

CEPT CONFERENCE PREPARATORY GROUP (CPG) PRELIMINARY CEPT POSITIONS FOR WRC-27

Preliminary Positions from December 2024

CEPT Conference Preparatory Group (CPG)

The European Conference of Postal and Telecommunications Administrations (CEPT)

CPG exists for the 46 Countries of CEPT and its WRC-27 preparation: <https://www.cept.org/cept>

CEPT has 3 committees;

Electronic Communications Committee (ECC)

considers and develops policies on electronic communications activities in European context, taking account of European and international legislations and regulations

Com-ITU (Committee – ITU)

is responsible for organising the co-ordination of CEPT actions for the preparation for and during the course of the ITU activities of the Council, Plenipotentiary Conferences, WTDC, WTSA (but not WRCs) and other meetings as appropriate

European Committee for Postal Regulation (CERP)

is responsible for postal regulation and European co-ordination and preparation for Universal Postal Union meetings



Appointments to Conference Preparatory Group (CPG)

Chair¹ of CPG (CPG is a working group of ECC)

Mr Stephen Talbot (G/UK) – Ofcom



Vice Chair positions (elected and appointed in May 2024):

Mr Thomas Welter (France)

Agence nationale des fréquences



Ms Nadia Katsanou (Greece)

Hellenic Telecommunications & Post Commission (EETT)



¹ Appointment for the WRC-27 study cycle was made at ECC#63 in March 2024

Structure of CPG



ECO Expert
Miiä Mustonen



Tech. Secretary
Lauren Galloway
(G/UK)



CPG
Stephen Talbot (G/UK)

1.9 Aero HF AM(OR)S Appendix 26

“Science”



CPG Project Team A

Karsten Buckwitz (D)

- 1.8 Radiolocation 231.5-275/700 GHz
- 1.15 Lunar Allocations
- 1.16 Radio Quiet Zones/RAS, from ngso
- 1.17 Receiving Space Weather Allocations
- 1.18 EESS passive & RAS above 76 GHz
- 1.19 EESS Passive ‘SST’ in 4 & 8 GHz

“Fixed & Broadcasting Satellite Services”



CPG Project Team B

Thomas Welter (F)

- 1.1 ESIMS to gso/ngso in 47.2-51.4 ‘V’ GHz
- 1.2 smaller ES antennas in 13.75 – 14 GHz
- 1.3 Ngso gateway FSS E>s in 51.4-52.4 GHz
- 1.4 FSS s>E (regions) in 17.3-17.7/8 GHz
- 1.5 Unauthorized Operation, service area)
- 1.6 Equitable access in Q and V Bands
- 1.10 71/6 81/6 GHz eirp & pfd FSS/FS/MS)
- 7 Satellite coordination procedures
- 9.2 Inconsistencies in the RRs/ITU Dir. Rpt)
- 9.3 Check satellite processes are equitable

“Mobile Satellite Service & General Issues”



CPG Project Team C

Nadia Katsanou (GRC)

- 1.11 L Band space links gso/ngso for MSS
- 1.12 Low-data-rate non-geo MSS
- 1.13 MSS in IMT Bands to complement MS
- 1.14 Additional MSS allocations
 - 2 Review of incorporated Recs
 - 4 Review of WRC Resolutions
 - 8 Footnotes
 - 10 Agendas for WRC-31/WRC-35

“IMT Matters”



ECC PT1

Christoph Hildebrand (D)*

- 1.7 IMT 4.4, 7, 8 & 15 GHz
- (1.13 MSS in IMT Bands) ¹

¹ limited to the technical studies, on the protection the of terrestrial component of IMT

* Appointed by ECC not CPG



WRC-27 agenda item 1.1

*to consider the technical and operational conditions for the use of the frequency bands 47.2-50.2 GHz and 50.4-51.4 GHz (Earth-to-space), or parts thereof, by aeronautical and maritime earth stations in motion communicating with space stations in the fixed-satellite service and develop regulatory measures, as appropriate, to facilitate the use of the frequency bands 47.2-50.2 GHz and 50.4-51.4 GHz (Earth-to-space), or parts thereof, by aeronautical and maritime earth stations in motion communicating with geostationary space stations and non-geostationary space stations in the fixed-satellite service, in accordance with Resolution **176 (Rev.WRC-23)***

Preliminary CEPT position

CEPT supports the development of a regulatory framework for the operation of aeronautical and maritime ESIMs communicating with GSO and non-GSO satellite systems in the FSS frequency bands 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space).

CEPT also considers that there is a need to ensure a consistency of the regulatory framework applicable to ESIMs across the various frequency bands. As a consequence, depending on the outcome of the technical studies and taking into account the previous work and regulations proposed by CEPT with respect to A-ESIMs and M-ESIMs in other frequency ranges, the possible framework to develop may include, on a non-exhaustive basis, parts or all of the following measures:

- to limit the operation of ESIMs to the territories of administrations which have authorised such operation within their territories
- to ensure the characteristics of ESIMs remain in the envelope of notified earth station characteristics;
- CEPT is in favour of adopting similar approach that has been developed under Resolution **123 (WRC-23)** for identifying the notifying administration of the satellite network with which the ESIM communicates
- CEPT is in favour of adopting similar approach that has been developed under Resolution **123 (WRC-23)** for the purpose of interference management procedures to address the operation of ESIMs communicating with GSO/non-GSO FSS systems and for the responsibility of the entities involved in this operation



WRC-27 agenda item 1.2

*to consider possible revisions of sharing conditions in the frequency band 13.75-14 GHz to allow the use of uplink fixed-satellite service earth stations with smaller antenna sizes, in accordance with Resolution **129 (WRC-23)***

Preliminary CEPT position

CEPT recognises that Nos. **5.502** and **5.503** provide the protection to radiolocation and radionavigation services used for terrestrial, maritime and airborne application (No **5.502**) and space research service (No. **5.503**).

CEPT is of the view that it should be demonstrated in studies accepted by CEPT that any modification (relaxation or strengthening) of the constraints on the minimum antenna diameters of GSO and NGSO FSS Earth stations and on the associated power limitations as defined in Nos **5.502** and **5.503** and their consequences on the FSS Earth stations deployments and on its associated interference occurrences would still ensure the protection of the radiolocation, radionavigation and space research services.

CEPT is of the view that the future development of the terrestrial, airborne and shipborne systems operating globally under the primary allocation to the radiolocation service in the frequency band 13.75-14 GHz should be taken into account.



WRC-27 agenda item 1.3

*to consider studies relating to the use of the frequency band 51.4-52.4 GHz to enable use by gateway earth stations transmitting to non-geostationary-satellite orbit systems in the fixed-satellite service (Earth-to-space), in accordance with Resolution **130 (WRC-23)***

Preliminary CEPT position

CEPT supports studies with a view to develop a regulatory framework relating to the use of the frequency band 51.4-52.4 GHz to enable use by gateway earth stations transmitting to non-geostationary-satellite orbit systems in the fixed-satellite service (Earth-to-space) ensuring the protection of existing services in the same and adjacent band in accordance with Resolution **130 (WRC-23)**, such as, but not limited to:

- Radioastronomy as mentioned in No. **5.556**
- EESS, with the aim to verify that with those additional gateway Earth stations, the protection of the EESS (passive) in the adjacent frequency band 52.6-54.25 GHz continues to be ensured through the current mandatory unwanted emission limits in Resolution **750 (Rev.WRC-19)**

WRC-27 agenda item 1.4

to consider a possible new primary allocation to the fixed-satellite service (space-to-Earth) in the frequency band 17.3-17.7 GHz and a possible new primary allocation to the broadcasting-satellite service (space-to-Earth) in the frequency band 17.3-17.8 GHz in Region 3, while ensuring the protection of existing primary allocations in the same and adjacent frequency bands, and to consider equivalent power flux-density limits to be applied in Regions 1 and 3 to non-geostationary-satellite systems in the fixed-satellite service (space-to-Earth) in the frequency band 17.3-17.7 GHz, in accordance with Resolution 726 (WRC-23)

Preliminary CEPT position

CEPT supports a new FSS (space-to-Earth) allocation in Region 3 in the frequency band 17.3-17.7 GHz, which facilitates the use of spectrum available to networks and systems in the FSS across Regions. CEPT also supports harmonisation in the three Regions of the epfd threshold, to protect GSO space stations, agreed at WRC-23 in Region 2. Except to the application of the epfd threshold values in Region 1 as defined at WRC-23 for Region 2 to ensure harmonisation, CEPT support keeping unchanged the other existing conditions applicable for FSS to Region 1 in the frequency band 17.3-17.7 GHz under consideration.

CEPT has not yet any view on the possible allocation to BSS in Region 3.



WRC-27 agenda item 1.5

to consider regulatory measures, and implementability thereof, to limit the unauthorized operations of non-geostationary-satellite orbit earth stations in the fixed-satellite and mobile-satellite services and associated issues related to the service area of non-geostationary-satellite orbit satellite systems in the fixed-satellite and mobile-satellite services, in accordance with Resolution 14 (WRC-23)

Preliminary CEPT position

CEPT is of the view that the existing regulatory measures outlined in Article **18** of the Radio Regulations, along with those in both Resolution **22 (Rev. WRC-23)** and Resolution **25 (Rev. WRC-23)**, already impose mandatory licensing and authorization obligations that respect the sovereignty and regulatory responsibilities of individual Member States. These measures also provide robust enforcement mechanisms to limit unauthorized uplink transmissions from earth stations.

CEPT supports studying the potential need for possible additional regulatory measures. Before any further regulation is considered, it is essential to thoroughly document and analyse the extent of cases related to unauthorized NGSO earth stations. If studies indicate that some of these cases cannot be adequately addressed within the current ITU regulations, the benefits of introducing new regulatory measures, with respect to the severity and extent of these cases, must be carefully weighed against corresponding potential negative impacts such as increased costs and complexity for existing and future satellite systems. In this analysis, particular attention should be given to factors such as innovation and competition.

CEPT is of the view that, in accordance with Resolution **14 (WRC-23)**, only non-GSO FSS and MSS earth stations should be considered in this agenda item.



WRC-27 agenda item 1.7 (1/2)

to consider studies on sharing and compatibility and develop technical conditions for the use of International Mobile Telecommunications (IMT) in the frequency bands 4 400-4 800 MHz, 7 125-8 400 MHz (or parts thereof), and 14.8-15.35 GHz taking into account existing primary services operating in these, and adjacent, frequency bands, in accordance with Resolution 256 (WRC-23)

Preliminary CEPT position

In all the frequency bands considered under this Agenda item, CEPT will contribute to the ITU-R studies to ensure the protection of existing services from IMT.

4400-4800 MHz: In case deployment scenarios and parameters of IMT have not changed with respect to WRC-15, WRC-19 and WRC-23 studies, CEPT is opposing to an IMT identification of the 4 400-4 800 MHz frequency band.

7125 - 8400 MHz: CEPT could consider an IMT identification of the frequency band 7 125-7 250 MHz if, and will oppose an IMT identification in the frequency range 7 250-8 400 MHz or parts thereof unless, the current and future operations of all existing primary allocated radiocommunication services (including FS) in the frequency range 7 125 – 8 400 MHz and adjacent frequency bands are protected from harmful interference caused by IMT networks while:

- the continued operation of the incumbent's usage is guaranteed, especially taking into account the deployment of transportable stations in the FSS and MSS/MMSS on short notice and in any locations, within national relevant territories or in international spaces;
- communications from space stations to Earth stations of EESS and METSAT can be protected globally, as this band is the main band used for collecting data from satellites;
- no additional regulatory, technical or operational restrictions are imposed on existing Primary Services, which are ensuring the implementation of space strategies and policies.



CEPT co-coordinators:
Robert Cooper (G)



Ines Ortega Castello (D)

WRC-27 agenda item 1.7 (2/2)

to consider studies on sharing and compatibility and develop technical conditions for the use of International Mobile Telecommunications (IMT) in the frequency bands 4 400-4 800 MHz, 7 125-8 400 MHz (or parts thereof), and 14.8-15.35 GHz taking into account existing primary services operating in these, and adjacent, frequency bands, in accordance with Resolution 256 (WRC-23)

Preliminary CEPT position

14.8-15.35 GHz: CEPT is of the view that existing users, including stations of the aeronautical mobile service that need to be deployed on short notice, on any locations within national relevant territories or in international spaces, must be protected and which is not expected to be practical/feasible unless otherwise demonstrated.



WRC-27 agenda item 1.8

*to consider possible additional spectrum allocations to the radiolocation service on a primary basis in the frequency range 231.5-275 GHz and possible new identifications for radiolocation service applications in the frequency bands within the frequency range 275-700 GHz for millimetric and sub-millimetric wave imaging systems, in accordance with Resolution **663 (Rev.WRC-23)***

Preliminary CEPT position

CEPT will consider the support of new primary allocations to the RLS in the frequency range 231.5 – 275 GHz, or parts thereof, and identification in the frequency range 275 – 700 GHz, or parts thereof, for the applications and systems of the RLS as described in Resolution **663 (Rev.WRC-23)** provided that the protection of the incumbent services and their applications is ensured, in particular passive services. CEPT supports the definition of the appropriate characteristics, operations, frequency bands and protection criteria of systems and applications of radiolocation.



WRC-27 agenda item 1.9

*to consider appropriate regulatory actions to update Appendix 26 to the Radio Regulations in support of aeronautical mobile (OR) high frequency modernization, in accordance with Resolution **411 (WRC-23)***

Preliminary CEPT position

CEPT supports the explicit recognition of wideband AM(OR)S uses with non-contiguous carrier aggregation by amending Appendix **26** of the Radio Regulations

CEPT also considers contiguous and single-carrier possibilities, without constraining current narrow-band uses or coexistence with other services.



WRC-27 agenda item 1.10

*to consider developing power flux-density and equivalent isotropically radiated power limits for inclusion in Article 21 of the Radio Regulations for the fixed-satellite, mobile-satellite and broadcasting-satellite services to protect the fixed and mobile services in the frequency bands 71-76 GHz and 81-86 GHz, in accordance with Resolution **775 (Rev.WRC-23)***

Preliminary CEPT position

CEPT supports the development and inclusion of power flux-density (pfd) and equivalent isotropically radiated power (e.i.r.p.) limits in Article **21** for satellite services (fixed-satellite service (FSS), mobile-satellite service (MSS) and broadcasting-satellite service (BSS)) in the bands 71 – 76 GHz and 81 - 86 GHz in accordance with Resolution **775 (Rev.WRC-23)**.



WRC-27 agenda item 1.11

*to consider the technical and operational issues, and regulatory provisions, for space-to-space links among non-geostationary and geostationary satellites in the frequency bands 1 518-1 544 MHz, 1 545-1 559 MHz, 1 610-1 645.5 MHz, 1 646.5-1 660 MHz, 1 670-1 675 MHz and 2 483.5-2 500 MHz allocated to the mobile-satellite service, in accordance with Resolution **249 (Rev.WRC-23)***

Preliminary CEPT position

CEPT supports to list and study new sharing configurations with possible space stations transmitting in the uplink bands and receiving in the downlink bands representing space-to-space links, in accordance with Resolution **249 (Rev. WRC-23)**, in order to develop technical and regulatory conditions related to the use of space-to-space links.



WRC-27 agenda item 1.12

*to consider, based on the results of studies, possible allocations to the mobile-satellite service and possible regulatory actions in the frequency bands 1 427-1 432 MHz (space-to-Earth), 1 645.5-1 646.5 MHz (space-to-Earth) (Earth-to-space), 1 880-1 920 MHz (space-to-Earth) (Earth-to-space) and 2 010-2 025 MHz (space-to-Earth) (Earth-to-space) required for the future development of low-data-rate non-geostationary mobile-satellite systems, in accordance with Resolution **252 (WRC-23)***

Preliminary CEPT position

CEPT supports:

- the principle of a global MSS allocation to one or more of the bands under study in order to meet the needs of low-data-rate non-GSO satellite communications;
- to carry out studies related to spectrum needs as well as sharing and compatibility studies with existing services, including assessment of impact from existing services into low-data-rate non-GSO MSS, with the objective to determine the technical conditions that should be associated to any of these possible new MSS allocations for the protection of existing services; and,
- to study technical and regulatory solutions to allow several operators to share spectrum resources and to avoid an exclusive access to these spectrum resources by just one or a few operators on a first-come, first-served basis.

WRC-27 agenda item 1.14

to consider possible additional allocations to the mobile-satellite service, in accordance with Resolution 254 (WRC-23)

Preliminary CEPT position

In CEPT, the frequency band 2110-2170 MHz is harmonised and widely used for IMT mobile networks. Consideration of MSS in this frequency band should be limited to agenda item 1.13.



WRC-27 agenda item 1.15

*to consider studies on frequency-related matters, including possible new or modified space research service (space-to-space) allocations, for future development of communications on the lunar surface and between lunar orbit and the lunar surface, in accordance with Resolution **680 (WRC-23)***

Preliminary CEPT position

CEPT supports possible new or modified space research service (space-to-space) allocations for the future development of communications on the lunar surface and between stations in lunar orbit and stations operating on the lunar surface based on the results of ITU-R studies.

CEPT supports the protection of the Shielded Zone (of the) Moon for its use for radio astronomy observations.



WRC-27 agenda item 1.17

*to consider regulatory provisions for receive-only space weather sensors and their protection in the Radio Regulations, taking into account the results of ITU Radiocommunication Sector studies, in accordance with Resolution **682 (WRC-23)***

Preliminary CEPT position

CEPT supports primary allocations to MetAids (space weather) for receive-only sensors in the 27.5-28.0 MHz, 29.7-30.2 MHz, 32.2-32.6 MHz, 37.5-38.325 MHz, 73.0-74.6 MHz, and 608-614 MHz frequency bands without imposing constraints on incumbent services.



WRC-27 agenda item 1.18 (Resolves 1)

*to consider, based on the results of ITU Radiocommunication Sector studies, possible regulatory measures regarding the protection of the Earth exploration-satellite service (passive) and the radio astronomy service in certain frequency bands above 76 GHz from unwanted emissions of active services, in accordance with Resolution **712 (WRC-23)***

Preliminary CEPT position

CEPT supports the development of the necessary technical studies towards compatibility between the EESS (passive) and the corresponding active services in adjacent frequency bands as listed in Table 1 of Resolution **712 (WRC-23)** and the inclusion of any required regulatory measures regarding the protection of the EESS (passive) in an update to Resolution **750 (Rev.WRC-19)**

WRC-27 agenda item 1.18 (Resolves 2)

*to consider, based on the results of ITU Radiocommunication Sector studies, possible regulatory measures regarding the protection of the Earth exploration-satellite service (passive) and the radio astronomy service in certain frequency bands above 76 GHz from unwanted emissions of active services, in accordance with Resolution **712 (WRC-23)***

Preliminary CEPT position

CEPT supports the development of the necessary technical studies towards compatibility between RAS and the corresponding active satellite services in adjacent and nearby frequency bands as listed in Table 2 of Resolution **712 (WRC-23)** and the inclusion of any required regulatory measures regarding the protection of the RAS in an update to Resolution **739 (Rev.WRC-19)**, including the set of the relevant threshold levels for unwanted emissions from any GSO and non-GSO space stations.



WRC-27 agenda item 1.19

*to consider possible primary allocations in all Regions to the Earth exploration-satellite service (passive) in the frequency bands 4 200-4 400 MHz and 8 400-8 500 MHz, in accordance with Resolution **674 (WRC-23)***

Preliminary CEPT position

CEPT supports the primary allocation of the bands 4 200-4 400 MHz and 8 400-8 500 MHz for EESS (passive) without protection from existing services in the frequency bands and in adjacent bands.



WRC-27 agenda item 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

CEPT supports:

- retaining the current process of continuing evolution at successive WRCs of the regime governing space services. CEPT also favours a stable and predictable regulatory framework for efficient use of spectrum and orbit resources. CEPT intends to develop specific positions susceptible to bring improvement to the regulatory process.
- the review of any RR provision bringing accurate solutions to specific detected inconsistencies and develop new improved provisions with emphasis on solving the most urgent issues, i.e. well characterized matters addressed Topic by Topic, in order to avoid unintended consequences.
- to review and consider each proposed Topic with a view to understand what it is trying to solve, before it becomes an agreed Topic under agenda item 7.
- to address encountered coordination difficulties on a case-by-case basis.

Useful links to CPG preparatory work for WRC-27

CPG Home Page

<https://www.cept.org/ecc/groups/ecc/cpg/client/introduction>

CEPT Coordinators for WRC-27 agenda items:

<https://www.cept.org/ecc/groups/ecc/cpg/page/list-of-cept-coordinators-wrc-27>

CPG Meetings Calendar (CPG27-3, 10-13 June 2025, Groningen)

<https://www.cept.org/ecc/groups/ecc/cpg/client/meeting-calendar>

CEPT Briefs / European Common Proposals to WRC-27:

<https://cept.org/ecc/groups/ecc/cpg/client/introduction/cept-briefs-and-ecps-for-wrc-27>

CPG Meeting Documents:

<https://www.cept.org/ecc/groups/ecc/cpg/client/meeting-documents>

CEPT Network of Women for WRC-27 (NOW4WRC27) page:

<https://cept.org/ecc/groups/ecc/cpg/now4wrc27/client/introduction>