

**ITUEvents**

# 1<sup>st</sup> ITU Inter-regional Workshop on WRC-23 preparation

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#ITUWRC

**Status of CEPT preparation  
for WRC-23 / RA-23**

(12 November 2021)

***CEPT***



# STATUS OF CEPT PREPARATION FOR WRC-23 / RA-23

12 November 2021

# Conference Preparatory Group (CPG)



- **A forum for CEPT Administrations (48) and ECC Observers**
- **European positions for ITU World Radiocommunication Conferences and Radiocommunication Assemblies**
- **Common positions in respect to ITU-R meetings**
- **Dialogue and cooperation with regional organisations outside CEPT**
- **Coordinated procedures for CEPT actions**

# CPG Deliverables



## European Common Proposals

- Multi-country proposals
- Guideline: **at least 10 CEPT members supporting and not more than 6 opposing the proposal**

## CEPT Briefs on agenda items

- (Preliminary\*) CEPT position agreed by consensus at each stage
- Background information and reasoning for CEPT position

\* CPG project teams develop “Draft Preliminary CEPT positions” while CPG Plenary approves “(Preliminary) CEPT positions”

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# CPG Management Team



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PROJECT TEAM B

PROJECT TEAM C

PROJECT TEAM D

PROJECT TEAM ECC PT1



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SCIENCE & GENERAL

SPACE

TRANSPORT

UHF BAND

IMT MATTERS

# Assignment of WRC-23 Agenda Items

## CONFERENCE PREPARATORY GROUP

### PROJECT TEAM A

#### SCIENCE & GENERAL

**1.12** Radar sounders  
**1.13** SRS 15 GHz  
**1.14** EESS(passive) 250 GHz  
**9.1a** Space weather sensors  
**9.1d** EESS(passive) 37 GHz  
**9.1c** FWA / FS bands  
**Res. 655** Time scale  
 2 Recs incorporated by ref.  
 4 Review of Res/Recs  
 8 Review of footnotes  
 10 Future agenda

### PROJECT TEAM B

#### SPACE

**1.15** GSO ESIM Ku-band  
**1.16** NGSO ESIM Ka-band  
**1.17** Inter-satellite links  
**1.18** MSS data collection  
**1.19** FSS 17 GHz  
 7 Sat. procedures (Res. 86)  
**9.2** Inconsistencies in RR  
**9.3** Due diligence (Res. 80)  
**Art. 21** Updates to Table 21-2  
**CS Article 48**

### PROJECT TEAM C

#### TRANSPORT

**1.1** Review of 5.441B  
**1.6** Sub-orbital vehicles  
**1.7** AMS(R)S 137 MHz  
**1.8** Resolution 155  
**1.9** Appendix 27  
**1.10** AMS non-safety  
**1.11** GMDSS  
**9.1b** Protection of RNSS  
**Res. 427** Aero. provisions

### PROJECT TEAM D

#### UHF BAND

**1.5** UHF review

### PROJECT TEAM ECC PT1

#### IMT MATTERS

**1.2** IMT centimetre bands  
**1.3** MS 3.6-3.8 GHz  
**1.4** HIBS  
**Art. 21** Limit in No. 21.5 & verification of No. 21.5



In general, CEPT supports the ITU-R studies on all WRC-23 agenda items as outlined in relevant Resolutions of WRC-15 and WRC-19



# WRC-23 Agenda item 1.1

*to consider, based on the results of the ITU-R studies, possible measures to address, in the frequency band 4 800-4 990 MHz, protection of stations of the aeronautical and maritime mobile services located in international airspace and waters from other stations located within national territories, and to review the pfd criteria in No. **5.441B** in accordance with Resolution **223 (Rev.WRC-19)***

## Preliminary CEPT position

CEPT is of the view that, AMS and MMS stations located in international airspace or waters and operated in the band 4800-4990 MHz shall be protected on the basis of the pfd limit provided in RR No. **5.441B**, which will be reviewed taking into account all detailed AMS and MMS characteristics and protection criteria.



# WRC-23 Agenda item 1.2 (1/3)

*to consider identification of the frequency bands 3 300-3 400 MHz, 3 600-3 800 MHz, 6 425-7 025 MHz, 7 025-7 125 MHz and 10.0-10.5 GHz for International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution **245 (WRC-19)***

## Preliminary CEPT position

### **3300-3400 MHz (Amend Footnote in Region 1)**

CEPT does not support amendments to footnotes **5.429A** and **5.429B** which could extend them to countries north of 30° parallel north. Thus, CEPT does not support an IMT identification for the entire Region 1. Furthermore, CEPT opposes amending the footnote to change the regulatory provisions applicable to IMT stations in the band. In particular, IMT stations shall not cause harmful interference to, or claim protection from, systems in the radiolocation service in various national and international operational environments and shall meet unwanted emission levels specified in the relevant ITU-R Recommendations. In addition, protection of FSS in the frequency band 3400-3800 MHz should also be ensured, as appropriate.





# WRC-23 Agenda item 1.2 (2/3)

*to consider identification of the frequency bands 3 300-3 400 MHz, 3 600-3 800 MHz, 6 425-7 025 MHz, 7 025-7 125 MHz and 10.0-10.5 GHz for International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution 245 (WRC-19)*

## Preliminary CEPT position (cont.)

### 3300-3400 MHz (Region 2)

CEPT supports maintaining the regulatory provisions in the footnotes Nos. **5.429C** and **5.429D** applicable to IMT stations in this band. In particular, IMT stations shall not cause harmful interference to, nor claim protection from, systems in the radiolocation service in various national and international operational environments, and shall meet unwanted emission levels specified in the relevant ITU-R Recommendations.

### 3600-3800 MHz (Region 2)

To be developed

### 6425-7025 MHz (Region 1)

To be developed



# WRC-23 Agenda item 1.2 (3/3)

*to consider identification of the frequency bands 3 300-3 400 MHz, 3 600-3 800 MHz, 6 425-7 025 MHz, 7 025-7 125 MHz and 10.0-10.5 GHz for International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution 245 (WRC-19)*

## Preliminary CEPT position (cont.)

### **7025-7125 MHz (Globally)**

To be developed

### **10000-10500 MHz (Region 2)**

CEPT is of the view that the result of a possible identification of the frequency band 10-10.5 GHz in Region 2 under this agenda item may have a global impact on EESS (active) in the band 10.0-10.4 GHz, as well as EESS (passive) in the band 10.6-10.7 GHz, due to the required protection of these services on a global basis. Therefore, CEPT is of the view that protection of EESS (active) and EESS (passive) systems should be ensured and identification of 10.0-10.5 GHz frequency band or parts of it for IMT in Region 2 should not impose any additional regulatory or technical constraints to EESS (active) and EESS (passive) stations because of their global coverage. It may have also an impact on airborne and naval radars operated by some CEPT countries in all Regions.



# WRC-23 Agenda item 1.3

*to consider primary allocation of the band 3 600-3 800 MHz to mobile service within Region 1 and take appropriate regulatory actions, in accordance with Resolution **246 (WRC-19)***

## Preliminary CEPT position

CEPT is considering an upgrade of the allocation of the frequency band 3600-3800 MHz to the mobile, except aeronautical mobile, service on a primary basis in Region 1 to improve opportunities for the introduction of MS applications in Europe.

This consideration is subject to the conditions that the current use in the frequency bands 3400-3800 MHz and the protection of primary services, under the existing CEPT regulatory framework, can be continued, and that no undue constraints are imposed on the existing services and their future development.

In consequence, CEPT supports that the technical and regulatory conditions applicable to the band 3400-3600 MHz, in particular the pfd limit of  $-154.5 \text{ dBW/m}^2/4 \text{ kHz}$  not to be exceeded for more than 20% of time 3 m above ground at the border to protect the neighbouring countries, are one part of the technical conditions in response to WRC- 23 Agenda item 1.3, recognising that sharing studies are required in ITU-R to ensure that the full objective of Resolution **246 (WRC-19)** is met.



# WRC-23 Agenda item 1.4

*to consider, in accordance with Resolution 247 (WRC-19), the use of high-altitude platform stations as IMT base stations (HIBS) in the mobile service in certain frequency bands below 2.7 GHz already identified for IMT, on a global or regional level*

## Preliminary CEPT position

To be developed



# WRC-23 Agenda item 1.5 (1/2)

*to review the spectrum use and spectrum needs of existing services in the frequency band 470-960 MHz in Region 1 and consider possible regulatory actions in the frequency band 470-694 MHz in Region 1 on the basis of the review in accordance with Resolution **235 (WRC-15)***

## Preliminary CEPT position

- CEPT supports a complete and comprehensive overview of the existing usage and evaluation of spectrum needs of the existing services within the frequency band 470–960 MHz in Region 1 as a basis for further work on agenda item 1.5.
- CEPT is of the view that any consideration of possible regulatory action(s) in the band 470-694 MHz requires a full account of the results and impact of sharing studies including a thorough analysis.
- In line with Resolution **235 (WRC-15)**, CEPT acknowledges and supports that no regulatory action is required in the band 694-960 MHz.
- CEPT is of the view that the primary allocation of the 470-862 MHz band to the broadcasting service in Region 1 shall remain, in order to enable the protection and development of incumbent usage of the broadcasting service.
- CEPT is of the view that any possible regulatory action by WRC-23 in the band 470 – 694 MHz shall not be in conflict with any provision of the GE-06 Agreement.



## WRC-23 Agenda item 1.5 (2/2)

*to review the spectrum use and spectrum needs of existing services in the frequency band 470-960 MHz in Region 1 and consider possible regulatory actions in the frequency band 470-694 MHz in Region 1 on the basis of the review in accordance with Resolution 235 (WRC-15)*

### Preliminary CEPT position (cont.)

- CEPT is of the view that this agenda item seeks the long-term balance between meeting various national requirements and the challenges of effective cross-border coordination between the existing services and various services/applications wishing to access spectrum, including applications of the mobile service.
- CEPT supports the continuation and development of the incumbent usage by PMSE (SAP/SAB) (in accordance with existing RR No. **5.296**).
- CEPT supports the protection of the radioastronomy service within the frequency band 606-614 MHz to ensure its continued operation. CEPT is of the view that any decision on regulatory action(s) in the band 470-694 MHz at the WRC-23 shall consider regulatory action to protect RAS, taking into account RR **5.149**.
- CEPT is currently of the view that no changes are necessary concerning RR No. **5.291A** addressing the operation of wind profiler radars.



# WRC-23 Agenda item 1.6

*to consider, in accordance with Resolution 772 (WRC-19), regulatory provisions to facilitate radiocommunications for sub-orbital vehicles*

## Preliminary CEPT position

CEPT is of the view that the definition of sub-orbital flight in Report ITU-R M.2477 “to be an intentional flight of a vehicle expected to reach the upper atmosphere with a portion of its flight path that may occur in space without completing a full orbit around the Earth before returning back to the surface of the Earth” is sufficient.

CEPT supports the categorization of radiocommunication station for suborbital vehicle by the purpose of the mission:

- Some suborbital vehicles that will have at least one phase of its their flight occurring in airspace shared with other aircraft, should use onboard terrestrial stations or/and Earth stations operated in the same radiocommunication services as the ones for conventional aircraft independently of the maximum altitude reached.
- Other types of suborbital vehicles that fly in non-shared airspace, may use onboard terrestrial stations or/and Earth stations operated in relevant radiocommunication service to allow the transmission of location information during all phases of flight and communication of other data for other functions.

The suborbital vehicles shall ensure the protection and not impose any constraint on other services or applications operated in the same service. The suborbital vehicles shall not impact the radiocommunications of conventional satellite launchers.

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# WRC-23 Agenda item 1.7

*to consider a new aeronautical mobile-satellite (R) service (AMS(R)S) allocation in accordance with Resolution 428 (WRC-19) for both the Earth-to-space and space-to-Earth directions of aeronautical VHF communications in all or part of the frequency band 117.975-137 MHz, while preventing any undue constraints on existing VHF systems operating in the AM(R)S, the ARNS, and in adjacent frequency bands*

## Preliminary CEPT position

CEPT supports a new primary allocation to AMS(R)S in the Earth-to-space and space-to-Earth directions in all or part of the frequency band 117.975-137 MHz while:

- limiting the use of the new AMS(R)S allocation to internationally standardised aeronautical systems;
- ensuring protection of AM(OR)S service in the band 117.975-137 MHz;
- ensuring protection of services in adjacent bands and not constraining these services.

CEPT is of the view that in-band coexistence between AM(R)S and AMS(R)S and adjacent-band coexistence between ARNS and AMS(R)S around 117.975 MHz will be ensured through frequency planning and coordination work.





# WRC-23 Agenda item 1.8 (1/3)

*to consider, on the basis of ITU-R studies in accordance with Resolution 171 (WRC-19), appropriate regulatory actions, with a view to reviewing and, if necessary, revising Resolution 155 (Rev.WRC-19) and No. 5.484B to accommodate the use of fixed-satellite service (FSS) networks by control and non-payload communications of unmanned aircraft systems*

## Preliminary CEPT position

CEPT acknowledges the opportunities of the use of networks of the FSS for UAS CNPC links and CEPT is of the view that UAS CNPC links using FSS in non-segregated airspace shall operate:

- in accordance with ICAO SARPs (see *resolves* 3 of Resolution **155 (Rev.WRC-19)**);
- under successfully coordinated assignments for FSS applications notified with class of earth station “UG” (see *resolves* 2 and 13 of Resolution **155 (Rev.WRC-19)**).

CEPT is of the view that the safety aspects of UAS CNPC shall not have any impact on:

- the existing terrestrial services and their current and expected applications (see *resolves* 8 of Resolution **155 (Rev.WRC-19)**);
- the relevant existing agreements reached during FSS satellite coordination process (see *resolves* 6, 7, and 9 of Resolution **155 (Rev.WRC-19)**);
- the future coordination of FSS networks during the application of provisions of Articles 9 and 11 of the RR (see *resolves* 9 of Resolution **155 (Rev.WRC-19)**);
- all cases which fall under RR **11.41** (see *resolves* 9 of Resolution **155 (Rev.WRC-19)**).



## WRC-23 Agenda item 1.8 (2/3)

*to consider, on the basis of ITU-R studies in accordance with Resolution 171 (WRC-19), appropriate regulatory actions, with a view to reviewing and, if necessary, revising Resolution 155 (Rev.WRC-19) and No. 5.484B to accommodate the use of fixed-satellite service (FSS) networks by control and non-payload communications of unmanned aircraft systems*

### Preliminary CEPT position (cont.)

CEPT is of the view that in order to ensure safety-of-flight operation of UAS, the administrations responsible for the operation of UAS CNPC links under the ICAO SARPs shall take the required measures on their side to ensure freedom from harmful interference to earth stations on board UA. (see *resolves* 7 and 13 of Resolution 155 (Rev.WRC-19)).

CEPT is of the view that the pfd mask labelled as example b in Annex 2 of Resolution 155 (Rev. WRC-19) is appropriate to protect the terrestrial services.

CEPT is of the view that the RR No. 5.149 for the protection of Radioastronomy from harmful interference in the frequency band 14.47-14.5 GHz has to be taken into account (see *resolves* 17 of Resolution 155 (Rev.WRC-19)).



## WRC-23 Agenda item 1.8 (3/3)

*to consider, on the basis of ITU-R studies in accordance with Resolution 171 (WRC-19), appropriate regulatory actions, with a view to reviewing and, if necessary, revising Resolution 155 (Rev.WRC-19) and No. 5.484B to accommodate the use of fixed-satellite service (FSS) networks by control and non-payload communications of unmanned aircraft systems*

### Preliminary CEPT position (cont.)

CEPT recognises that ICAO is responsible for the safe operation of aircraft including UAS and is developing appropriate SARPs covering all aspects of safe operation of UAS including the required communication system and that RR 4.10 does not apply to the use of networks of the FSS for UAS CNPC links. This implies that any administration notifying FSS network as well as any administration authorising the operation of stations of the terrestrial services in accordance with the RR in the frequency bands identified in *resolves* 1 of Resolution 155 (Rev.WRC-19) are not responsible for the application of RR 4.10.

CEPT is of the view that if the conditions for the safety operation of CNPC established by ICAO cannot be met with the existing FSS link as it stands, then this link should not be used for UAS.



# WRC-23 Agenda item 1.9

*to review Appendix 27 of the Radio Regulations and consider appropriate regulatory actions and updates based on ITU-R studies, in order to accommodate digital technologies for commercial aviation safety-of-life applications in existing HF bands allocated to the aeronautical mobile (route) service and ensure coexistence of current HF systems alongside modernized HF systems, in accordance with Resolution 429 (WRC-19)*

## Preliminary CEPT position

CEPT supports the modification of the Appendix 27 of RR that would allow new digital wideband HF systems including aggregating contiguous and/or not contiguous channels, if retained, ensuring:

- the protection of other primary services operating in band and in adjacent frequency bands, and
- coexistence with existing aeronautical analogue voice and data HF systems.



# WRC-23 Agenda item 1.10

*to conduct studies on spectrum needs, coexistence with radiocommunication services and regulatory measures for possible new allocations for the aeronautical mobile service for the use of non-safety aeronautical mobile applications, in accordance with Resolution 430 (WRC-19)*

## Preliminary CEPT position

CEPT acknowledges the need for additional spectrum to fulfil the increasing demand for non-safety aeronautical applications and is considering a new allocation to AMS for non-safety application in whole range or a part of the frequency bands 15.4-15.7 GHz and 22-22.21 GHz while:

- any modification of the RR should ensure appropriate protection for the EESS/SRS (passive) and the RAS (taking into account RR No. **5.149**) allocated in adjacent frequency band from unwanted emissions of the AMS;
- ensuring protection for in-band radiolocation and aeronautical radionavigation and FSS (Earth-to-space) services in the relevant part of the frequency band 15.4 – 15.7 GHz;
- ensuring protection for in-band fixed and mobile services in the frequency band 22-22.21 GHz, noting that the fixed service is allocated in the 21.2-23.6 GHz frequency range.



# WRC-23 Agenda item 1.11

*to consider possible regulatory actions to support the modernization of the Global Maritime Distress and Safety System and the implementation of e-navigation, in accordance with Resolution **361 (Rev.WRC-19)***

## Preliminary CEPT position

### Issue A: Modernisation of GMDSS

CEPT supports the possible regulatory actions needed to implement the GMDSS modernisation in the Radio Regulation based on decisions to be taken in IMO.

### Issue B: e-navigation

CEPT supports, based on decisions to be taken in IMO, the possible regulatory actions in the Radio Regulation needed to support the implementation of the e-navigation, if appropriate.

### Issue C: Regulatory actions due to the introduction of additional satellite systems into the GMDSS by IMO

CEPT supports regulatory actions to introduce an additional satellite system into the GMDSS, based on decisions to be taken in IMO. . However, approval by IMO of any existing satellite system/network as complying with the requirements for GMDSS shall not lead to a change in the status of frequency assignments of this system/network and/or the allocation status of the corresponding service within which this system/network is notified.

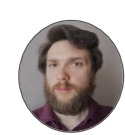


# WRC-23 Agenda item 1.12

*to conduct, and complete in time for WRC-23, studies for a possible new secondary allocation to the Earth exploration-satellite (active) service for spaceborne radar sounders within the range of frequencies around 45 MHz, taking into account the protection of incumbent services, including in adjacent bands, in accordance with Resolution 656 (Rev.WRC-19)*

## Preliminary CEPT position

To be developed



# WRC-23 Agenda item 1.13

*to consider a possible upgrade of the allocation of the frequency band 14.8-15.35 GHz to the space research service, in accordance with Resolution **661 (WRC-19)***

## Preliminary CEPT position

CEPT is supporting upgrade of space research service (SRS) allocation from secondary to primary while ensuring protection for in-band FS/MS and for radioastronomy service in the adjacent band 15.35-15.4 GHz . Upgrading of the allocation of the frequency band 14.8-15.35 GHz to the SRS should not impose constraints on existing systems of FS and MS in the frequency band 14.8-15.35 GHz.





# WRC-23 Agenda item 1.14

*to review and consider possible adjustments of the existing or possible new primary frequency allocations to EESS (passive) in the frequency range 231.5-252 GHz, to ensure alignment with more up-to-date remote-sensing observation requirements, in accordance with Resolution 662 (WRC-19)*

## Preliminary CEPT position

CEPT supports to cover relevant requirements of passive microwave sensor measurements within the frequency range 231.5-252 GHz with frequency allocations to EESS (passive) without unduly constraining the other primary services currently allocated in this frequency range.

In line with the scientific observation requirements identified so far, CEPT supports the assessment of the frequency bands 239.2-242.2 GHz and 244.2-247.2 GHz for a possible primary allocation to the EESS (passive), including the relevant sharing and compatibility studies with the services to which these and the adjacent bands are already allocated.



# WRC-23 Agenda item 1.15 (1/2)

*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)*

## Preliminary CEPT position

CEPT supports establishing a regulatory framework and technical requirements for operation of earth stations on aircraft in the frequency band 12.75-13.25 GHz (Earth-to-space) with conditions that protect the services currently allocated in this frequency band and bands adjacent to it, taking into account ECC Decision (19)04.

CEPT supports establishing a regulatory framework and technical requirements for operation of earth stations on vessels in the frequency band 12.75-13.25 GHz (Earth-to-space) pending on the results of the studies conducted on protection services currently allocated in this frequency band and bands adjacent to it.



## WRC-23 Agenda item 1.15 (2/2)

*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)*

### Preliminary CEPT position (cont.)

CEPT considers that earth stations on aircraft and vessels in the frequency band 12.75-13.25 GHz shall operate consistent with the Appendix **30B** procedures, protect the Appendix **30B** allotments in the Plan, assignments in the List and in the new proposed Appendix **30B** ESIM List (if adopted at WRC-23) and respect Resolution **170 (WRC-19)**.

CEPT supports the operation of these earth stations in the territories (air space and territorial waters) of administrations which have given agreement under No. **6.6** of Article 6 of Appendix **30B** and have authorised such operation within their territories. The characteristics of these earth stations should remain in the envelope of notified earth station characteristics.

CEPT also supports to study regulatory and technical aspects of operations of earth stations on aircraft and vessels in international waters and airspace.



# WRC-23 Agenda item 1.16 (1/3)

*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 the development of a regulatory framework for the operation of ESIM communicating with non-GSO satellite systems in the FSS in the frequency bands 17.7-18.6 GHz, 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). The technical and operational requirements for the use of non-GSO ESIM shall ensure the protection of GSO networks and other services operating in the same frequency bands and in adjacent bands.

CEPT is of the view that non-GSO ESIM operating in the frequency bands 17.7-18.6 GHz and 18.8-19.3 GHz (space-to-Earth) shall not claim protection from terrestrial services having allocations in the same frequency bands and operating in accordance with the Radio Regulations.

CEPT supports the development of a methodology regarding examination by the Bureau of compliance with pfd limits by non-GSO aeronautical ESIM or of adequate transitional measures in case WRC-23 could not finalise the methodology. CEPT also supports that the progress on this WRC-23 agenda item not be conditional on the development of the methodology for compliance with pfd limits as part of Resolution **169 (WRC-19)** for aeronautical GSO ESIM.



## WRC-23 Agenda item 1.16 (2/3)

*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 (cont.)

CEPT is of the view that the protection of GSO networks in the fixed-satellite service operating in the frequency bands 17.8-18.6 GHz, 19.7-20.2 GHz, 27.5-28.6 GHz and 29.5-30 GHz from non-GSO ESIM can be achieved by requiring that links involving non-GSO ESIM comply with EPFD limits referred to in Nos. **22.5C**, **22.5D** and **22.5F** and that the methodology included in Recommendation ITU-R S.1503 for determination of compliance with epfd limits in Article **22** is applicable to ESIM communicating with non-GSO FSS systems.

CEPT is of the view that to protect GSO networks – in those bands where epfd limits do not apply - and non-GSO systems in the FSS:

- non-GSO ESIM characteristics shall remain within the envelope characteristics of typical earth stations associated with the non-GSO satellite system with which the ESIM communicate
- non-GSO ESIM shall not cause more interference and shall not claim more protection than typical earth stations in this non-GSO systems
- the operation of non-GSO ESIM shall comply with the coordination agreements obtained following the application of provisions under No **9.11A**.



# WRC-23 Agenda item 1.16 (3/3)

*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 (cont.)

CEPT is of the view that sharing and compatibility studies between non-GSO ESIM and fixed and mobile services allocated on a secondary basis in the 29.5-30 GHz (see No **5.542**) are outside the scope of this agenda item as per *resolves 2* in Resolution **173 (WRC-19)**.

CEPT supports the protection of EESS (passive) sensors in the frequency band 18.6-18.8 GHz, and compatibility studies with related non-GSO systems to define necessary protection measures. In particular, CEPT is of the view that enabling the operations of non-GSO ESIM should not result in an increase of the interference to EESS (passive) sensors operating in the 18.6-18.8 GHz band. Any measure on non-GSO space stations communicating with aeronautical ESIM and maritime ESIM that may be needed to limit the interference to EESS (passive) sensors operating in the 18.6-18.8 GHz band shall be applicable only to those non-GSO systems notified/brought into use after the last day of WRC-23.



# WRC-23 Agenda item 1.17 (1/4)

*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, or parts thereof, while ensuring protection of existing services in the same frequency bands and adjacent bands. CEPT supports avoiding a new ISS allocation in these core and heavily-used FSS bands.

CEPT supports that the introduction of satellite-to-satellite transmissions must ensure the same level of protection for GSOs and non-GSOs as currently provided in the RR and must not impose new constraints on GSOs and non-GSOs to protect satellite-to-satellite links from interference.

CEPT supports that the introduction of satellite-to-satellite transmissions must ensure the same level of protection for terrestrial services as currently provided in the RR and must not impose new constraints on terrestrial services to protect satellite-to-satellite links from interference.



# WRC-23 Agenda item 1.17 (2/4)

*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 (cont.)

CEPT proposes that space stations that plan satellite-to-satellite transmissions should be governed by the following preliminary guiding principles:

- CEPT supports
  - operations within the cone of coverage of GSO or non-GSO service provider space stations. The cone of coverage<sup>(1)</sup> of a service provider space station is the conical volume of space defined by a cone whose apex is at the service provider space station and whose base does not extend beyond the edge of coverage of the Earth as viewed by the service provider space station; and
  - operations within the volume of space defined by the service provider space station and the visible service area defined in the ITU satellite network of the service provider space station;

<sup>(1)</sup> This definition is purely geometrical and does not take into account the list of countries or geographic designations identified by each FSS filing, which could limit operation within the cone of coverage accordingly. The possible operational limitation of a non-GSO user space station, due to specific parameters of the satellite network of the service provider space station, will be addressed during the development of the regulatory text in the draft CPM text.





# WRC-23 Agenda item 1.17 (3/4)

*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 (cont.)

- CEPT will further consider the possibility to allow operations outside the cone of coverage, within FSS, provided that no undue constraints are placed on other FSS use and services and that unacceptable interference is not caused to other FSS use and services. CEPT final support to a concept of operation will depend on the outcome of the studies;
- Satellite-to-satellite link transmissions will comply with the same directionality indicators as in the existing FSS allocations (Earth-to-space = from user space station to service provider space station, space-to-Earth = from service provider space station to user space station);
- Non-GSO user space stations will operate in a manner that should resemble typical user stations of the host FSS service provider system;
- Non-GSO user space stations should comply with applicable EPFD limits in the portions of the Ku- and Ka-bands where these limits apply when communicating with a non-GSO FSS service provider space station;



# WRC-23 Agenda item 1.17 (4/4)

*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 (cont.)

- The higher altitude to lower altitude link transmissions in 11.7-12.7 GHz, 18.1-18.6 GHz and 18.8 20.2 GHz from the GSO or non-GSO FSS service provider space station to the non-GSO user space station would be identical in technical characteristic to the transmissions from GSO or non-GSO service providers to any ground-based user in the service provider's network;
- Enabling the operation of satellite-to-satellite links should not result in an increase of the interference to EESS (passive) sensors operating in the 18.6-18.8 GHz band. Any measure on non-GSO or GSO service provider space stations providing satellite-to-satellite links that may be needed to limit the interference to EESS (passive) sensors operating in the 18.6-18.8 GHz shall be applicable only to those non-GSO or GSO service provider systems notified/brought into use after the last day of WRC-23.



# WRC-23 Agenda item 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 data-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)**.

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# WRC-23 Agenda item 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.



## WRC-23 Agenda item 2

*to examine the revised ITU-R Recommendations incorporated by reference in the Radio Regulations communicated by the Radiocommunication Assembly, in accordance with further resolves of Resolution **27 (Rev.WRC-19)**, and to decide whether or not to update the corresponding references in the Radio Regulations, in accordance with the principles contained in resolves of that Resolution*

### Preliminary CEPT position

CEPT supports the revision of ITU-R Recommendations: to be developed.

CEPT resumes examining the compliance with the principles of Annex 1 to Resolution **27 (Rev. WRC-19)** of the references to ITU-R Recommendations in the Radio Regulations.

CEPT supports update of the RR Volume **4** cross-reference list.



# WRC-23 Agenda item 4

*in accordance with Resolution 95 (Rev.WRC-19), 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 Resolutions: RES **160 (WRC-15)**, RES **161(WRC-15)**, to be developed;
- CEPT proposes to modify Resolutions: RES **22 (WRC-19)**, RES **221 (WRC-07)**, to be developed;
- CEPT proposes to suppress Recommendations: to be developed;
- CEPT proposes to modify Recommendations: to be developed.



# WRC-23 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.

CEPT favours the review of any RR provision which can bring accurate solutions to specific detected inconsistencies and develop new improved provisions with emphasis on solving the most urgent issues, i.e. well characterised issues whose improvement is urgent and impacting.



# WRC-23 Agenda item 7, Topic A

## *Tolerances for non-GSO orbital characteristics*

### Preliminary CEPT position

CEPT supports the development of the definition of tolerances limited to the four orbital characteristics of non-GSO space stations in FSS, BSS and MSS identifying a “notified orbital plane”.

CEPT does not support the development of tolerances under this Topic for the orbital characteristics of non-GSO space stations whose frequency assignments belong to services other than the FSS, BSS and MSS.

CEPT supports the development of these tolerances in the context of ITU regulatory procedures such as BIU and the milestone-based approach. In the absence of such tolerances, it is unclear whether the requirements of Resolution **35 (WRC-19)** are met.

To avoid collision with another non-GSO space station or to permit reorganization of satellites in an orbit-plane after a launch of new non-GSO space stations, CEPT supports specific regulatory measures to temporarily exceed the defined tolerances if final tolerances definition could not address such operational requirements.

CEPT supports the development of appropriate regulatory consequences for frequency assignments to non-GSO space stations that do not maintain these to-be-developed orbital tolerances.





# WRC-23 Agenda item 7, Topic B

## *Non-GSO BIU post-milestone procedure*

### Preliminary CEPT position

CEPT supports the development of final post-milestone procedures at WRC-23 to replace temporary Post-milestone procedures contained in the Resolution **35 (WRC-19)** in *resolves* 19.

CEPT supports to develop a new Resolution to replace *resolves* 19 of Resolution **35 (WRC-19)**, to suppress *resolves* 19 of Resolution **35 (WRC-19)** and leave the rest of the Resolution **35 (WRC-19)** as is otherwise.

CEPT supports aligning the post milestone procedures in this new Resolution with No. **11.49** and Resolution **35 (WRC-19)** targeting a procedure allowing a reduction of satellites deployed greater than [5]% of the number of satellites notified in the MIFR for a maximum period of 3 years without alignment of the number of satellite notified in the MIFR. The mentioned procedure also considers the process to duly notify the Bureau as in No. **11.49**.

CEPT considers application of only No. **13.6** by the BR is not an adequate solution for Topic B.

CEPT supports the development of new procedures which permit some temporary flexibilities on the real number of non-GSO satellites deployed compared to the number of satellites contained in the Master Register.

CEPT supports the development of appropriate regulatory consequences for frequency assignments to non-GSO space stations that do not respect these to-be-developed post-milestone procedures.



CEPT Coordinator:  
Anna MARKLUND (S)



Coordination team:  
Thomas WEBER (D)

# WRC-23 Agenda item 7, Topic C

*Protection of GSO MSS from non-GSO emissions in 7/8 and 20/30 GHz*

## Preliminary CEPT position

CEPT supports the identification and definition of criteria, extensions and addition of provisions in order to quantify the protection of GSO networks operating in the MSS from interference caused by non-GSO networks or systems operating in the same frequency bands 7250-7750 MHz (space-to-Earth), 7900-8025 MHz (Earth-to-space), 20.2-21.2 GHz (space-to-Earth) and 30-31 GHz (Earth-to-space) and in identical directions.



# WRC-23 Agenda item 7, Topic D

*Modifications to Appendix 1 to Annex 4 of AP 30B*

## Preliminary CEPT position

CEPT supports correcting the values of the coordination arc in the aggregate C/I calculation in Appendix 1 to Annex 4 of RR Appendix **30B** based on the coordination arc reductions decided at WRC-19.



CEPT Coordinator:  
Anna MARKLUND (S)



Coordination team:  
Kjersti THOMASSEN HAMBORGSTROM (NOR)

# WRC-23 Agenda item 7, Topic E

*Improved procedures under AP 30B for new ITU member States*

## Preliminary CEPT position

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)**.

CEPT supports that a comprehensive understanding of the interference scenarios for new ITU Member States can be achieved through additional technical analysis.

CEPT supports new ITU Member States encouraging them and the resulting affected Administrations to actively undertake and cooperate in coordination discussions to resolve any interference cases.



# WRC-23 Agenda item 7, Topic F

*Excluding uplink service area in Appendix 30A for Regions 1 & 3 and in Appendix 30B*

## Preliminary CEPT position

CEPT supports developing specific measures to avoid creating obstacles to the establishment of space systems by other countries over their territories.

CEPT notes that further studies are required to define possible solutions.



CEPT Coordinator:  
Anna MARKLUND (S)



Coordination team:  
Benoit ROUGIER (F)

# WRC-23 Agenda item 7, New Topic

*Resolution 770 (WRC-19) GSO protection from single entry non-GSO in Q/V bands*

## Preliminary CEPT position

CEPT supports that any amendments to Resolution **770 (WRC-19)** such as procedural and regulatory provisions that need to be developed, inclusion of relevant guidance from WP 3M on Recommendation ITU-R P.618-13 to Resolution **770 (WRC-19)** and editorial modifications should be addressed under agenda item 7.



CEPT Coordinator:  
Anna MARKLUND (S)



Coordination team:  
Benoit ROUGIER (F)

# WRC-23 Agenda item 7, WP4A SWG 4A2 (1/3)

*Resolution 769 (WRC-19) GSO protection from non-GSO in Q/V bands*

## Preliminary CEPT position

CEPT supports that any regulatory text that needs to be developed under this topic should be addressed under Agenda item 7.

CEPT supports that any technical studies, that WRC-19 urgently invited the ITU-R to carry out, should aim at the development of an ITU-R Report, an ITU-R Recommendation and/or a WRC Resolution.

CEPT supports the development of a suitable methodology to take into account the aggregate effect from non-GSO systems.

CEPT supports the development of a methodology to validate supplemental links and of a suitable procedure to select one or more C/N objectives for supplemental links at needed percentages of time.

CEPT recognises the need for performance objectives to be defined in supplemental links and supports their use. The number of performance objectives to be used is still to be studied.



CEPT Coordinator:  
Anna MARKLUND (S)



Coordination team:  
Thomas WEBER (D)

# WRC-23 Agenda item 7, WP4A SWG 4A2 (2/3)

*Article 21 scaling factor equations in No. 21.16.6*

## Preliminary CEPT position

CEPT considers that the current equations contained in RR No. **21.16.6**, for the scaling function  $X$ , dependent on the number of satellites in a satellite constellation,  $N$ , leads to inaccurate scaling calculations when applied to satellite constellations composed of a number of satellites greater than at least 288 satellites (with the final number of satellites still to be decided).

CEPT supports the development of adequate scaling factor for large non-GSO constellations, while ensuring protection of Fixed and Mobile Services.

CEPT supports that the revised scaling factor should ensure the same level of protection to Fixed and Mobile services as they have today.

Updates of the scaling factor equations should focus primarily on the maximum potential visibility of the non-GSO system's space stations visible to any single point on the surface of the Earth.





CEPT Coordinator:  
Anna MARKLUND (S)



Coordination team:  
Thomas WEBER (D)

# WRC-23 Agenda item 7, WP4A SWG 4A2 (3/3)

*Article 21 scaling factor equations in No. 21.16.6*

## Preliminary CEPT position (cont.)

CEPT supports that this item may only modify the X value, excluding any other part of the computation of the pfd limit in RR Table 21-4 for systems with the number of satellites greater than at least 288 (with the final number of satellites still to be decided).

CEPT supports that future treatment of non-GSO systems is consistent among non-GSO systems.

CEPT supports that changes to the X value do not create differences in terms of examination by the BR of the non-GSO systems, or affect the priority of the non-GSO systems, based on their filing date.



# WRC-23 Agenda item 8 (1/2)

*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-19)*

## 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 existing footnotes**

- CEPT is of the view that this agenda item is not intended for adding country names into existing 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, subject to the principle that proposals for the addition of country names to existing footnotes can be considered but their acceptance is subject to the express condition that there are no objections from the affected countries.

### **Issue C – Addition of new country footnotes**

CEPT is of the view that this agenda item is not intended for addition of new country footnotes and therefore proposals for the addition of new country footnotes which are not related to agenda items of this Conference should not be considered.



# WRC-23 Agenda item 8 (2/2)

*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-19)*

## Preliminary CEPT position (cont.)

### Issue D – Availability of proposals

- CEPT supports administrations bringing their proposals on agenda item 8 to the attention of other administrations with a view to avoid any potential difficulties well before a WRC.
- CEPT is of the view that the current practice on establishment of submission deadlines should be kept by the WRC-23 with regard to additional proposals for deletion of country names from footnotes and for addition of country names to existing footnotes.

### Issue E – Possible revision of Resolution 26 (Rev. WRC-19)

CEPT supports retaining Resolution 26 (Rev. WRC-19).



CEPT Co-coordinators:  
Bharat DUDHIA (G)  
Katharina ANDERSEN (D)

# WRC-23 Agenda item 9.1, topic a

*In accordance with Resolution 657 (Rev.WRC-19), review the results of studies relating to the technical and operational characteristics, spectrum requirements and appropriate radio service designations for space weather sensors with a view to describing appropriate recognition and protection in the Radio Regulations without placing additional constraints on incumbent services*

## Preliminary CEPT position

CEPT supports the following definition for space weather:

*space weather: information relating to the characteristics of natural phenomena occurring in space and in high atmosphere that impact Earth's environment and human activities.*

CEPT also supports the:

- Identification of priority frequency bands used for providing data critical for space weather forecasting/warnings and that will require protection;
- Recognition in the Radio Regulations of space weather sensors;
- Determination of the appropriate service(s) in line with the space weather definition.

In addition, CEPT supports the further processing of the related work under an agenda item of WRC-27 - see preliminary agenda item 2.6 in Resolution **812 (WRC-19)**.



CEPT Co-coordinators:  
Hans BLONDEEL TIMMERMAN (HOL)  
Jean CHENEBAULT (F)

## WRC-23 Agenda item 9.1, topic b

*Review of the amateur service and the amateur-satellite service allocations in the frequency band 1 240-1 300 MHz to determine if additional measures are required to ensure protection of the radionavigation-satellite (space-to-Earth) service operating in the same band in accordance with Resolution 774 (WRC-19)*

### Preliminary CEPT position

CEPT supports the protection of the RNSS.

CEPT supports the development of a new ITU-R Report or Recommendation to provide guidance towards the implementation of technical and operational measures for the continued use of the frequency band 1240-1300 MHz by the Amateur and Amateur-satellite services in accordance with the RR in order to protect the RNSS.

CEPT supports that above mentioned measures to be applied on the use of secondary Amateur and Amateur-satellite services, should be based on the results of co-existence studies and measurement campaigns.



# WRC-23 Agenda item 9.1, topic c (1/2)

*Study the use of International Mobile Telecommunication system for fixed wireless broadband in the frequency bands allocated to the fixed services on primary basis, in accordance with Resolution 175 (WRC-19)*

## Preliminary CEPT position

CEPT is of the view that:

- the work on this topic should focus on consideration of broadband fixed wireless access (BFWA) that use IMT technologies under the existing regulatory framework of the FS;
- definition for “BFWA using IMT technologies” is necessary to avoid misunderstanding with the term “IMT system”;
- the usage of IMT systems in the fixed service is not compliant with the Radio Regulations;
- BFWA that use IMT technologies as well as other technologies in the frequency bands allocated to the fixed service can be adequately addressed, if necessary, through an update of appropriate existing ITU-R Recommendations/Reports/Handbooks;
- given the existing provisions of the Radio Regulations and taking a technology neutral approach there is no need to consider/study specific frequency bands under this topic;
- the development of new ITU-R Recommendations/Reports should only be considered, if necessary, based on the outcome of a review of existing ITU-R Deliverables;
- this work falls under the scope of ITU-R Working Parties 5A and 5C.



## WRC-23 Agenda item 9.1, topic c (2/2)

*Study the use of International Mobile Telecommunication system for fixed wireless broadband in the frequency bands allocated to the fixed services on primary basis, in accordance with Resolution 175 (WRC-19)*

### Preliminary CEPT position

In conclusion, CEPT opposes any changes to the RR in response to WRC-23 Agenda item 9.1, topic c.

CEPT considers that discussions on fixed wireless broadband applications that use IMT technologies, as any other technologies, should take place in ITU-R WPs 5A and 5C (not other ITU-R WPs) to avoid fragmentation of work and to ensure efficient working within ITU-R.



# WRC-23 Agenda item 9.1, topic d

*Protection of EESS (passive) in the frequency band 36-37 GHz from non-GSO FSS space stations*

## Preliminary CEPT position

CEPT supports the protection of EESS (passive) sensors operating in the frequency band 36-37 GHz from NGSO FSS systems operating in the band 37.5-38 GHz and the determination of relevant conditions that would ensure such protection.





# Resolution 427 (WRC-19)

*Resolution 427 (WRC-19) - Updating provisions related to aeronautical services in the Radio Regulations*

## Preliminary CEPT position

CEPT proposes for WRC-23 no change to Chapters IV, V, VI and VIII of Volume I of the Radio Regulations.



# Resolution 427 (WRC-19)

*Resolution 427 (WRC-19) - Updating provisions related to aeronautical services in the Radio Regulations*

## European Common Proposal

No change to Chapters IV, V, VI and VIII of Volume I of the Radio Regulations



Interim CEPT Co-coordinator (PT1):  
Steve GREEN (G)



CEPT Co-coordinator (PTB):  
Florence MAGNIER (F)

# Article 21 (1/2)

*The applicability of the limit specified in No. 21.5 of the Radio Regulations to IMT stations, that use an antenna that consists of an array of active elements, with a view to recommend ways for its possible replacement or revision for such stations, as well as any necessary updates to Table 21-2 related to terrestrial and space services sharing frequency bands*

## Preliminary CEPT position

### Issue A

CEPT is considering whether the same approach as for Issue B could be applied in frequency bands used for reception by space stations, though not excluding alternative solutions. Any solution should ensure that it does not impact the protection of satellite reception.

### Issue B (verification of No. 21.5)

For the purpose of verification of RR No. 21.5 in the notification of IMT stations that use an array of active elements under the provision of RR 2020 Edition (i.e. in the frequency band 24.45-27.5 GHz), CEPT is of the view that the "power delivered to the antenna of a station" in RR No. 21.5 can be considered as the "total radiated power" (TRP). An adjustment factor to the TRP needs to be applied depending on the bandwidth being considered in the RR No. 21.5 limit. TRP is defined as the integral of the power transmitted from all antenna elements in different directions over the entire radiation sphere. A remark could be added in the assignment record to indicate the need to review the finding with the WRC-23 decision.



Interim CEPT Co-coordinator (PT1):  
Steve GREEN (G)



CEPT Co-coordinator (PTB):  
Florence MAGNIER (F)

## Article 21 (2/2)

*The applicability of the limit specified in No. 21.5 of the Radio Regulations to IMT stations, that use an antenna that consists of an array of active elements, with a view to recommend ways for its possible replacement or revision for such stations, as well as any necessary updates to Table 21-2 related to terrestrial and space services sharing frequency bands*

### Preliminary CEPT position

#### Issue C

CEPT considers to develop the updates of Table 21-2 of RR Article **21** to include the following frequency bands, where reception by space stations is to be protected when these bands are shared with equal rights with the fixed and mobile services:

- 24.45-27.5 GHz, 40-40.5 GHz, 42.5-43.5 GHz, 45.5-47 GHz, 47.2-48.2 GHz, 66-71 GHz, which are identified for IMT and might be used by stations with AAS, and
- 43.5-45.5, 48.2-50.2, 50.4-51.4 GHz

CEPT will assess whether the limit in 21.5 has to be adapted for the frequency bands above 29.5 GHz (see Issue A).



# Resolution 655 (WRC-15)

*Resolution 655 (WRC-15) - Definition of time scale and dissemination of time signals via radiocommunication systems*

## Preliminary CEPT position

CEPT recognises strictly that:

- the UTC is produced by BIPM and is not a task of spectrum regulation;
- the general definition of international reference time scale UTC is provided in Resolution 2 of the 26th General Conference on Weights and Measures.
- UTC is addressed in RR **1.14**, Resolution **655 (WRC-15)** and Recommendation ITU-R TF.460-6



# WRC-23 Agenda item 9.2

*to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention on any difficulties or inconsistencies encountered in the application of the Radio Regulations*

## Preliminary CEPT position

To be developed



# WRC-23 Agenda item 9.3

*to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention on action in response to Resolution **80 (Rev.WRC-07)***

## Preliminary CEPT position

To be developed



CEPT Coordinator:  
Pasi TOIVONEN (FIN)



Coordination team:  
Karsten BUCKWITZ (D)  
Emmanuel FAUSSURIER (F)

# WRC-23 Agenda item 10

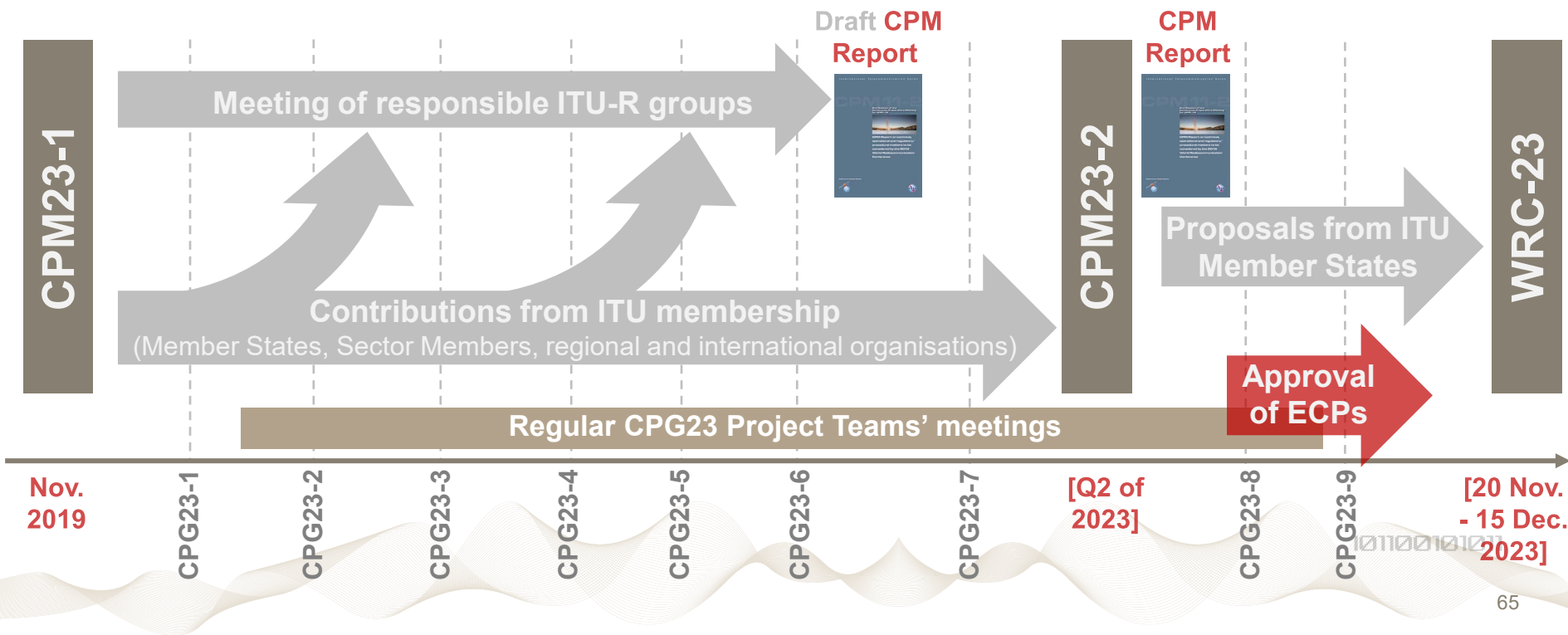
*to recommend to the Council items for inclusion in the agenda for the next WRC, and items for the preliminary agenda of future conferences, in accordance with Article 7 of the Convention and Resolution **804 (Rev.WRC-19)***

## Preliminary CEPT position

To be developed



# CPG23 Timeline



# Upcoming Meetings

## CPG Plenary

- 25-29 April 2022, Denmark
- 17-29 October 2022, TBD

## CPG Project Teams

- ECC PT1, 18-20 Jan 2022, hybrid
- PTD-4, 1-3 Feb 2022, hybrid
- PTC-4, 7-11 Mar 2022, hybrid
- PTB-4, 14-18 Mar 2022, hybrid
- PTA-4, 29-31 Mar 2022, hybrid



**CEPT welcomes the representatives from other regional organisations to the meetings of CPG and its Project Teams**



## Further information

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

**CPG23 page:** <http://www.cept.org/ecc/groups/ecc/cpg>

**CEPT coordinators:**

<https://www.cept.org/ecc/groups/ecc/cpg/page/list-of-cept-coordinators-wrc-23>

**CEPT Briefs / European Common Proposal to WRC-23:**

<https://www.cept.org/ecc/groups/ecc/cpg/page/cept-briefs-and-ecps-for-wrc-23>

**CPG23 Meeting Schedule:**

[https://cept.org/Documents/cpg/67352/cpg-21-info-25r3\\_cpg23-preliminary-schedule-2020-2023](https://cept.org/Documents/cpg/67352/cpg-21-info-25r3_cpg23-preliminary-schedule-2020-2023)