CEPT ECC
Electronic Communications Committee

STATUS OF CEPT PREPARATION SATELLITE ISSUES

25 November 2021

Agenda items under the responsibility of CPG-PTB

- 1.15 GSO ESIM Ku-Band
- 1.16 non-GSO ESIM Ka-Band

Connectivity in motion

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- 1.19 FSS 17 GHz Region 2
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- 9.3 Due diligence (Res 80)
- Art 21 Updates to table 21-2
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Regulatory issues

CEPT Coordinator 1.15:
Miia MUSTONEN (D)

CEPT Coordinator 1.16:
Soraya CONTRERAS (SUI)

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Connectivity in motion (1.15, 1.16)

*1.15 to harmonize the use of the frequency band 12.75-13.25 GHz (Earth-to-space) by earth stations on aircraft and vessels communicating with geostationary space stations in the fixed-satellite service globally, in accordance with Resolution **172 (WRC-19)***

*1.16 to study and develop technical, operational and regulatory measures, as appropriate, to facilitate the use of the frequency bands 17.7-18.6 GHz and 18.8-19.3 GHz and 19.7-20.2 GHz (space-to-Earth) and 27.5-29.1 GHz and 29.5-30 GHz (Earth-to-space) by non-GSO FSS earth stations in motion, while ensuring due protection of existing services in those frequency bands, in accordance with Resolution **173 (WRC-19)***

Preliminary CEPT position

CEPT supports establishing a regulatory framework and technical requirements for operation of earth stations on aircraft and vessels under **AI 1.15** (GSO ESIM Ku band) and **AI 1.16** (non-GSO ESIM Ka-band).

In the Ku band (**AI 1.15**), such ESIMs shall operate shall operate consistent with the Appendix **30B** procedures, protect the existing rights in this band. CEPT supports operation of such ESIM in territories of administrations who have given their agreement, as well as international waters and airspace.

For the non-GSO ESIM in Ka-band (**AI 1.16**), CEPT:

- is of the view that such systems shall not claim protection from terrestrial services
- supports the development of a methodology regarding examination by the BR of compliance with pfd limits
- Is of the view that protection of GSO networks in the FSS can be achieved via the EPFD limits in the RR.
- supports the protection of EESS (passive) sensors in the frequency band 18.6-18.8 GHz

Interim CEPT Coordinator:
Thomas WELTER (F)

Inter-satellite communications (1.17)

*1.17 to determine and carry out, on the basis of the ITU-R studies in accordance with Resolution **773 (WRC-19)**, the appropriate regulatory actions for the provision of inter-satellite links in specific frequency bands, or portions thereof, by adding an inter-satellite service allocation where appropriate*

Preliminary CEPT position

- CEPT supports the development of a regulatory framework to enable the operation of satellite-to-satellite links within the fixed-satellite service (FSS) allocation in the 11.7-12.7 GHz, 18.1-18.6 GHz, 18.8-20.2 GHz and 27.5-30 GHz bands
- CEPT supports avoiding a new ISS allocation in these core and heavily-used FSS bands.
- CEPT supports the same level of protection for GSOs and non-GSOs as currently provided in the RR.
- CEPT supports the same level of protection for terrestrial services as currently provided in the RR.
- In order to limit the interference to existing services, CEPT supports the operations within the cone of coverage of GSO or non-GSO service provider space stations. Studies are required to check whether these inter-satellite communications can be operated slightly outside of the geometrical cone of coverage.
- The EESS (passive) sensors operating in the 18.6-18.8 GHz band need to be protected.

CEPT Coordinator:
Norbert SCHROEDER (HOL)

WRC-23 Agenda item 1.18

*1.18 to consider studies relating to spectrum needs and potential new allocations to the mobile-satellite service for future development of narrowband mobile-satellite systems, in accordance with Resolution **248 (WRC-19)***

Preliminary CEPT position

CEPT is of the view that the spectrum needs of low data-rate satellite applications currently presented in the preparatory work could be satisfied through possible new primary or secondary allocations to MSS within the bands considered in the framework of Resolution **248 (WRC-19)**.

CEPT is however of the view that before proceeding with any new allocations to MSS in these bands, in-band and adjacent band coexistence of low date-rate satellite applications with systems operated under existing allocations has to be demonstrated through sharing and compatibility studies, also considering to not causing undue constraints on their further development.

CEPT is of the view that e.i.r.p. limits referred to in *recognizing* c) of Resolution **248 (WRC-19)** are applicable on a per satellite basis. CEPT is also of the view that applicable power limits to ensure the protection of incumbent services should be concluded from sharing and compatibility studies in accordance with Resolution **248 (WRC-19)**.

Interim CEPT Coordinator:
Thomas WELTER (F)

WRC-23 Agenda item 1.19

*1.19 to consider a new primary allocation to the fixed-satellite service in the space-to-Earth direction in the frequency band 17.3-17.7 GHz in Region 2, while protecting existing primary services in the band, in accordance with Resolution **174 (WRC-19)***

Preliminary CEPT position

Given that frequency band 17.3-17.7 GHz is allocated to FSS (space to Earth) in Region 1, CEPT would support a similar allocation in Region 2 which facilitates the use of spectrum available to networks and systems in the FSS across Regions, if the studies show that the new allocation is feasible.

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CEPT ECC Electronic Communications Committee

WRC-23 Agenda item 7

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

Preliminary CEPT position

- **Topic A:** Tolerances for non-GSO orbital characteristics. CEPT supports the development of tolerances limited to the four orbital characteristics of non-GSO space stations in FSS, BSS and MSS identifying a “notified orbital plane”.
- **Topic B:** Non-GSO post-milestone procedure. CEPT supports the development of final post-milestone procedures to replace temporary Post-milestone procedures contained in the Resolution **35 (WRC-19)** in *resolves* 19.
- **Topic C:** Protection of GSO MSS from non-GSO emissions in 7/8 and 20/30 GHz. CEPT supports the identification and definition of criteria, to protect GSO networks operating in the MSS from interference caused by non-GSO.
- **Topic D:** Modifications to Appendix 1 to Annex 4 of AP 30B (correction of WRC-19).
- **Topic E:** Improved procedures under AP 30B for new ITU member States. CEPT supports the possibility to grant new ITU Member States the same privilege as those granted to administrations having no assignments in the Appendix **30B** List, or under coordination, as adopted in Resolution **170 (WRC-19)**.
- **Topic F:** Excluding uplink service area in Appendix 30A for Regions 1 & 3 and in Appendix 30B. CEPT supports developing specific measures to avoid creating obstacles to space systems by other countries over their territories.