider spectrum requirements and possible additional spectrum allocations for the mobile-satellite service in the Earth-to-space and space-to-Earth directions, including the satellite component for broadband applications, including International Mobile Telecommunications (IMT), within the frequency range from 22 GHz to 26 GHz, in accordance with Resolution **234 (WRC-12)**

Preliminary CEPT position:

CEPT sees difficulties, in particular in sharing, for MSS allocations within the frequency range 22-26 GHz and does not support such additional allocations under this Agenda Item. Further to this agenda item CEPT does not see a need for additional spectrum and therefore requests justification for possible spectrum allocations for the MSS in the frequency range 22-26 GHz.



Agenda Item 1.11 (amended by CPG-5)

Issue: to consider a primary allocation for the Earth exploration-satellite service (Earth-to-space) in the 7-8 GHz range, in accordance with Resolution 650 (WRC-12)

Preliminary CEPT position:

•CEPT supports the allocation of the frequency band 7190-7250 MHz on a primary basis to the Earth exploration-satellite service (Earth-to-space) limited to non-geostationary satellite systems.

•Studies indicate that sharing is feasible with all the services in the frequency range 7190-7250 MHz.

•CEPT recognizes that EESS (Earth-to-space) cannot share with SRS (deep space) in the 7 145-7 190 MHz band and therefore does not support allocation of the frequency band 7145-7190 MHz on a primary basis to the Earth exploration-satellite service (Earth-to-space).

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CEPT Coordinator : Ms Elena Daganzo (The Netherlands)



Agenda Item 1.12 (update CPG-15-5)

Issue: to consider an extension of the current worldwide allocation to the Earth exploration-satellite (active) service in the frequency band 9 300-9 900 MHz by up to 600 MHz within the frequency bands 8 700-9 300 MHz and/or 9 900-10 500 MHz, in accordance with Resolution 651 (WRC-12)

Preliminary CEPT position:

CEPT currently supports the allocation of additional radio frequency spectrum of 600 MHz in the frequency band 9 200-9 300 MHz and 9.9-10.4 GHz to the Earth Exploration-Satellite Service (active) with a [primary] status.

CEPT supports, that stations in the Earth exploration-satellite service (active) shall not cause harmful interference to, nor claim protection from, stations operating in the Radio Determination Services allocated in the same frequency bands. The extension band should be only used by SAR systems requiring more than 600 MHz bandwidth.

CEPT supports, that provisions for the protection of Fixed and Mobile Services from EESS (active) need to be implemented, as appropriate.

CEPT supports, that the Space Research Service (deep space) operating in the band 8 400 - 8 450 MHz and the Radio Astronomy Service operating in the band 10.6 - 10.7 GHz will be protected through the implementation of mitigation techniques, or, if not sufficient, through operational coordination, as described in ITU-R and/or SFCG recommendations under development.



Issue: to review No. 5.268 with a view to examining the possibility for increasing the 5 km distance limitation and allowing space research service (space-to-space) use for proximity operations by space vehicles communicating with an orbiting manned space vehicle, in accordance with Resolution **652 (WRC-12)**

Preliminary CEPT position:

CEPT support removal of the distance limitation within RR No 5.268 and the restriction to the extra vehicular activities while keeping the pfd limit at the Earth's surface.

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CEPT Coordinator : Mr Thibaut Caillet (France)



Agenda Item 1.14 (amended by CPG-15-5)

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 methods, for dissemination by radiocommunication systems

•CEPT also supports studies on issues related to the possible implementation of a continuous reference time-scale (including technical and operational factors)

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CEPT Coordinator: Mr Bharat Dudhia (UK)



Agenda Item 1.15 (amended by CPG-15-5)

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:

•CEPT does not support the identification of additional spectrum for on-board communications in UHF, due to existing heavy usage by other services.

•CEPT supports more efficient usage of the existing frequencies, such as 12.5 and 6.25 kHz bandwidth for all the channels identified in the RR for on-board communications.

•CEPT supports the use of Continuous Tone Coded Squelch Systems (CTCSS) or Digital Coded Squelch (DCS).

•CEPT supports amendments to RR footnote No. 5.287 and to Recommendation ITU-R M.1174-2.

acting CEPT Coordinator: CPG PTC chairman



Agenda Item 1.16 (amended by CPG-15-5)

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 the Concept of the VHF Data Exchange System (VDES) which contains a VDE terrestrial component, a satellite component and a ASM component would enhance maritime radio communications.

•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

•CEPT considers that a combination of channels 24, 25, 84 and 85 could be a possible solution for the terrestrial component for the future VDES.

•CEPT is considering a new secondary allocation to the maritime mobile satellite service in downlink and uplink direction, while ensuring the protection of existing terrestrial services.

•CEPT is of the view that a satellite component could include a downlink comprising the following combination of channels 2024, 2025, 2026, 2084, 2085 and 2086. For the uplink comprising the following channels 1024, 1025, 1026 1084, 1085, 1086 and the frequencies ASM1 (Channel 2027) and ASM2 (Channel 2028).

CEPT Coordinator : Mr Hans-Karl von Arnim (Germany)



Agenda Item 1.17 (amended by CPG-15-5)

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:

CEPT supports a primary AM(R)S allocation in the 4 200 – 4 400 MHz band limited to WAIC to accommodate the required frequency spectrum of 145 MHz.

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CEPT Coordinator: Mr Uwe Schwark (Germary)



Agenda Item 1.18 (amended by CPG-15-5)

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 (WRC-12)**

Preliminary CEPT position:

CEPT supports a primary allocation to the radiolocation service to support [automotive] short range radar applications in the frequency band 77.5 to 78.0 GHz in accordance with Resolution 654 (WRC-12) "Allocation of the band 77.5-78 GHz to the radiolocation service to support automotive short-range high-resolution radar operations".

CEPT is of the opinion that the new allocation needs to be supported by provisions, if needed, to protect the incumbent services.

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CEPT Coordinator : Mr Hartmut Dunger (Germany)



Issue: to examine the revised ITU-R Recommendations incorporated by reference in the Radio Regulations communicated by the Radiocommunication Assembly, in accordance with Resolution 28 (Rev.WRC-03), and to decide whether or not to update the corresponding references in the Radio Regulations; in accordance with principles contained in Annex 1 to Resolution 27 (Rev.WRC-12)

Preliminary CEPT position:

•CEPT supports ITU-R studies on the revision of ITU-R Recommendations incorporated by reference.

•CEPT resumes examining the compliance with the principles of Annex 1 to Resolution 27 (Rev.WRC-12) of the references to ITU-R Recommendations in the Radio Regulations.

•CEPT supports update of the RR Volume 4 cross references list taking into account its possible role in new arrangement of RR mentioned in noting b) of Resolution 67 (WRC-12), see also AI 9 Issue 9.1.4.

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CEPT Coordinator : Mr Karel Antousek (Czech Republic)



Issue: in accordance with Resolution 95 (Rev. WRC-07), to review the Resolutions and Recommendations of previous conferences with a view to their possible revision, replacement or abrogation

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.

- CEPT proposes to suppress Resolution [TBD]
- CEPT proposes to modify Resolution [TBD]
- CEPT proposes to suppress Recommendation [TBD]
- CEPT proposes to modify Recommendation [TBD]

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CEPT Coordinator : Mr Karel Antousek (Czech Republic)



Issue: to consider possible changes, and other options, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, an advance publication, coordination, notification and recording procedures for frequency assignments pertaining to satellite networks, in accordance with Resolution **86 (Rev.WRC-07)** to facilitate rational, efficient, and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit.

Preliminary CEPT position:

CEPT is studying possible improvements of the coordination and notification procedures for space services. CEPT also supports retaining the current process of continuing evolution at successive WRCs of the regime governing space services, including the retention of Resolution 86. CEPT has developed specific positions susceptible to bring improvement to the regulatory process.

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Issue A: informing the BR of a suspension under RR No. 11.49 beyond six months.

Preliminary CEPT position:

CEPT supports Method A2, Option A of the draft CPM text. This method modifies RR No. 11.49 by reducing the three-year time period by the amount of time that has elapsed between the end of the six-month period and the date that the BR is informed of the suspension.

CEPT considers that it provides a balanced application of incentives on avoiding longer delays to inform to BR. This method would also clarify the regulatory situation when the request for suspension is received six months after the date of suspension.

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Issue B: publication of information on bringing into use of satellite networks at the ITU website.

Preliminary CEPT position:

CEPT supports full clarity in the Radio Regulations to the Bureau's procedure for publishing and making available information relating to bringing into use and suspension of frequency assignments of satellite networks. CEPT studies the best regulatory approach to implement such clarity (Method B1 or B2).

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Issue C: review of the advance publication mechanism for satellite networks subject to coordination under Section II of Article 9 of the Radio Regulations.

Preliminary CEPT position:

CEPT supports suppression of the six-month period, and studies whether the ability to comment on advance publications is needed to be retained. Once CEPT concludes on this issue a proper regulatory implementation will be finalized.

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Issue D: General use of modern electronic means of communications in coordination and notification procedures

Preliminary CEPT position:

CEPT supports furthering the use of modern electronic means for correspondence between administrations and the Radiocommunication Bureau in relation with coordination and notification procedures of satellite networks.

In this regard, CEPT supports amending Resolution 907 (WRC-12) to ensure that, wherever the words "telegram", "telex" or "fax" are inserted in provisions related to coordination and notification procedures of satellite networks (including Radio Regulations Appendices 30, 30A, 30B and relevant Resolutions), modern electronic means can be used instead. CEPT also supports expanding the scope of Resolution 908 (WRC-12) to all kind of satellite network filings and requesting the BR to analyse whether it is possible to have a single consolidated interface for both the submission of satellite network filings and any related correspondence. This corresponds to the single method proposed in the draft CPM text for WRC-15¹¹ agenda item 7, Issue D.



Issue E: Failure of a satellite during the ninety-day bringing into use period.

Preliminary CEPT position:

CEPT supports Method E3 of the draft CPM text (NOC).



Issue [X]: Review of the orbital position limitations in Annex 7 to RR Appendix 30.

Preliminary CEPT position:

CEPT could support the suppression of paragraph A of Annex 7 as described in Method [X]1, depending on the special procedures for existing satellite systems that rely on the Annex 7 limitations for limiting interference, which must be developed.

נפרד Cept Coordinator : Ms Anna Marklund (Sweden)



Issue [Y]: Possible methods to mitigate excessive satellite network filings.

Preliminary CEPT position:

CEPT currently supports suppression of the API six months period, which addresses excessive API filings. It is noted that although this method will not resolve the excessive filing issue, it is at the moment considered to be a possible solution to this issue. However, the issue of excessive CR/C filings also needs to be considered.

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Issue [XX]: transfer into the Radio Regulations of the Rule of Procedure regarding suspension of a frequency assignment in the List in Appendix 30B.

Preliminary CEPT position:

CEPT supports transfer of the Rule of Procedure into Appendix 30B of the Radio Regulations. It provides stability and certainty on the Rules developed by RRB.

دافتا المالية: CEPT Coordinator : Ms Anna Marklund (Sweden)



Agenda Item 8 (amended by CPG PTA-5)

Issue: to consider and take appropriate action on requests from administrations to delete their country footnotes or to have their country name deleted from footnotes, if no longer required, taking into account Resolution **26 (Rev. WRC-07)**

Preliminary CEPT position:

General

CEPT is of the view that there is no need to change the Resolution 26 (**Rev. WRC-07**)

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

•CEPT is of the view that this agenda item is not intended for adding country names into footnotes and the addition of new country footnotes.

•CEPT is of the view that Conferences may continue to deal with requests to add country names to existing footnotes on a case by case basis.



Agenda Item 9 (Issue 9.1.1) (approved by CPG-15-5)

Issue: Resolution 205 (Rev. WRC-12) "Protection of the systems operating in the mobile-satellite service in the band 406-406.1 MHz"

Preliminary CEPT position

In order to ensure adequate protection of MSS systems in the frequency band 406-406.1 MHz, CEPT supports a revision of Resolution 205 (Rev WRC-12) containing protection measures such as the implementation of a guard band from 406.1 MHz to 406.2 MHz; Administrations should consider applying the guard band to new frequency assignments and this guard band is not applicable to existing stations/networks.

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CEPT Coordinator : Mr Jean Pla (France)



Agenda Item 9 (Issue 9.1.2) (approved by CPG-15-5)

Issue: 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"

Preliminary CEPT position:

CEPT will actively participate to the ITU-R studies called by this Resolution with a view of improving the satellite coordination process.

Two alternative views were expressed during CPG-PTB and are presented below.

View 1:

•Regarding the resolves 1 of the Resolution 756, CEPT supports retaining the current provision RR No. 9.41 but replacing the Δ T/T criterion by a C/I ratio criterion in applying RR No. 9.41 in all FSS bands, in the same manner as currently done in No. 11.32A.

•CEPT is of the view that the C/I ratio criterion in both Nos. 9.41 and 11.32A should be derived in accordance with the current Section B3 of Part B of the Rules of Procedure, i.e. by taking as a basis for computing the required C/I ratio (C/Irequired = C/Nrequired – I/Nrequired), using the filed C/N ratio or the calculated C/N ratio, whichever is lower.

•Regarding the required I/N value to be applied for GSO FSS-GSO FSS coordination, CEPT is of the view that a higher value than the one applied today (which is based on $\Delta T/T = 6\%$) is justified. The determination of this value needs further studies.

•In addition, CEPT is considering to support introducing pfd levels in C- and Ku-bands that, if met, lead to a favourable finding under No. 11.32A noting that existing systems having technical parameters that may be more sensitive to interference may require the development of separate, dedicated pfd levels. Hence, this is still subject to further studies, including agreeing on the actual pfd levels to be applied.

•Regarding the resolves 2 of the Resolution 756, CEPT supports reducing the coordination arc for coordination between geostationary FSS networks to ±6° in C-band and to ±5° in Ku-band. In Ka-band, CEPT still needs further studies before adopting a preliminary position.

CEPT Coordinator: Mr Mario Neri (UK)



Agenda Item 9 (Issue 9.1.2) (approved by CPG-15-5)

View 2:

•Regarding the resolves 1 of the Resolution 756, CEPT supports retaining the current provision RR No. 9.41, which means supporting Method 1D of the ITU-R WP 4A (doc 4A/591). This method keeps the same triggering protection criterion of Delta T/T of 6 % without a need of changing to the C/I.

•CEPT is of the view that the BR Director contribution (document number 4A/579-E) provides the following reasons as to why the $\Delta T/T$ should be retained:

- The Bureau concludes that the C/I criterion alone for identifying potentially affected administrations/networks under RR Nos. 9.7 and 9.41 would not significantly reduce coordination requirement. Results of simulation demonstrate that the orbital separation required establishing coordination requirement using C/I criterion would not significantly improve the situation in the absence of any other mechanism.
- The Bureau considers that simple transition to C/I would not address the problem of "effectiveness and appropriateness" of the existing and proposed criteria while increasing the workload of the Bureau to implement the changes and the process.

•CEPT is of the view that introducing the C/I as a triggering parameter would lead to substantial increase in the workload of BR, administrations and satellite operators with the potential consequence of an increase in cost recovery fees charged by the ITU-BR to Administrations and their satellite operators.

•The Δ T/T value of 6 % is justified based on the fact that satellite links have typical interference margins of 1dB. This is particularly relevant for coordination of networks with larger orbital separations than the coordination arc value. The figures of Δ T/T for networks within the coordination arc are not relevant as Δ T/T is a parameter used to launch the coordination process but not for conducting detailed coordination between networks.

•Regarding the resolves 2 of the Resolution 756, CEPT supports reducing the coordination arc for coordination between geostationary FSS networks to ±6° in C-band and to ±5° in Ku-band. No modification is proposed for the coordination arc applicable to Ka-band. CEPT supports the method 2A of the ITU-R WP 4A (doc 4A/591).



Agenda Item 9 (Issue 9.1.3) (approved by CPG-15-5)

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

Preliminary CEPT position:

•CEPT notes that, while some challenges in building developing country capacities remain in order to fully take advantage of satellite services and the associated orbital resources, the current situation demonstrates availability of international public telecommunication services for developing countries through application of existing regulatory procedures.

•CEPT therefore sees no need for regulatory changes to the Radio Regulations but acknowledges that Resolution 11 (WRC-12) could be amended so that, taking also into account WTDC-14 Resolution 37 (Rev. Dubai, 2014), priority be placed on implementation of joint ITU-R and ITU-D activities to further support capacity building and knowledge sharing in the area of satellite telecommunications. Such activities should particularly focus on use of 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.



Agenda Item 9 (Issue 9.1.4) (amended by CPG-15-5)

Issue: Updating and rearrangement of the Radio Regulations. The Resolution 67 resolves to initiate studies for possible updating, review and possible revision of outdated information, and rearrangement of certain parts of the Radio Regulations, except for Articles 1, 4, 5, 6, 7, 8, 9, 11, 13, 14, 15, 16, 17, 18, 21, 22, 23 and 59 and those parts which are being revised on a regular basis, as appropriate.

Preliminary CEPT position:

CEPT note the consideration of the issue in WP 1B. CEPT is of the view that there is no need update and rearrange the Radio Regulations under this issue.

CEPT therefore propose NOC to the Radio Regulations under this issue.

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CEPT Coordinator : Ms Olga Slyusar (Russian Federation)



Agenda Item 9 (Issue 9.1.5) (approved by CPG-15-5)

Issue: 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

Preliminary CEPT position:

•CEPT supports the modification of Resolution 154 (WRC-12) to urge relevant administrations in Region 1 to use special care in the coordination, assignment, and management of frequencies taking into consideration the potential impact on FSS earth stations [in neighbouring countries] used for satellite communications related to safe operation of aircraft and reliable distribution of meteorological information in the band 3 400-4 200 MHz.

•In this regard, CEPT reminds that the RR is limited to international issues and not intended for those within a given country, noting that the results of ITU-R studies can be relevant to both types of issues.

CEPT considers that regulatory procedures currently exist in the Radio Regulations to address the issues raised by Resolution 154 (WRC-12), i.e. to coordinate, with their neighbouring countries, and to notify their receiving earth stations as well as to use relevant ITU-R methodologies to ensure compliance with RR No. 5.430A. CEPT is of the view that this agenda item should not be used to obtain additional protection compared to the one currently provided by the application of the existing regulatory procedures. CEPT considers that these FSS applications should not be considered as falling within the scope of No. 4.10.
CEPT notes that these two applications can be accommodated in parts of the band 3 400-4 200 MHz.



Agenda Item 9 (Issue 9.1.6) (amended by CPG-15-5)

Issue: Resolution 957 (WRC-12) resolves to review the definitions of fixed service, fixed station and mobile station for possible modification and invites ITU-R to conduct the necessary studies including on the potential impact of such modifications.

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.

CEPT therefore propose NOC to the Radio Regulations under this issue

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CEPT Coordinator : Mr Anders Jonsson (Sweden)



Agenda Item 9 (Issue 9.1.7) (approved by CPG-15-5)

Issue: Resolution 647 (Rev. WRC-12) Spectrum management guidelines for emergency and disaster relief radiocommunication

Preliminary CEPT position:

CEPT supports:

•the suppression of Resolution 647 (Rev. WRC-12)

Current CEPT proposal can be seen in Method C in CPM text from WP1B.

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CEPT Coordinator : Mr Andrew Gowans (UK)



Agenda Item 9 (Issue 9.1.8) (amended by CPG-15-5)

Issue: Resolution 757 (WRC-12) – Regulatory aspects on nano- and pico satellites

Preliminary CEPT position:

•CEPT proposes that RR Articles 9 and 11 remain unchanged concerning publication, coordination and notification purposes.

•In addition, in order to ensure equal coexistence between NGSO space services, and to avoid uncontrolled deployment of small satellites CEPT recommends that a future WRC-18 agenda item should establish [guidelines] and limits in the Radio Regulations.

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CEPT Coordinator : Mr Wouter Jan Ubbels (Netherlands)



Agenda Item 9 (Issue 9.2) (Sat part) (approved by CPG-15-5)

Issue: Collection of difficulties or inconsistencies encountered in the application of the Radio Regulations (RR) that are identified by the administrations, the Radiocommunication Bureau (BR) and the Radio Regulations Board (RRB), as well as the suggestion of the BR and the RRB of modifications of the RR to alleviate such difficulties or inconsistencies.

Preliminary CEPT position

CEPT will gather any difficulties or inconsistencies encountered by its members in their application of the provisions of the Radio Regulations related to space procedures. CEPT will afterwards bring them to the attention of the Director of the Radiocommunication Bureau so that they may be included in his Report to WRC-15.

Note: Under this agenda item the CEPT is currently considering possible clarification of the use of No. 5.526 raised in BR Circular Letter CR/358.

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CEPT Coordinator: Mr Jonas Eneberg (UK)



Agenda Item 9 (Issue 9.3) (approved by CPG-15-5)

Issue: Resolution 80 (Rev.WRC-07) "Due diligence in applying the principles embodied in the Constitution"

Preliminary CEPT position:

CEPT follows the ITU-R studies on this aspect.

acting CEPT Coordinator: Mr Alexandre Vallet (France)



Agenda Item 10 (amended by CPG-15-5)

Issue: to recommend to the Council items for inclusion in the agenda for the next WRC, and to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, in accordance with Article 7 of the Convention

Preliminary CEPT position:

1.CEPT will address the process of setting the agendas for the forthcoming WRCs in accordance with Resolution **804 (Rev. WRC-12)**, both the conditions to be met for items to be included on a future conference agenda and item a) – h). Furthermore CEPT is of the view that agenda items arising from previous conferences and which have been considered by two successive conferences should not be considered.

2. The template contained in **Annex 2** of Resolution **804 (Rev. WRC-12)** shall be used for all proposals for agenda items for WRC-18. This includes an estimate of the costs that would be incurred by its implementation by ITU before considered by CEPT for submission to the WRC.

3.CEPT considering support of the two proposed agenda items already contained in Resolution 808 (WRC-12) based on the results of the current studies.



Next meetings

CPG will meet at the beginning of February 2015, Malta Its next Project Team meetings are:

- •6th PTA: 13 16 January 2015, Malta
- •8th PTD: 19 23 January 2015, United Kingdom
- •7th PTC: 20 23 January 2015, Budapest, Hungary
- •6th PTB: 26 28 January 2015, Copenhagen (Denmark)
- •6th CPG: 3 6 February 2015, Malta
- •9th PTD: 20 24 April 2015, Lithuania

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



Useful links:

General information: <u>http://www.cept.org/ecc</u>

CPG page: http://www.cept.org/ecc/groups/ecc/cpg

Coordinators: http://www.cept.org/ecc/groups/ecc/cpg

CEPT Briefs/ECPs: http://www.cept.org/ecc/groups/ecc/cpg/page/cept-briefsand-ecps-for-wrc-15

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THANK YOU

