

## REPORT OF THE THIRD WEEK OF THE WRC-23 (20 NOVEMBER – 15 DECEMBER 2023)

The World Radiocommunication Conference (WRC-23) was opened on 20 November 2023.

H.E. Mohammed Al Ramsi (UAE) was elected as the chairman of the Conference.

The European Communications Office (ECO) is publishing this report to provide an overview of the activities and results of the third week of WRC-23 (2-8 December). Relevant background information can be found on the [ECC website](#).

The reports from previous weeks are available [here](#).

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Seven Committees were established by WRC-23:

- Committee 1: Steering Committee (composed of Chair and Vice-Chairs of the Conference and Committees);
- Committee 2: Credentials Committee (Basebi MOSINYI, Botswana);
- Committee 3: Budget Control Committee (Cindy COOK, Canada);
- Committee 4, 5 and 6: Specific Agenda Items Committees (see table below);
- Committee 7: Editorial Committee (Christian RISSONE, France).

Committees 4, 5 and 6 set up several Working Groups each. The responsibilities on the key agenda items for CEPT were then identified as highlighted below. Please note that several working groups also address relevant parts of agenda items 3 and 5.

| Committee   | Working Group/ Ad hoc Group   | Agenda items   |
|---|---|--|
| Committee 4<br>(Hiroyuki ATARASHI,<br>Japan)        | WG4A - Broadband applications in the mobile service<br>(Mohamed MOGHAZI, Egypt) | 1.1, 1.2, 1.4, Doc. 550 (WRC-19), 9.2 (relevant parts) |
|   | WG4B - Aeronautical and maritime services<br>(Sandra WRIGHT, USA)               | 1.6, 1.7, 1.8, 1.9, 1.10, 1.11, 9.1-b, Res. 427        |
|   | WG4C - Fixed, mobile and broadcasting services<br>(Usman ALIYU, Nigeria)        | 1.3, 1.5, 9.1-c, 9.2 (relevant parts)                  |
| Committee 5<br>(Anna MARKLUND,<br>Sweden)           | WG5A - Science<br>(Eric ALLAIX, France)   | 1.12, 1.13, 1.14, 9.1-a, 9.1-d                         |
|   | WG5B - Satellite allocation<br>(Abdulrahman AL-NAJDI, Saudi Arabia)             | 1.15, 1.16, 1.17, 1.18, 1.19                           |
|   | WG5C - Satellite regulatory<br>(Cheng FENHONG, China)                           | 7, 9.2 (relevant parts), 9.3                           |
| Committee 6<br>(Abdouramane EL<br>HADJAR, Cameroon) | WG6A – General Issues<br>(Jonathan WILLIAMS, USA)                               | 2, 4, 8, 9.1, 9.2 (relevant parts), Res. 655           |
|   | WG6B – Next WRC<br>(Geraldo NETO, Brazil)                                       | 10   |

A summary table showing the current status of progress for all agenda items is available [here](#).

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## **AGENDA ITEM 1.1 - RR 5.441B (4 800-4 990 MHZ)**

### **Sub Working Group 4A1 (Baxton SIREWU, Zimbabwe)**

*to consider, based on the results of 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 power flux-density criteria in No. 5.441B in accordance with Resolution 223 (Rev.WRC-19)*

### **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 following pfd limits provided in RR No. 5.441B and derived from detailed AMS and MMS characteristics and protection criteria:
  - In the frequency bands 4800-4825 MHz and 4835-4950 MHz,  $-140 \text{ dB(W/(m}^2 \cdot 1 \text{ MHz))}$  produced up to 19 km above sea level at 22 km from the coast, defined as the low-water mark, as officially recognised by the coastal State.
  - In the band 4800-4990 MHz,  $-134 \text{ dB(W/(m}^2 \cdot 1 \text{ MHz))}$  produced up to 30 m above sea level at 22 km from the coast, defined as the low-water mark, as officially recognised by the coastal State.
- These pfd criteria shall apply to IMT operating in national territories in order to protect AMS and MMS stations located in international airspace or waters and operating in the band 4800-4990 MHz, i.e. beyond the territorial seas.
- The above new pfd criteria shall apply to all countries listed in RR No. 5.441B ensuring consistency in the application of the limits.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

Two options A and B are under consideration in response to this agenda item for the protection of aeronautical and maritime mobile services located in international airspace and waters.

- Option A includes 3 sub-options and applies a reviewed power flux density (pfd) limit in footnote No. 5.441B including the removal of the exemption of this pfd limit for 11 countries. The 3 sub-options propose to retain the current pfd limit unchanged, a generic relaxed pfd, or the CEPT proposal which is the most relaxed option
- Option B includes 2 sub-options and proposes either to largely revise footnote No. 5.441B beyond the scope of this agenda item by removing pfd limits and upgrading IMT status, or to develop two possible footnotes during the Conference for a list of countries. The proposed footnotes, would be either based on No. 5.441 B with a new pfd limit (aggregated limit), or a new footnote applying IMT identification in the 4.8-[4.9/4.99] GHz band with no pfd limit.

Committee 4 did not make any conclusion on any update of No. 11.14 of Radio Regulations which could remain unchanged despite the inconsistency raised by the BR Director's Report to WRC-23. CEPT submitted a proposal to remove this inconsistency and highlighted the close connection of this article with agenda item 1.1.

Finally, some countries requested to add their country names into No. 5.441 B both before and during the Conference, including additions into an updated footnote. Those countries will be able to decide on entering the final footnote at the end of the Conference.

### **NEXT STEPS**

Continue discussions.

## AGENDA ITEM 1.2 - IMT CENTIMETER BANDS

### **Sub Working Group 4A2 (Luciana CAMARGOS, Brazil)**

*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)*

### **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.

#### **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)**

CEPT would not oppose an IMT Identification in Region 2, noting that administrations of Region 2 are expected to define relevant provisions to protect FSS earth stations

#### **6425-7025 MHz (Region 1) and 7025-7125 MHz (globally)**

CEPT is neither proposing nor supporting an IMT identification of the frequency range 6425-7125 MHz but could accept it if the conditions below are fulfilled. If these conditions are not fulfilled, CEPT will support NOC (underlined).

CEPT will only accept an IMT Identification if all of the following five conditions are fully met:

- 1) the protection of relevant primary services is ensured (as provided in the European Common Proposal - ECP)
- 2) continued operation of other services (i.e. those identified in RR Nos. **5.458** for EESS (passive) and **5.149** for Radioastronomy) is addressed (as provided in the ECP) with additionally new EESS (passive) primary allocations in the frequency bands 4.2-4.4 GHz, and 8.4-8.5 GHz, to allow the continued operation of sea surface temperature (SST) measurements
- 3) no limitations are imposed on the existing services and their future development
- 4) the IMT Resolution clearly outlines opportunities for other broadband applications in the mobile services (i.e. WAS/RLAN) as well as sufficient flexibility regarding the future wireless broadband usage, i.e. by IMT, WAS/RLAN or under a shared framework between IMT and WAS/RLAN as provided in the ECP

- 5) WRC-23 does not approve an agenda item for WRC-27 studying additional IMT identifications in frequency bands between 7 and 30 GHz where IMT would have the potential to jeopardize important European space and governmental spectrum.

### **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 has a global impact on EESS (active) in the band 10.0-10.4 GHz and may have a global impact on EESS (passive) in the band 10.6-10.7 GHz due to the required protection of these services on a global basis. Moreover, interference would be detrimental to airborne and shipborne radars operating in 10-10.5 GHz under the radiolocation service operated by some CEPT countries in all Regions at 10-10.5 GHz. Sharing and compatibility studies between IMT and EESS (active) show that sharing between IMT and those services is not possible. Therefore, CEPT is of the view that the band 10-10.4 GHz should not be identified for IMT in Region 2 in order to ensure the protection of the radiolocation and the globally operating EESS (active) systems and in order to not impose any additional regulatory or technical constraints to these services.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

Further offline discussions led by the Chair of Committee 4 have been held on the conditions for the 6 GHz band which are considered by some administrations as being out of scope of this agenda item. This includes the CEPT conditions on sea surface temperature (SST) measurements and on other broadband applications in the mobile services (i.e. WAS/RLAN). Offline discussions and discussions with other regional organisations have also taken place on the 6 GHz e.i.r.p. mask to protect the fixed-satellite service. A number of important issues remain to be resolved from the CEPT perspective.

Regarding the 3.3-3.4 GHz band, discussions are continuing to find a solution to update the footnotes whilst not impacting systems in the radiolocation service.

Regarding the 10–10.5 GHz band, extensive discussions took place to converge on a set of conditions which could be agreeable by all parties. CEPT agreed to consider a set of conditions for the protection of EESS (active) and radiolocation which are more relaxed than that included in the CEPT Brief: maximum e.i.r.p. per base station of 30 dB(W/100MHz) and -0.5 dB(W/100MHz) for elevation angles higher than 34 degrees. In addition to those, the protection of the radiolocation service in the footnote has to be addressed

These conditions were not fully accepted by Brazil who made a new proposal, which slightly deviates from the CEPT one and discussions are still on-going.

### **NEXT STEPS**

Discussions will continue on all outstanding 6 GHz band issues both in the offline groups and formal ad-hoc groups.

For the 3.3 GHz band, discussions need to continue to find a solution to update the footnotes whilst not impacting systems in the radiolocation service.

For the 10 GHz band, evaluate the latest proposal from Brazil and assess whether the conditions could be acceptable for CEPT.

## AGENDA ITEM 1.3 - MS 3 600-3 800 MHZ

### **Sub Working Group 4C1 (Cesar GUTIERREZ MIGUELEZ, Spain)**

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

### **CEPT POSITION**

CEPT supports the 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 mobile service applications in Europe.

This support 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 carried out in ITU-R ensured that the full objective of Resolution **246 (WRC-19)** has been met. In addition, CEPT opposes making these technical and regulatory conditions for the frequency band 3600-3800 MHz more stringent than those applicable to the band 3400-3600 MHz to protect FSS earth stations, in particular any changes to the value or percentage of time of the pfd limit, or to the height above ground where this limit applies.

CEPT does not support introducing any further requirements or requests for coordination, in particular under No. **9.21**.

CEPT is of the view that consideration of an IMT identification as well as consideration of the aeronautical mobile service in this band are not in the scope of Resolution **246 (WRC-19)**.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

Discussions continued in the Sub Working Group. As a result of offline discussions, a compromise solution for the coordination and protection issues for the upgrade of the mobile, except aeronautical, service was developed. The compilation document containing the compromise text (option 1) as well as all other options proposed in inputs to the Conference was further revised. Agreement was reached to only retain option 1 in square brackets and to delete all other options.

This proposal was presented to Working Group 4C, where the discussion focussed on the way forward on how to resolve the disagreements. CEPT confirmed the view expressed in the European Common Proposal that IMT identification is out of scope, and proposed addressing IMT identification at Committee 4, once the upgrade of the mobile service to primary is agreed. There was no agreement for this approach and as a result discussion will continue in Committee 4.

### **NEXT STEPS**

CEPT will continue to propose during Committee 4 to first consider and approve the upgrade of the mobile service, except aeronautical, to primary to respond to Resolution 246 (first step) and then (second step) to consider country footnotes on the IMT identification.



## AGENDA ITEM 1.4 - HIBS

### **Sub Working Group 4A3 (Camilo ZAMORA, Micronesia)**

*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*

### **CEPT POSITION**

CEPT supports regulatory provisions applying to HIBS in order to enable their use of the frequency bands 694-960 MHz, 1710-1885 MHz and 2500-2690 MHz while protecting other services and applications in these frequency bands as well as in the adjacent bands. Under the same line, the conditions pertaining to the IMT applications using high altitude platform stations (HAPS) as base stations as currently defined through RR No. 5.388A and Resolution 221 (Rev. WRC-07) are also proposed to be revised.

The regulatory provisions proposed by CEPT to ensure protection of other services are of three different nature applying as appropriate, specific geographical coordination, in-band or adjacent band pfd masks and limitation of the HIBS emissions to a specific direction.

CEPT is of the view that the use by HIBS of these frequency bands should be on a non-protection basis, since studies have not addressed the risk that HIBS may require more protection than conventional IMT base stations.

CEPT is of the view that the use of HIBS should be enabled at an altitude lower than 20 km, down to a minimum of 18 km, since ITU-R studies have confirmed that there is a negligible difference in terms of impact to other services.

CEPT is of the view that there needs to be a pfd limit for the protection of broadcasting and not a coordination trigger since that would allow an alternative coordination procedure for the band 694-960 MHz.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

The work regarding issue D (2.5 GHz) is completed and was approved at Working Group 4A, noting that the outcome is aligned with the European Common Proposal (ECP).

Issues B (1710- 1885 MHz) and C (1885-1980 MHz, 2010-2025 MHz and 2110-2170 MHz) were presented at Working Group 4A, with one minor unresolved matter regarding protection of aeronautical mobile service (AMS). The open issue is related to the ATU region and the outcome of issues B and C are aligned with the ECP.

Issue A (694-960 MHz) was also presented at Working Group 4A with one unresolved matter relating to the protection of aeronautical radionavigation service (ARNS). This requires further offline discussion between CEPT and RCC. RCC will withdraw its No Change position subject to adequate protection for ARNS. The outcome of issue A is aligned with the ECP. For this band, countries in Region 3 are yet to decide whether the footnote would apply to the entire Region or to adopt a country specific footnote.

Committee 4 established an Ad-Hoc group to continue work on these unresolved issues.



## **NEXT STEPS**

To resolve the remaining matters within the Ad-Hoc group of Committee 4. ARNS is the only issue relevant to CEPT to be resolved with RCC. Once the work on issues A, B, C, and D is completed, the Chair will complete the Appendix 4 table from the provisions of the Resolutions.

## AGENDA ITEM 1.5 - UHF REVIEW

### **Sub Working Group 4C2 (Ronel LE GRANGE, Namibia)**

*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)*

### **CEPT POSITION**

CEPT supports a secondary allocation to the mobile service (except aeronautical mobile) in the frequency band 470-694 MHz to be made at WRC-23, with a future agenda item for WRC-31 to consider a possible upgrade to a primary allocation.

CEPT is of the view that sharing studies indicate that due care will be required in any introduction of new applications of the mobile service in the band.

CEPT is of the view that this agenda item seeks the long-term balance between (1) national requirements, in particular due to the evolution of spectrum usage and demands, and (2) 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.

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 GE06 Agreement.

CEPT supports the continuation and development of the incumbent usage by PMSE (SAB/SAP) (in accordance with existing RR No. **5.296**).

CEPT supports the protection of the radioastronomy service within the frequency band 606-614 MHz, where required, 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 No. **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.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

Discussions have continued within the informal group, but no way forward has yet been agreed with regards to reducing the number of options being considered under this agenda item.

To address concerns expressed during the informal discussions, CEPT has modified its original proposal from that of a secondary allocation within the Table of Allocations, to a modified proposal for a secondary allocation through a footnote to the table. In conjunction with this proposal, CEPT has further revised its proposal for a possible review of the 470 – 694 MHz band during WRC-31 which would be focussed on Region 1 in general, to a more prescriptive review of the entire band which could be limited to a specified geographic area (e.g.

those countries that have signed up to a footnote for a secondary allocation). Discussions around this possibility are ongoing.

The outcomes from the informal group have now been reported to Working Group 4C and further discussed. Little progress was made during the Working Group discussion, and the outcomes from the informal group will now therefore be referred to Committee 4 for further consideration.

## **NEXT STEPS**

CEPT focus over the coming days will remain on ensuring a secondary allocation through a footnote, and also securing a review of the entire band during WRC-31. Of particular note, it is essential to bring focus to the modified Resolution text (as per the European Common Proposal) concerning possible review during WRC-31.

## **AGENDA ITEM 1.6 - SUB-ORBITAL VEHICLES**

### **Sub Working Group 4B1 (Kim KOLB, USA)**

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

#### **CEPT Position**

CEPT is of the view that a new WRC Resolution is required that:

- a new WRC Resolution is required that provides the conditions for the operation of terrestrial stations and earth stations fitted on board sub-orbital vehicles;
- the new Resolution should not affect the operation of satellite launchers operating in the space operation service;
- in response to *invites ITU-R 3* of Resolution 772 (WRC-19), CEPT has not currently identified any need for action to be taken after WRC-23 to identify additional spectrum for sub-orbital vehicles.

#### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

Consensus could not be reached on a Resolution that met CEPT's requirements and hence CEPT reluctantly accepted the No Change option and deletion of Resolution 772. This retained options to operate sub-orbital vehicles in Europe as open as possible. The No Change option has been approved at Committee 4 4 and is pending approval in plenary.

#### **NEXT STEPS**

Approval for No Change at plenary.

## AGENDA ITEM 1.7 - AMS(R)S 137 MHz

### Sub Working Group 4B2 (Olivier AL PELLAY, France)

*to consider a new aeronautical mobile-satellite (R) service 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 aeronautical mobile (R) service, in the aeronautical radionavigation service, and in adjacent frequency bands*

### CEPT POSITION

CEPT supports a new primary allocation to AMS(R)S in the frequency band 117.975-137 MHz while:

- limiting the use of the new AMS(R)S allocation to non-geostationary satellite systems and internationally standardised aeronautical systems as developed by ICAO;
- mandating that the use of this new primary allocation to AMS(R)S be subject to coordination provisions of No. **9.11A**;
- ensuring protection of services in adjacent bands and not constraining these services;
- associating the new allocation with footnotes and a new WRC Resolution in order to detail certain elements of the regulatory framework.

CEPT is of the view that in-band coexistence between AM(R)S and AMS(R)S and adjacent-band coexistence with ARNS below 117.975 MHz need to be ensured through frequency planning and coordination work, taking into account the current ICAO frequency management framework.

CEPT is of the view that the provisions above will also ensure compatibility between AMS(R)S systems and AM(OR)S assignments in the band 132-137 MHz of countries listed in RR Nos. **5.201** and **5.202**.

CEPT is of the view that the protection of adjacent band services operating above 137 MHz from AMS(R)S emissions can be ensured:

- through the 1 MHz frequency separation in 136-137 MHz and RR Appendix **3** limits for spurious emissions for AMS(R)S systems operating in 117.975-136 MHz,
- through 62.5 kHz frequency separation and RR Appendix **3** limits for spurious emissions for the band 136.9375-137 MHz and
- through a limit on the level of unwanted emissions above 137 MHz for AMS(R)S emissions from systems operating in 136.9375-137 MHz.

CEPT is of the view that when operating in the frequency band 136.8-137 MHz, AMS(R)S space receivers shall be able to operate in the presence of out-of-band aggregated power level as described in the draft new Resolution **[EUR-A17-SAT-VHF] (WRC-23)**, as a result of satellite systems operating in the frequency band 137-138 MHz, without imposing additional regulatory provisions on those services operating in the frequency band 137-138 MHz.

### SHORT REPORT, INCLUDING STATUS FOR WEEK 3

A solution to the agenda item was agreed based on merging of the two existing options.

This solution consists of 2 new footnotes related to the new AMS(R)S allocation in 117.975-137 MHz. The first footnote addresses the application of No. 9.11A (excluding No. 9.16), limits the allocation to non-GSO and internationally standardised aeronautical systems, and refers to the new Resolution. The other footnote clearly indicates that use of the band by AM(R)S shall have priority of use over AMS(R)S.

The proposed new Resolution was retained, including all elements proposed by CEPT. The Resolution indicates that AMS(R)S priority applies for frequency planning within ICAO. The out-of-band limit for AMS(R)S emissions above 137 MHz and provisions to indicate that AMS(R)S space station receivers shall be designed to be resilient to the interference environment were also included.

In addition, modifications to Appendices 4 and 5 were agreed based on CEPT proposals to include a statement on the out-of-band PFD level, the PFD thresholds applicable for AM(OR)S (-140 dBW/m<sup>2</sup>/4 kHz) and AM(R)S (-140 dBW/m<sup>2</sup>/4 kHz).

The level for the out-of-band PFD limit was discussed. CEPT finally agreed to the level proposed by RCC and CITEL (-170 dBW/m<sup>2</sup>/14 kHz vs -166.6 dBW/m<sup>2</sup>/14 kHz sought by CEPT),

#### **NEXT STEPS**

None – work completed.

## AGENDA ITEM 1.8 - RESOLUTION 155

### **Sub Working Group 4B3 (Per HOVSTAD, China)**

*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 networks by control and non-payload communications of unmanned aircraft systems*

### **CEPT POSITION**

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 by the UAS operator.

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;
- the relevant existing agreements reached during FSS satellite coordination process;
- the future coordination of FSS networks during the application of provisions of Articles 9 and 11 of the Radio Regulations.

CEPT considered two options in accordance with Resolution 171 (WRC-19) to respond to this agenda item:

- to suppress RR No. 5.484B together with Resolution 155 (Rev.WRC-19) as well as Resolution 171 (WRC-19)
- to modify RR No. 5.484B and Resolution 155 (Rev.WRC-19) and to suppress Resolution 171 (WRC-19)

No agreement was reached on these options.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

Work continued in the Sub-Working Group 4B3 and Working Group 4B. Informal meetings are also ongoing between administrations and operators.

Discussions in the Sub-Working Group have focussed on general concerns without a chance to consider respective text in the *recognizing* and/or *resolves* clauses of the Resolution which might respond to those concerns.

At Working Group 4B the two methods considered so far (see previous reports), now Option 1 and Option 2, have each been supplemented by a views document. In order to consider potential ways forward at Committee 4 additional options have been added to the list as follows:

- • Option 1: Suppression of Resolution 155 (method 1)
- • Option 2: Revision of Resolution 155 (method 2)
- • Option 3: Suppression plus new agenda item for AMS(R)S frequencies
- • Option 4: Revision with new FSS frequencies (finally deleted)
- • Option 5: No Change
- • Option 6: Defer until the 2027 Conference, and take decisions then based on the status within ICAO

### **NEXT STEPS**

Discussions to continue.



## AGENDA ITEM 1.9 - APPENDIX 27

### **Sub Working Group 4B4 (Glenn ODLUM, Australia)**

*to review Appendix 27 of the Radio Regulations and consider appropriate regulatory actions and updates based on ITUR studies, in order to accommodate digital technologies for commercial aviation safety-of-life applications in existing HF bands allocated to the aeronautical mobile (R) service and ensure coexistence of current HF systems alongside modernized HF systems, in accordance with Resolution 429 (WRC19)*

### **CEPT POSITION**

CEPT is of the view that the current version of RR Appendix 27 does not preclude the use of wideband digital HF communication by using multiple channels simultaneously.

CEPT proposes:

- The introduction in the Appendix 27 of the relevant parts of the current text of the Rules of Procedure for clarification and,
- adjustments of the Appendix 27 of the RR to make explicit the possibility to use wideband emissions by aggregation of multiple individual channels each of which complies with the provisions of Appendix 27.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

None – work was completed during week 2.

### **NEXT STEPS**

None – work completed.

## AGENDA ITEM 1.10 - AMS NON-SAFETY

### **Sub Working Group 4B5 (Saad ALASKAR, Saudi Arabia)**

*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 (WRC19)*

### **CEPT POSITION**

CEPT acknowledges the need for additional spectrum to fulfil the increasing demand for non-safety aeronautical mobile applications. Therefore, CEPT supports new allocations to AM(OR)S for non-safety application in the whole range or a part of the frequency bands 15.4-15.7 GHz and 22-22.21 GHz while:

- ensuring protection of the EESS/SRS (passive), and the RAS from unwanted emissions of the AM(OR)S;
- not claiming protection nor create harmful interference to radiolocation and aeronautical navigation services in the 15.4-15.7 GHz frequency band;
- ensuring protection of the primary allocations to fixed-satellite (Earth-to-space) service in the frequency band 15.43-15.63 GHz;
- ensuring protection of the primary allocations to the fixed and mobile services in the frequency band 22-22.21 GHz noting that the frequency range 21.2-23.6 GHz is allocated to the fixed service;
- considering that RR No. 5.149 applies, also recognizing that some CEPT administrations operate RAS under their National regulation with a primary or secondary status in the frequency band 22.00-22.21 GHz.

Noting that some CEPT Administrations operate water vapour radiometers in the frequency range 22-22.5 GHz utilized by some radio astronomy stations and in a variety of environmental applications, including weather forecasting and nowcasting, as well as climate monitoring for meteorology, CEPT will also ensure their necessary protection.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

During this week the Sub-Working Group converged on agreement to allow new allocations for the AM(OR)S: a secondary allocation in the 15.41-15.7 GHz frequency band, and a primary allocation in 22-22.2 GHz frequency band. These allocations would be applicable in Region 1 with a country footnote for Region 3.

Discussion took place in the meetings and offline in order to find a commonly agreeable way forward on recognition of water-vapour radiometers operating around 22 GHz (due to a water vapour absorption line in this band). The solution on this matter was to propose the addition of a *noting* to Resolution 673, instead of a dedicated footnote in the Article 5.

This agreed solution was approved by Committee 4.

### **NEXT STEPS**

Approval at plenary.

## **AGENDA ITEM 1.11 - GMDSS**

**Sub Working Group 4B6 (Issue A and B: Mohammed ALHASSANI, UAE; Issue C: Xia GE, China)**

*to consider possible regulatory actions to support the modernization of the Global Maritime Distress and Safety System (GMDSS) and the implementation of e-navigation, in accordance with Resolution 361 (Rev. WRC19)*

### **CEPT POSITION**

#### **Issue A: Modernisation of GMDSS**

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

CEPT supports in particular:

- the removal of narrow band direct printing from the GMDSS and introduction of an automatic connection system for MF and selected HF bands;
- the introduction of NAVDAT as a component of the GMDSS;
- to accommodate Automatic Identification System - search and rescue transmitters (AIS-SARTs) as homing equipment for survival craft stations, as an alternative to Radar-SARTs;
- to accommodate Automatic Identification System homing signals provided by EPIRBs (EPIRB-AIS) as an alternative to EPIRBs sending signals on 121.5 MHz and 243 MHz;
- the removal of satellite EPIRBs operating in the frequency band 1645.5-1646.5 MHz (Earth-to-space) from the GMDSS in the Radio Regulations.

#### **Issue B: e-navigation**

CEPT is of the view that no change to the Radio Regulations is required as a consequence of no decision taken by IMO regarding spectrum requirements to implement e-navigation.

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

CEPT does not support the introduction of the regional satellite system BEIDOU in the Radio Regulations in order to be part of the GMDSS, even if the IMO has recognised the BEIDOU Message Service System as a GMDSS service provider. The reasons are the lack of justification of the frequency requirement, the incompatibility with the current usage of the 1610-1626.5 MHz and 2483.5-2500 MHz bands in which BEIDOU would like to operate and the non-achievement of the frequency coordination with the other MSS systems present in these frequency bands.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

The proposed changes under AI 1.11 Issue A, and No Change under Issue B were approved in Plenary.

On Issue C, the Sub-Working Group concluded its work without reaching consensus. The report from the group contains three options:

1. No Change
2. regulatory changes including a new resolution
3. possible future agenda item for WRC-27

Option 2 is based as a possible compromise originally developed by France and China, according to which BDMSS operating bands (exact frequencies not yet fixed in report) are added to Appendix.15, subject to a new Resolution. This Resolution aims at ensuring that protection of the band comes into effect only after successful coordination and underlines the restriction of IMO's recognition to the BDMSS GSO system and service area. Option 3, brought up during the SWG's final session, proposed to address the Issue in a new agenda item for WRC-27. There are intensive discussions within CEPT to explore whether Options 2 or 3 might be a way forward. For now, the CEPT position remains No Change.

An Ad-Hoc group was established in Committee 4 to resolve the remaining issues.

### **NEXT STEPS**

Work will continue over the weekend in a dedicated Ad-Hoc group of Committee 4. Work will continue on the consideration of the different options.

## **AGENDA ITEM 1.12 - EESS (ACTIVE) RADAR SOUNDERS**

### **Sub Working Group 5A1 (Bruno ESPINOSA)**

*to conduct, and complete in time for WRC-23, studies for a possible new secondary allocation to the Earth exploration-satellite service (active) 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)*

### **CEPT POSITION**

CEPT supports a new secondary allocation to the Earth exploration-satellite service (active) in the 40-50 MHz band while ensuring the protection of incumbent services already allocated to the 40-50 MHz band or adjacent frequency ranges.

CEPT supports the development of technical and regulatory provisions, which would provide protection to the incumbent services while allowing the operation of spaceborne radar sounders in the EESS (active). Specifically, CEPT proposes to apply a set of pfd limits to EESS (active), one reference value (-147 dB(W/(m<sup>2</sup> · 4 kHz))) not to be exceeded for more than 0.05% of the time and a cap value (-136 dB(W/(m<sup>2</sup> · 4 kHz))), with additional provisions to cover the case of multiple EESS (active) spaceborne radar sounders in operation.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

A global agreement was raised to Working Group 5A on a solution with EESS (active) operations limited to the poles and Greenland whereas outside of these areas, operations might be possible upon agreement of specific administrations.

All various issues were solved with the exception of the request from ASMG insisting on prohibiting operation of EESS (active) over their territories, which was not acceptable for CEPT as well as other regions.

Despite several offline sessions, it was not possible to find a compromise with ASMG.

The issue is now at Committee 5 level with 2 options, either the proposal mentioned above or No Change.

### **NEXT STEPS**

Offline discussions to try resolve the ASMG objection.

## **AGENDA ITEM 1.13 - SRS 15 GHZ**

### **Sub Working Group 5A2 (Anton STEPANOV, Russian Federation)**

*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)*

### **CEPT POSITION**

CEPT is supporting an upgrade of the space research service (SRS) allocation to satellite systems operating in the space-to-space, space-to-Earth and Earth-to-space directions at distances from the Earth less than  $2 \times 10^6$  km 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 shall not claim protection from the aeronautical mobile service (AMS) and from the FS in the frequency band 14.8-15.35 GHz.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

At the end of this week, only three options remain under discussion: No Change, Option A which proposes an upgrade of the space research service (space-to-space) only and Option C proposing an upgrade of all directions of the space research service. Option B and C have conditions for the protection of incumbent services, in particular for the protection of the aeronautical mobile and fixed service. Currently, CEPT supports Option C. In principle Option B could also be a solution, but in this option, it is proposed that SRS cannot claim protection from the land mobile service which is not in line with the CEPT position. Therefore, more discussion is needed with CITELE, the main proponent for option B, to delete the land mobile service from *resolves* 1.3 of option B. If this happens, option A and B would be in line with the CEPT position.

### **NEXT STEPS**

Further discussions are needed to resolve the remaining open questions and converge on a single option. It needs to be clarified under which conditions CITELE may move to option C and how to address the concerns of Japan which is the only country arguing for No Change.

## **AGENDA ITEM 1.14 - EESS (PASSIVE) 250 GHZ**

### **Sub Working Group 5A3 (Ahmad AMIN, UAE)**

*to review and consider possible adjustments of the existing frequency allocations or possible new primary frequency allocations to the Earth exploration-satellite service (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)*

### **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, specifically:

- In line with the scientific observation requirements identified so far, CEPT supports a new primary allocation to the EESS (passive) in the frequency bands 239.2-242.2 GHz and 244.2-247.2 GHz;
- In order to avoid undue constraints to the primary services to which the bands 239.2-242.2 GHz and 244.2-247.2 GHz are currently allocated and subject to the outcome of the relevant sharing and compatibility studies with the services to which these and the adjacent bands are already allocated, CEPT is also proposing a shift of existing allocations to the FS and MS in the frequency band 239.2-241 GHz into the frequency band 235-238 GHz;
- In order to ensure that there will be no potential future impact to FS and MS in the frequency band 235 - 238 GHz, CEPT proposes to limit the existing allocation to EESS (passive) in this frequency band for use by limb sounding passive sensors only.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

During this week the Plenary adopted the new allocations for EESS (passive) in the bands 239.2-242.2 and 244.2-247.2 GHz, the shift of the fixed service (FS) and mobile service (MS) allocations to 235-238 GHz and a footnote stating that the EESS (passive) in this band shall not claim protection from FS and MS. This is in line with the CEPT position and constitutes a very positive outcome on this agenda item.

### **NEXT STEPS**

None - work completed.



## AGENDA ITEM 1.15 - GSO ESIM KU-BAND

### **Sub Working Group 5B1 (Giselle CREESER, USA)**

*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)*

### **CEPT POSITION**

CEPT supports establishing a regulatory framework and technical requirements for operation of earth stations on aircraft and vessels 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 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 supports the application of on-axis (depending on the maximum antenna gain) and off-axis e.i.r.p. density limits for the purpose of the protection of non-GSO FSS systems.

CEPT supports the use of power flux density (PFD) limits on the earth surface for earth stations on aircraft to ensure the protection of Mobile and Fixed Services, and also supports the development of a methodology to verify compliance with PFD limits by GSO earth stations on aircraft or of adequate transitional measures in case WRC-23 could not finalise the methodology.

CEPT is of the view that the notifying administration of the GSO network with which the earth stations on aircraft and vessels communicate should be identifiable to address the potential cases of harmful interference caused by any earth station on aircraft and vessels to fixed and mobile services. This identification could be done thanks to:

- i) the license issued by / authorisation of the administration for the operation of the earth station on aircraft and vessels on its territory;
- ii) the assistance of the flag nation of aircraft/vessel;
- iii) the on-board radio license of the aircraft or vessel equipped with an earth station.

CEPT is of the view that, unless specified otherwise in the Radio Regulations, the receiving part of these earth stations in the associated frequency bands shall not claim protection from terrestrial services having allocations in the same frequency bands and operating in accordance with the Radio Regulations.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

Discussions were finalised on the draft new Resolution and its annexes. Joint discussions were concluded with agenda item 1.16 on responsibilities of administrations in the case of unacceptable interference and list of authorising administrations. Regarding responsibilities the notifying administration will remain the one responsible to eliminate the harmful interference while other potentially involved administrations may collaborate on a voluntary basis. The ESIM authorisations will not be published. However, in the case of

unacceptable interference, the BR will request this information from the notifying administration on a bilateral basis.

Frequency assignments under No. 6.25 of the Radio Regulations can be used as supporting assignments for ESIMs. Protection measures for terrestrial services in Annex 2 and PFD methodology for A-ESIM in Annex 4 were agreed. Annex 5 with the minimum capabilities for ESIMs was maintained with significantly reduced content.

ITU-R is invited to develop, as a matter of urgency, a new Recommendation on ESIM operations, network control and management centre (NCMC) and switching facilities. In the meantime, ESIM can operate under a commitment of the notifying administration to remove any unacceptable interference.

USA and Korea withdrew their proposal to prohibit A-ESIM transmissions below an altitude of 6 km. The draft new Resolution was approved at COM 5 level.

## **NEXT STEPS**

Approval at Plenary.

## AGENDA ITEM 1.16 - NGSO ESIM KA-BAND

### **Sub Working Group 5B2 (Mario NERI, France)**

*to study and develop technical, operational and regulatory measures, as appropriate, to facilitate the use of 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) by non-geostationary fixed-satellite service earth stations in motion, while ensuring due protection of existing services in those frequency bands, in accordance with Resolution 173 (WRC-19)*

### **CEPT Position**

CEPT supports the development of a regulatory framework for the operation of aeronautical and maritime ESIMs 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).

CEPT also supports the operations of Land ESIMs in the frequency bands above and recognizes that they are subject to national regulations. Such operations shall not cause unacceptable interference to terrestrial services in neighbouring countries.

CEPT supports that 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 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 communicates;
  - non-GSO ESIM shall not cause more interference and shall not claim more protection than typical earth stations in this non-GSO system;
  - the operation of non-GSO ESIM shall comply with the coordination agreements obtained following the application of provisions under No. **9.11A**.

CEPT supports that the technical and operational requirements for the use of non-GSO ESIM shall ensure the protection of fixed and mobile services with allocations in the frequency bands considered in this agenda item:

- 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 stations in the fixed and mobile services operating in the same frequency bands in accordance with the Radio Regulations;
- CEPT supports the use of PFD (power flux density) limits on the Earth's surface for aeronautical ESIMs to ensure the protection of fixed and mobile services. CEPT supports also the use of the methodology under development to examine compliance with the pfd limits by non-GSO aeronautical ESIM or transitional measures in case WRC-23 could not agree on the methodology;
- CEPT supports the applicability of the limits contained in Annex 3 to Resolution **169 (WRC-19)** to aeronautical and maritime ESIMs communicating with non-GSO systems operating in the frequency band 27.5-29.1 GHz; such ESIMs shall not cause unacceptable interference to fixed and mobile services operating in the same frequency band;
- CEPT supports the use of the limits contained in Annex 3 to Resolution **169 (WRC-19)** to protect stations in the fixed and mobile services operating in the frequency band 29.5-30 GHz on the entire territories of administrations mentioned in No. **5.542**.

- CEPT is of the view that the notifying administration of the non-GSO system with which the ESIMs communicate should be identifiable to address the potential cases of harmful interference caused by any ESIM to fixed and mobile services. This identification could be done thanks to:
  - i) the license issued by / authorisation of the administration for the operation of the ESIM on its territory;
  - ii) the assistance of the flag nation of aircraft/vessel;
  - iii) the on-board radio license of the aircraft or vessel equipped with the ESIM.

CEPT supports the protection of EESS (passive) sensors in the frequency band 18.6-18.8 GHz through an unwanted emission pfd limit over the oceans of -118 dBW/m<sup>2</sup>/200 MHz for MEO FSS satellites and -110 dBW/m<sup>2</sup>/200 MHz for LEO FSS satellites communicating with aeronautical and maritime ESIM. In addition, CEPT supports that no specific measure is required for non-GSO systems operating in LEO orbits that make use of frequency reuse schemes employing at least three colours.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

During the third week, the discussions on open issues were concluded and the draft Resolution was approved at Committee 5. The open issues were addressed and resolved as follows:

- On the issue of responsibility of administrations in case of harmful interference, the approach from the European Common Proposal (ECP) was adopted to maintain the notifying administration responsible to eliminate the harmful interference, while allowing other potentially involved administrations to collaborate on its resolution on a voluntary basis. The issue of the publication of the administrations authorising ESIMs was solved using an alternative solution which would apply only in case of unacceptable interference. This would be limited to a bilateral process between the BR and administrations.
- It was explicitly clarified in the text that “Land ESIMs” are not within the scope of the provisions in the developed Resolution and that their authorisation is a national matter.
- CEPT accepted to maintain Annex 4 containing the minimum requirements for ESIMs.
- The Resolution allows the use of assignments under No. 11.41 for ESIMs.
- The interference management procedure was also agreed including the involvement of the “flag nation” to identify the notifying administration of the satellite network.
- A new ITU-R Recommendation will be developed to provide more detailed descriptions of ESIMs operations, network control and management centre (NCCM) and switching facilities. While this Recommendation is under development, ESIMs are able to operate under certain commitments of the notifying administration.
- The protection of EESS (passive) in the band 18.6-18.8 GHz has been agreed as proposed in the European Common Proposal.

### **NEXT STEPS**

Approval at Plenary.

## **AGENDA ITEM 1.17 - INTER-SATELLITE LINKS**

### **Sub Working Group 5B3 (Samuel BLONDEAU, Luxembourg)**

*to determine and carry out, on the basis of 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.*

### **CEPT POSITION**

CEPT supports the operation of satellite-to-satellite links under a new inter-satellite service allocation in the frequency bands 18.1-18.6 GHz, 18.8-20.2 GHz and 27.5-30 GHz, under conditions to ensure the protection of existing services in the same frequency bands and adjacent 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. CEPT does not support establishing a pfd mask to protect secondary terrestrial services operated in conformity with No. 5.542.

CEPT supports a NOC for the 11.7-12.7 GHz frequency band.

CEPT supports an ISS allocation. The hard limits or coordination procedures to protect terrestrial services and/or other satellite networks/systems will not be tied to the type of allocation.

CEPT supports a limitation to space research, space operation and Earth exploration-satellite applications and also transmissions of data originating from industrial and medical activities in space.

CEPT supports the operations under the “expanded cone” concept of operations, limited to the LEO-GSO links.

CEPT supports the development of provisions where no additional coordination would be required for the user and service provider space stations if satellite-to-satellite emissions fall within the envelope of the operational characteristics of the service provider.

For the protection of GSO systems, CEPT supports a pfd approach in the efd bands for non-GSO service providers, and a under the envelope approach for coordinated bands (for both non-GSO and GSO service providers).

For the protection of non-GSO systems, CEPT supports the development of hard limits in the bands 19.3-19.7 GHz and 27.5-30 GHz.

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

- 1) 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);
- 2) Non-GSO user space stations will operate in a manner that should resemble typical Earth stations of the FSS service provider system;

- 3) The equivalent power flux-density,  $epfd_{\uparrow}$ , produced at any point in the geostationary-satellite orbit by emissions from all combined operations of inter-satellite and typical Earth station transmissions shall not exceed the limits given in Table 22-2;
- 4) The equivalent power flux-density,  $epfd_{\downarrow}$ , at any point on the Earth's surface visible from the transmitting satellite system, produced by emissions from all the space stations of the non-geostationary-satellite system shall not exceed the limits given in Tables 22-1A to 22-1E, where applicable;
- 5) The higher altitude to lower altitude link transmissions in 18.1-18.6 GHz and 18.820.2 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.
- 6) CEPT supports the protection of EESS (passive) sensors in the frequency band 18.6-18.8 GHz through an unwanted emission pfd limit over the oceans of  $-118 \text{ dBW/m}^2/200 \text{ MHz}$  for MEO satellites and  $-110 \text{ dBW/m}^2/200 \text{ MHz}$  for LEO satellites communicating with non-GSO space stations. In addition, CEPT supports that no specific measure is required for non-GSO systems operating in LEO orbits that make use of frequency reuse schemes employing at least three colours.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

Consensus was reached with other regions except RCC to enable the inter-satellite service in the Ka band. All the technical sub-items for the protection of the GSOs, non-GSOs and scientific services are completed and agreed, including but not limited to the protection of the terrestrial services in the 29.5-30 GHz band, the protection of incumbent non-GSO networks and the verification processes regarding the GSO systems.

No agreement was reached with RCC, who now request coordination with the fixed-satellite, mobile-satellite, inter-satellite and meteorological-satellite services. Coordination would undergo No. 9.11A for the non-GSO ISS (ISS users) and No. 9.7 for GSO ISS (service provider) within  $8^\circ$  of their own position. This situation creates the risk of No Change for this agenda item, which would lead to operation of inter-satellite links under No. 4.4 of the Radio Regulations or under Russia's explicit agreement in Regions 1 and 3.

### **NEXT STEPS**

CEPT effort will be focused on avoiding the imposition of coordination requirements and/or a No Change outcome for the agenda item.

## **AGENDA ITEM 1.18 - MSS DATA COLLECTION**

### **Sub Working Group 5B4 (Jennifer MANNER, USA)**

*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)*

### **CEPT POSITION**

CEPT supports “No Change” to the Radio Regulations for the frequency bands 1695-1710 MHz, 2010-2025 MHz, 3300-3315 MHz, and 3385-3400 MHz.

CEPT considers further the possibility for a global allocation for narrowband MSS to be addressed by WRC27.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

None – work was completed during week 2.

### **NEXT STEPS**

None – work completed.



## **AGENDA ITEM 1.19 - FSS 17 GHZ**

### **Sub Working Group 5B5 (Luciana FERREIRA, Brazil)**

*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);*

### **CEPT POSITION**

CEPT supports a new FSS (space-to-Earth) allocation in Region 2 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 Regions 1 and 2 of the provisions that apply between FSS networks in this frequency band.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

Discussions are polarised between the various regions. While APT could accept a solution including Region 3 that would alleviate their concerns, RCC strongly opposes any non-GSO allocation. ASMG expressed concern about any regulatory changes in Region 1.

There are two options at this time that seem to be the only viable way forward to solve the agenda item:

- No Change
- GSO allocation only in Region 2, associated to No Change to Appendix 30A (except inclusion of Region 2), no changes to Region 1, and general support to the future agenda item for Region 3 downlink FSS alongside global non-GSO considerations.

None of the options under consideration is in line with the European Common Proposal. Therefore, consultations are ongoing with CEPT on the option to support.

### **NEXT STEPS**

To consider the update of the CEPT position during coordination in light of the above issues, noting that the position is not compatible with the current status of discussion.

## **AGENDA ITEM 2 - RECS INCORPORATED BY REFERENCE**

### **Sub Working Group 6A1 (Keiko MORI, Japan)**

*to examine the revised ITUR 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*

### **CEPT Position**

CEPT supports updating the reference(s) in relevant RR provisions of the following ITU-R Recommendation(s): from ITU-R M.585-8 to M.585-9.

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.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

Work has been completed based on principles of Resolution 27 and documents have been approved by the plenary. CEPT's objectives on this agenda item have been accomplished. Recommendations proposed to be incorporated by reference which were approved by the 2023 Radiocommunication Assembly have been an integral part of the work of the Conference under this agenda item.

### **NEXT STEPS**

None – work completed.

## **AGENDA ITEM 4 - REVIEW OF RES/RECS**

### **Sub Working Group 6A1 (Keiko MORI, Japan)**

*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;*

#### **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 75 (Rev.WRC-12), RES 160 (WRC-15), RES 161 (WRC-15)
- CEPT proposes to modify Resolutions: RES 49 (Rev.WRC-19), RES 85 (WRC-03), RES 99 (Rev.WRC-19), RES 140 (Rev. WRC-15), RES 163 (WRC-15), RES 343 (WRC-97), RES 608 (Rev. WRC-19), RES 731 (Rev. WRC-19), RES 762 (WRC-15), RES 804 (Rev. WRC-19)
- CEPT proposes to modify Recommendations: REC 34 (Rev. WRC-12).

#### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

Work on this agenda item has been completed and revised Resolutions and Recommendations have been approved at Committee level. Many CEPT objectives have been reached. The differences between the CEPT proposals and the result of the existing outcomes need to be analysed further. Some of these differences resulted from very detailed proposals from APT and other regional groups and administrations. Those proposals were mainly focused on detailed analysis of footnotes in the Radio Regulations and consequential changes. Furthermore, many changes resulted from the idea to standardise references to ITU-R Recommendations which are not mandatory. During discussion it transpired that general standardisation is not possible, but it is necessary to do so on a case-by-case basis. The changes which have been made are not harmful to the CEPT interest.

Two remaining issues regarding Resolutions 731 and 655 have been resolved and modifications to those Resolutions have been approved.

Based on the guidance from Committees 4 and 5, work on Resolution 99 and No. 59.15 of the Radio Regulations needs to be completed when the Committees have completed their work.

#### **NEXT STEPS**

Approval at Plenary.

## **AGENDA ITEM 7 - SATELLITE PROCEDURES (RES. 86)**

### **Sub Working Group 5C1 (Jack WENGRYNIUK, USA)**

*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;*

### **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.

### **TOPIC A: TOLERANCES FOR NON-GSO ORBITAL CHARACTERISTICS**

#### **CEPT POSITION ON TOPIC A**

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

- the inclination of the orbital plane;
- the altitude of the apogee of the orbit of the space station;
- the altitude of the perigee of the orbit of the space station, except in the case of HEO orbits.

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

CEPT supports, except under No. **11.44C** and **11.49.2**, that tolerances could be temporarily exceeded for a short period of time to permit rephasing of satellites in an orbit-plane after a launch of new non-GSO space stations.

CEPT supports appropriate regulatory consequences under Nos. **11.44C**, **11.49.2** and **11.51** for frequency assignments to non-GSO space stations that do not maintain these to-be-developed orbital tolerances.

CEPT does not support methods permitting notifying administrations to self-declare the expected orbital altitude and inclination variations.

CEPT supports defining orbital tolerances such that the operation of non-GSO systems within those tolerances does not adversely impact the interference environment of other networks, systems and services.

CEPT supports for all networks to align their notified orbital characteristics with deployed orbital characteristics without regulatory implication subject to a maximum difference allowed between the notified and deployed orbital characteristics of the satellite system.

CEPT supports an accurate definition of a circular/elliptical orbit through the parameters required in Appendix 4, namely the distance between the perigee or apogee and the centre of the Earth.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

Long discussion took place during this week to converge on agreed regulatory text. The compromise regulatory solution is based on a merge of the proposal submitted by CITELE which proposed to review the tolerances at each milestone and the CEPT/APT 2-step approach (i.e. a large tolerance to select final notified orbital parameters compared to the one submitted at CR/C level, and a small tolerance). The new regulatory proposal considers the 2-step approach, but the application of the small tolerance will occur only as soon as a satellite is classed as bring into use (BIU), bring back into use (BBIU) or for the milestone purpose.

### **NEXT STEPS**

Values of the large and small tolerances need to be discussed and a compromise will be required due to the difference of proposed values to the WRC.

## **TOPIC B: NON-GSO BIU POST-MILESTONE PROCEDURE**

### **CEPT POSITION ON TOPIC B**

CEPT supports the adoption of a new Resolution to replace resolves 19 of Resolution **35 (WRC-19)** at WRC-23 suppressing resolves 19 of Resolution 35 (WRC-19) and leaving the rest of the Resolution **35 (WRC-19)** as is otherwise.

CEPT supports a decision at this WRC to give administrations a more stable regulatory framework to adapt their launch strategies to these new rules after their 3rd Milestone, which will take place mainly from 2027 onwards.

CEPT supports a regulatory solution aligning the post milestone procedures in this new Resolution with No. 11.49 and Resolution **35 (WRC-19)** allowing some operational flexibilities:

Possibility to operate a minimum 95% of the number of satellites notified in the MIFR without regulatory impact for constellations with more than 50 satellites.

Possibility to operate less than 95% of the number of satellites notified in the MIFR for a maximum period of 3 years without regulatory impact for constellations with more than 50 satellites. (A suspension process analogue to the GSO case is proposed.)

Considering the process to duly notify the Bureau based on similar regulatory mechanism as in **No. 11.49**

CEPT supports a reduction in the number of satellites notified in the MIFR if the deployed number of satellites falls below 95% of that which was notified in the MIFR for a continuous period exceeding 3 years for constellations with more than 50 satellites.

CEPT supports a threshold below 95% for constellations with less than or equal to 50 satellites.

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

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

A group composed of proponents of the post-milestone procedure was created which worked to develop a compromise regulatory text and associated threshold values. Following discussions, 4 different methods have been proposed and compromise has not yet been reached.

### **NEXT STEPS**

Final negotiation to start on the retained regulatory options.

### **TOPIC C: PROTECTION OF GSO MSS FROM NON-GSO EMISSIONS IN 7/8 AND 20/30 GHZ**

#### **CEPT POSITION ON TOPIC C**

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.

More specifically, CEPT supports:

- the modification of footnote RR No. **5.461** to exempt agreements under RR No. **9.21** regarding GSO networks in the MSS in the frequency bands 7250-7300 MHz and 7300-7375 MHz with respect to non-GSO systems for which complete coordination or notification information, as appropriate, are received by the Bureau after 15 December 2023.
- extend the provisions of RR No. **22.2** via an additional Article No. **22.2bis** to GSO networks in the MSS in the concerned frequency bands.
- introducing new RR Appendix 4 data items for assignments to non-GSO systems in the above-mentioned frequency bands to better facilitate analysis of potential interference for victim GSO networks.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

Work on agenda item 7 Topic C was finalised and approved at the Plenary. A compromise solution was agreed between all regional groups, based on a modification of No. 5.461, addition of new footnotes in Article 5 for the concerned frequency bands and addition of Appendix 4 data items which aim to support bilateral coordination processes. All regional groups have shown a positive attitude and willingness in identifying a common solution for this agenda item which should improve the protection for GSO mobile-satellite service in the concerned bands.

#### **NEXT STEPS**

None – work completed.

#### **TOPIC D1: MODIFICATIONS TO APPENDIX 1 TO ANNEX 4 OF APPENDIX 30B**

##### **CEPT POSITION ON TOPIC D1**

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.

##### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

None – work was completed during week 1.

#### **NEXT STEPS**

None – work completed.

#### **TOPIC D2: NEW APPENDIX 4 PARAMETERS FOR RECOMMENDATION ITU-R S.1503 UPDATES**

##### **CEPT POSITION ON TOPIC D2**

CEPT supports making modifications to Appendix 4 in consequence of the revision to Recommendation ITU-R S.1503 agreed at ITU-R SG 4 in July 2023 and sent for formal adoption and approval.

##### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

None – work was completed during week 2.

#### **NEXT STEPS**

None – work completed.

#### **TOPIC D3: BR REMINDERS FOR BIU AND BBIU**

##### **CEPT POSITION ON TOPIC D3**

CEPT supports to establish reminders for confirming the bringing into use or bringing back into use of a satellite network or system under Nos. **11.44B, 11.44C, 11.44D** and **11.44E**.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

None – work was completed during week 1.

### **NEXT STEPS**

None – work completed.

### **TOPIC E: IMPROVED PROCEDURES UNDER APPENDIX 30B FOR NEW ITU MEMBER STATES**

#### **CEPT POSITION ON TOPIC E**

CEPT supports the right of every ITU Member State to obtain a national allotment in the Plan in line with the objective of the Appendix **30B**.

CEPT supports to grant new ITU Member States the same conditions as those granted to administrations having no assignments in the Appendix **30B** List, or assignments listed under 6.1, as adopted in Resolution **170 (WRC-19)**, in addition to the procedure for the addition of a new allotment to the Plan for a new ITU Member State, already contained in Article 7 of Appendix **30B** of the RR. In addition, CEPT supports to add a new Annex 7 to Appendix **30B** of the RR to facilitate the addition of a new allotment to the Plan for a new Member State of the Union.

CEPT encourages new ITU Member States and the resulting affected administrations to actively undertake and cooperate in coordination discussions.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

Work is still ongoing on this Topic and the BR has made quite extensive changes to the document, both to the structure and also some suggestions to improve or make the procedure clearer. Coordination for the seven new countries added to Article 7 of Appendix 30B of the Radio Regulations is still ongoing and will hopefully be completed before the end of the Conference.

### **NEXT STEPS**

Follow discussions and support the European Common Proposal (ECP). Wait for the proposed update on the text from the BR and support it. Make sure the new document is in line with the intention of the ECP and support the work to finalise the document.



## **TOPIC F: EXCLUDING UPLINK SERVICE AREA IN APPENDIX 30A FOR REGIONS 1 & 3 AND IN APPENDIX 30B**

### **CEPT POSITION ON TOPIC F**

Considering high level of completed coordination in Resolution 559 (WRC-19) between administrations, CEPT supports bilateral coordination solutions or national licensing conditions to address potential encountered problems on a case-by-case basis.

CEPT considers that the current regulatory provisions are adequate to address this Topic and supports No Changes to the Radio Regulations.

CEPT notes that, as an example, aligning the coverage area with the service area is not always technically feasible.

CEPT encourages administrations involved in Resolution **559 (WRC-19)** coordinations to make utmost efforts to communicate with requesting administrations and to timely reply in order to complete coordination.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

A small group was created to solve this Topic. Many discussions took place to define principles. The group is close to finding an agreement on regulatory text. The proposal on the table will grant some privileges to specific networks in case of blocking of the coordination process by the already submitted/deployed network without technical reasons.

### **NEXT STEPS**

Finalisation of the discussion is expected soon.

## **TOPIC G: RESOLUTION 770 (WRC-19) GSO PROTECTION FROM SINGLE ENTRY NON-GSO IN Q/V BANDS**

### **CEPT POSITION ON TOPIC G**

CEPT supports to amend Resolution **770 (WRC-19)** by suppressing Annex 2 from Resolution **770 (WRC-19)** and move it to a new recommendation ITU-R S.2157 to be incorporated by reference in Resolution **770 (WRC-19)**.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

The solution agreed during the previous week was approved by the plenary.

### **NEXT STEPS**

None – work completed.

## **TOPIC H: ENHANCED PROTECTION OF APPENDICES 30 AND 30A IN REGION 1 AND 3 AND APPENDIX 30B**

### **CEPT POSITION ON TOPIC H**

CEPT notes that there are several Planned bands initiatives to be discussed at WRC-23 and generally supports the continued protection of Appendices **30** and **30A** and Appendix **30B**.

CEPT does not support to change the current provisions with regards to implicit agreement at WRC-23 but CEPT is willing to consider studying the implications of suppressing provisions with regards to implicit agreement.

CEPT does not support to reduce the EPM degradation tolerance in Appendices **30** and **30A** without any valid technical studies supporting the reasoning behind such a modification.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

The work is completed after several offline meetings and a “package deal” was reached based on Method H1C of the CPM Report for the issue of “implicit agreement” and method H2B for the issue of “EPM degradation”.

### **NEXT STEPS**

Approval at Committee and Plenary.

## **TOPIC I: SPECIAL ARRANGEMENTS UNDER APPENDIX 30B**

### **CEPT POSITION ON TOPIC I**

CEPT supports a regulatory solution based on a specific agreement, on a voluntary basis, allowing an administration suffering from low reference protection margin for its national allotment in Appendix **30B** due to agreements under § 6.15 to retrieve adequate reference protection margin.

CEPT supports the possibility to sign a specific agreement between an additional system and a national allotment in Appendix 30B permitting the additional system to cover the territory of the national allotment in Appendix **30B** until the bringing into use of this national allotment in Appendix **30B**.

CEPT supports the adaptation of the additional system operations to not create harmful interference and to fully protect the operations of the national allotment with which the specific agreement was signed.

CEPT encourages administrations for which § 6.15 of Appendix **30B** has been applied with respect to a national allotment, to cooperate and consider signing such a specific agreement.

## SHORT REPORT, INCLUDING STATUS FOR WEEK 3

The proposed solution as supported by CEPT was approved at Committee 5.

### NEXT STEPS

Approval at Plenary.

## TOPIC J: MODIFICATIONS TO RESOLUTION 76 (REV.WRC-15)

### CEPT POSITION ON TOPIC J

CEPT supports the modification of Resolution **76 (Rev.WRC-15)** to introduce the concept of “consultation meetings”.

CEPT supports that only the operational satellites of non-GSO systems should be considered to evaluate the aggregate epfd levels.

CEPT supports that all administrations are given full visibility of the process.

CEPT supports that the technical work, such as the methodology to be used to evaluate aggregate epfd limit compliance, as well as the methodology to adapt the operation of all non-GSO FSS systems operating co-frequency in frequency bands covered in Tables 1A to Table 1D that are taken into account to evaluate the aggregate epfd levels, should be developed by the ITU-R as a matter of urgency.

CEPT supports that any amendment to the relevant non-GSO FSS systems mentioned above shall not affect the regulatory status of the affected non-GSO systems, including following any modifications to their published characteristics.

CEPT supports that consultation meetings held under the amended Resolution **76 (WRC-15)** shall not occur before the methodologies above are developed by the ITU-R and made available to the membership or by 1 June 2027, whichever comes first.

CEPT supports that the current regulatory provisions in RR (Article **22.5K** and resolves 2 of Resolution **76 (WRC-15)**) combined with existing ITU-R Recommendations could be used for the interim period until the relevant methodologies needed for the consultation meeting are approved. However, CEPT notes that, in absence of a methodology to calculate the aggregate epfd produced by non-GSO FSS systems, the certainty of possible exceedance of the aggregate epfd produced by non-GSO FSS systems should be ensured.

## SHORT REPORT, INCLUDING STATUS FOR WEEK 3

A draft revised Resolution 76 has been adopted in Working Group 5C and is now expected for approval at Committee level.

The document contains the description and principles for a consultation process with regards to the protection of geostationary fixed-satellite service and geostationary broadcasting-satellite service networks from the maximum aggregate equivalent power flux-density produced by multiple non-geostationary fixed-satellite service systems in relevant frequency bands. USA and Canada have stated reservations over the draft revised Resolution.

This Topic is also related to the proposal under agenda item 10 (Future Agenda) for a new agenda item at WRC-27 on the review of epfd limits for which a decision is still pending.

#### **NEXT STEPS**

Approval at Committee level-.

#### **TOPIC K: MODIFICATIONS TO RESOLUTION 553 (REV.WRC-15)**

##### **CEPT POSITION ON TOPIC K**

CEPT supports the possibility to apply the special procedure of Resolution **553 (Rev. WRC-15)** again if the requesting administration fails to bring into use a network even if the special procedure of Resolution **553 (Rev. WRC-15)** was previously requested.

CEPT supports the possibility to also apply the special procedure of **Resolution 553 (Rev. WRC-15)** once if the requesting administration has at maximum one network successfully examined under **No. 9.34** and published under **No. 9.38** for the frequency band 21.4-22 GHz and at the same orbital position(s) as the network to which the special procedure is to be applied.

##### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

None – work was completed during week 1.

##### **NEXT STEPS**

None – work completed.

## AGENDA ITEM 8 – REVIEW OF FOOTNOTES

### **Sub Working Group 6A2 (Stella BANYENZA, Tanzania)**

*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)*

### 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.

#### **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 proposes for WRC-23 no change to Resolution 26 (Rev. WRC-19).

### SHORT REPORT, INCLUDING STATUS FOR WEEK 3

Regarding country footnotes, the sub-working group held the final discussion on the footnotes that had not yet been approved. 11 footnotes were not approved due to concerns from administrations and were submitted to Working Group 6A for a decision.

Several concerns regarded countries outside Region 1 and CEPT. Italy raised concerns in relation the addition of Tunisia in footnote 5.429. These concerns haven't been resolved yet. With the exception of footnote 5.429, all footnotes were adopted by Committee 6 and forwarded to the Plenary.

Regarding revision of Resolution 26, the proposed editorial amendment was adopted at Committee 6 and forwarded to the Plenary for adoption.

## **NEXT STEPS**

Completion of the work and approval at Committee and Plenary level.

**AGENDA ITEM 9.1 - REPORT OF THE DIRECTOR**

*to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention on the activities of the ITU Radiocommunication Sector since WRC-19*

## AGENDA ITEM 9.1 TOPIC A - SPACE WEATHER SENSORS

### Sub Working Group 5A4 (Boris SOROKIN)

*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*

### CEPT POSITION

CEPT supports that the following definition for space weather is included in Article 1, section VIII, of the Radio Regulations:

*space weather: natural phenomena, mainly originating from solar activity and occurring beyond the major portion of Earth's atmosphere that impact Earth's environment and human activities.*

CEPT also supports the:

- Designation of space weather observations (active and receive-only) as an application of the MetAids service, operated under a subset of this service called MetAids (space weather) through Article 4 as follows:  
*Space weather sensor systems, may operate under the meteorological aids service (space weather) allocations.*
- Draft New WRC Resolution on the importance of MetAids (space weather) service applications, in which the definitions of active and receive-only space weather sensors will be introduced.

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), in order to study the appropriate protection of receive-only space weather observations in the priority frequency bands which were defined for this purpose:

- 27.5-28.0 MHz;
- 37.5-38.25 MHz;
- 51.0-54.0 MHz;
- 73.0-74.6 MHz;
- 153.0-154.0 MHz;
- 218.28-248.28 MHz;
- 606.0-614.0 MHz.

Finally, CEPT supports the development of ITU-R Recommendation(s) to provide the relevant protection criteria for receive-only space weather sensors.

### SHORT REPORT, INCLUDING STATUS FOR WEEK 3

During this week, the work under agenda item 9.1, topic a was completed and the outcome was approved at the Plenary.

The compromise Option 3, that was proposed by CEPT as a possible solution was finally supported by all regional groups. Accordingly, the definition of space weather and its service designation is proposed to be included in a draft new Resolution. An additional Article 29B under Chapter VI of the Radio Regulations is proposed to be created to refer to this Resolution.





**NEXT STEPS**

None – work completed.

## **AGENDA ITEM 9.1 TOPIC B - AMATEUR-RNSS AT 1300 MHZ**

### **Sub Working Group 4B7 (Dale HUGHES, Australia)**

*review 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 service (space-to-Earth) operating in the same band in accordance with Resolution **774 (WRC-19)***

### **CEPT POSITION**

CEPT supports the protection of the RNSS.

CEPT supports the development of a new ITU-R Recommendation based on the ITU-R Reports 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 the 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.

CEPT considers incorporating by reference the new ITU-R Recommendation developed by ITU-R WP 5A.

CEPT considers the development of a fallback position, e.g. a new WRC Resolution, in case the Recommendation ITU-R M.[AS\_GUIDANCE] is not adopted in due time for WRC-23.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

The proposed modification to the table of allocation for the frequency band 1240–1300 MHz and the new footnote have been approved at Plenary level.

Resolution 774 has been suppressed.

### **NEXT STEPS**

None – work completed.

## AGENDA ITEM 9.1 TOPIC C - FS IMT

### Committee 4 (Hiroyuki ATARASHI, Japan)

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

### CEPT POSITION

CEPT supports suppression of Resolution 175 (WRC-19) and opposes any other changes to the Radio Regulations in response to WRC-23 Agenda item 9.1, topic c including any new or revised Resolution on this topic.

CEPT is further of the view that:

- the usage of IMT systems in the fixed service is not compliant with the Radio Regulations;
- the work under this topic should focus on consideration of broadband fixed wireless access (BFWA) that use IMT technologies under the existing regulatory framework of the FS;
- 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;
- 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. 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;
- 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.

### SHORT REPORT, INCLUDING STATUS FOR WEEK 3

None – work was completed during week 1.

### NEXT STEPS

None – work completed.

## AGENDA ITEM 9.1 TOPIC D - EESS (PASSIVE) 37 GHZ

### Sub Working Group 5A5 (Ted BERMAN, USA)

*Protection of EESS (passive) in the frequency band 36-37 GHz from non-GSO FSS space stations (See WRC-19 Document 535, 2nd section of the Annex)*

### CEPT POSITION

CEPT supports the protection of EESS (passive) sensors operating in the frequency band 36-37 GHz from non-GSO FSS systems operating in the band 37.5-38 GHz:

- CEPT supports an unwanted emission power limit of -31 dBW/100 MHz in the band 36-37 GHz for FSS non-GSO space stations operating at an apogee altitude above 407 km and below 2000 km in the frequency band 37.5-38 GHz for the protection of EESS (passive) cold calibration channels;
- CEPT supports the inclusion of that unwanted emission power limit in a new footnote of Article 5 of the Radio Regulation during WRC-23;
- CEPT supports the inclusion the inclusion of items A.25 in Annex 2 of Appendix 4 regarding the compliance with the unwanted emission limit defined in a proposed new footnote.

### SHORT REPORT, INCLUDING STATUS FOR WEEK 3

Consensus was reached on a limit of -21 dBW/100 MHz in the band 36-37 GHz per satellite in the fixed-satellite service (all beams) for angles greater than 65° from the satellite nadir. This value will be inserted in a footnote of the Radio Regulations. This consensus was approved by Committee 5.

### NEXT STEPS

Approval at Plenary.

**RESOLUTION 427 (WRC-19)**

**Working Group 4B (Sandra WRIGHT, USA)**

*Updating provisions related to aeronautical services in the Radio Regulations*

**CEPT POSITION**

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

**SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

Consensus was reached for No Change, and approved at the plenary.

**NEXT STEPS**

None – work completed

## **RESOLUTION 655 (WRC-15)**

### **Sub Working Group 6A3 (Frank ERNST, Germany)**

*Definition of time scale and dissemination of time signals via radiocommunication systems*

#### **CEPT POSITION**

CEPT recognises that:

- the general definition of the international reference time scale UTC is provided in Resolution 2 (2018) of the 26th General Conference on Weights and Measures (CGPM), whereas Resolution 4 (2022) of the 27th CGPM determines its future relation with respect to mean solar time UT1;
- UTC is produced by BIPM and its definition is not a task of spectrum regulation;
- the cooperation between BIPM and the ITU-R is settled by their Memorandum of Understanding, signed in 2020.

CEPT will address necessary revisions and amendments regarding Resolution **655 (WRC-15)**.

#### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

The draft revision of Resolution 655 (WRC-15) having not obtained consensus at Sub-Working Group 6A3, was submitted to Working Group 6A for further consideration. Intensive informal offline work was carried out and a final version was agreed which was approved at Committee 6. The consensus version is fully in line with the position of the CEPT. The work is therefore completed.

#### **NEXT STEPS**

Approval at Plenary.

## ARTICLE 21 - WRC-19 DOCUMENT 550

### Sub Working Group 4A4 (Michael KRÄMER)

*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*

### CEPT POSITION

*Note: The term AAS is used here as a shortcut for “stations in the mobile service, including IMT stations, and the fixed service that use an antenna that consists of an array of active elements”*

#### Proposed short-term approach at WRC-23 for notification and verification of AAS in the frequency range 24.45-29.5 GHz

For the purpose of verification of RR No. 21.5 in the notification of stations in the mobile service, including IMT stations, and stations in the fixed service, that use an antenna that consists of an array of active elements in the frequency range 24.45-29.5 GHz, CEPT is of the view that the "power delivered by a transmitter to the antenna of a station" in RR No. 21.5 can be considered as the "total radiated power" (TRP), which is defined as the integral of the power transmitted from all antenna elements in different directions over the entire radiation sphere (noting it is mathematically equivalent to the sum of conducted powers from all internal transmitters, minus ohmic losses).

The limit 8AA  $\leq$  10 dBW for notification of base stations that use an antenna that consists of an array of active elements would remain unchanged. The following other fields would have to be documented in every notification:

- 9G = maximum gain of the AAS
- 8B = 8AA + 9G
- 7AB = necessary bandwidth of the IMT transmission (currently 50, 100, 200 or 400 MHz)

The European Common Proposal proposes to implement the short-term solution at WRC-23 through revisions to RR Article 21, in particular a new provision 21.5B applicable to AAS in the frequency range 24.45-29.5 GHz, and to merge entries in Table 21-2 for the frequency band 24.45-29.5 GHz.

### SHORT REPORT, INCLUDING STATUS FOR WEEK 3

Work on this issue has been completed and approved at the Plenary.

As part of the agreed compromise, Article 21.5 of the Radio Regulations will not be modified, but a relevant clarification will be made in Appendix 4. This clarification has 3 options, to be chosen at the discretion of the administration which are all almost equivalent except for the inclusion of the array ohmic loss.

The clarification is generic and applies to all bands from Table 21-2, and in particular to 26 GHz and 28 GHz bands. This means that in the case/bands where Article 21.5 becomes unnecessary (e.g. in the case where an e.i.r.p. mask would be defined, such as the 6 GHz band under discussion in agenda item 1.2) it would be necessary to be explicit in the relevant resolution that the e.i.r.p. mask applies instead of Article 21.5

The merging of the 3 entries for 26 GHz was accepted with no issue, however discussions related to bands above 29.5 GHz raised major difficulties. In the final compromise, a sentence below Table 21-2 was agreed mentioning that “Additional frequency bands above 29.5 GHz may be considered for inclusion into Table 21 2 at a future competent conference”.

With those elements, all of the objectives of the European Common Proposal were achieved.

**NEXT STEPS**

None – work completed.



## AGENDA ITEM 9.2 - INCONSISTENCIES IN RADIO REGULATIONS

### Sub Working Group 4A1,4A4,4C3,5C2,6A3

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

### CEPT POSITION

Based on the Report of the Director of the Radiocommunication Bureau, CEPT gathered difficulties and inconsistencies in the application of the provisions of the Radio Regulations. CEPT prepared its views on these issues as part of the European preparation for the WRC-23 as indicated in Table 1 of the [CEPT Brief](#).

CEPT has developed European Common Proposals on five issues, all relative to Addendum 2 to Doc. WRC23/4:

- 1 “Practice of splitting a non-geostationary satellite system into several filed systems”, as mentioned in para 3.1.4;
- 2 “Harmful interference to receivers in the of the radionavigation satellite service”, as mentioned in para 3.1.7.2;
- 3 “Identification of transmissions of space systems”, as mentioned in para 3.1.8;
- 4 “PFD scaling factor to be applied to non-GSO FSS constellations with 1000 or more space stations operating in the 17.7-19.3 GHz frequency band”, as mentioned in para 3.1.9.2; and,
- 5 “§4.1.24 of Article 4 of Appendices 30 and 30A”, as mentioned in para 3.2.5.1.

### SHORT REPORT, INCLUDING STATUS FOR WEEK 3

WRC-23 decided to consider only those sections of the BR Director’s Report with proposals for associated changes to the Radio Regulations. The list below summarises the main decisions taken by the Conference so far.

- Proposed amendment to No. 13.6 from RCC: No Change to the Radio Regulations;
- Commenting mechanism for cases of agreements to be obtained under No. 9.21: WRC-23 approved relevant changes to the Radio Regulations;
- Inclusion of the METEOR-3M satellite system in No. 5.264B: WRC-23 accepted the BR’s proposal;
- Removal of Advance Publication Information (API) for frequency assignments subject to coordination: WRC-23 approved relevant changes to the Radio Regulations;
- Amendment to No. 9.7 to exclude inter-satellite links of a GSO network: No Change;
- Notification of specific earth stations at sea: WRC-23 took note of this practice and did not see a need for guidance;
- Registration of mobile stations of terrestrial services in the Master International Frequency Register (MIFR): Sub-Working Group 4A1 decided not to recommend any changes to Article 11.14. It was however noted that depending on the decision taken by WRC-23 on agenda item 1.1, there might arise a need to revisit and re-evaluate the proposed amendment to No. 11.14.
- Commenting procedure under No. 11.28.1: WRC-23 decided that the relevant comments will be published on the ITU website;
- Scaling factor: WRC-23 approved the proposal contained in the European Common Proposal but included an additional equation which provides 1 dB of extra margin applicable to  $N > 6000$ ;
- Multiple masks for epfd examination: sub-working Group 5C2 agreed to invite the ITU-R to study the issue. No Change to the Radio Regulations;

- Harmful interference to receivers of the radionavigation satellite service in the 1559-1610 MHz frequency band: draft new Resolution has been approved at 5C level. It is consistent with the European Common Proposal on the same subject;
- Identification of transmissions of space systems: No change to the Radio Regulations, contrary to what CEPT proposed;
- Interference in the shielded zone of the Moon: WRC-23 approved a text very similar to the one proposed by the CEPT;
- Definition of RAAN and LAN: WRC-23 decided to remove these two items from Appendix 4. Only LAN to be provided a  $t=0$  will be maintained;
- Orbital decay: WRC-23 approved the inclusion of two additional elements in Appendix 4 to describe the decay of orbits;
- The orientation angles alpha and beta: WRC-23 approved the BR's proposal;
- Identity of the satellite network(s) or system(s) including frequency assignments under which feeder links for another satellite service operate: WRC-23 agreed with the BR's proposal, including the fact that the administration responsible for the network/system containing the frequency assignments for feeder-links may be different from the administration responsible for the network/system containing the frequency assignments for service-links. This decision is in line with the CEPT position;
- Coordination trigger in the frequency band 17.7-17.8 GHz under No. 9.11: WRC-23 approved the BR's proposal;
- Resolution 4 (Rev. WRC-2003): WRC-23 approved relevant changes to the Radio Regulations;
- Resolution 35 - Addition of MSS bands to the Table contained in *resolves* 1: the CEPT proposal was agreed by the Conference;
- Resolution 35 - Modification of notified characteristics in accordance with *resolves* 11: develop Rules of Procedure with the view of including it in the BR Director's report to revise Resolution 35 at WRC-27;
- Resolution 35 - Changes to orbital parameters in accordance with *resolves* 14: WRC-23 invited the ITU-R to study;
- Resolution 35 - Application of *resolves* 17 b): WRC-23 invited the Bureau to develop Rules of Procedure and invited the ITU-R to study;
- Resolutions 907 and 908 (Rev. WRC-15): WRC-23 agreed to merge these into Resolution 55.

## **NEXT STEPS**

Continue the discussion on all the issues under this agenda item.

## **AGENDA ITEM 9.3 - DUE DILIGENCE (RES. 80)**

### **Sub Working Group 5C2 (Jack WENGRYNIUK, USA)**

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

### **CEPT POSITION**

CEPT has prepared its views on these issues as shown in Table 1 of the [CEPT Brief](#).

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

Work on this agenda item has been completed at Working Group 5C and has been forwarded to Committee 5 for approval.

Issues related to the implementation of Resolution 59 have been resolved, leading to 41 new countries in the broadcasting-satellite service (BSS) Plan. The long-term protection of the BSS/FSS plans will be addressed through further studies in ITU-R.

Most due diligence issues seem to have found consensus with regards to the resulting changes to the Radio Regulations and proposals for the WRC-23 plenary minutes. Intensive discussions took place on No. 4.4 of the Radio Regulations for which there was not enough time to address fully the issues presented in the RRB Report. Some administrations may make further proposals at Committee 5 on this item.

### **NEXT STEPS**

Approval at Committee level.

## AGENDA ITEM 10 - FUTURE AGENDA

### Working Group 6B (Geraldo NETO, Brazil)

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

### CEPT POSITION

CEPT is supporting the following preliminary agenda items as included in Resolution **812 (WRC-19)** for the Agenda for WRC-27:

- 2.1 - Radiolocation service 275-700 GHz. Resolution **663 (WRC-19)** to be modified;
- 2.2 - Aeronautical and Maritime ESIM. Resolution **176 (WRC-19)** to be modified to cover also NGSO and land ESIM;
- 2.4 - PFD and e.i.r.p. limits for 71-76 GHz/81-86 GHz. Resolution **775 (WRC-19)** to be modified;
- 2.6 - Space weather sensors. Follow-up on Resolution **657 (WRC-19)**;
- 2.8 - Space-to-space links among non-GSO and GSO satellites within MSS. Resolution **249 (WRC-19)** to be modified;
- 2.11 - EESS (Earth-to-space) 22.55-23.15 GHz. Resolution **664 (WRC-19)** to be modified;
- 2.12 - 694-960 MHz removal of limitation of aeronautical mobile. Resolution **251 (WRC-19)** to be modified;
- 2.13 - Low data rate MSS in the frequency bands 1645.5-1646.5 MHz, 1880-1920 MHz and 2010-2025 MHz. Resolution **248 (WRC-19)** to be suppressed. New Resolution to be developed.

CEPT is supporting preliminary agenda item 2.10 (Resolution **812 (WRC-19)**) VHF maritime frequencies in Appendix **18** for the future agenda of WRC-31.

In replacement of preliminary agenda item 2.5 (Resolution **812 (WRC-19)**), CEPT is supporting the following proposals for new agenda items:

- Protection of the EESS (passive) in bands covered by RR No. **5.340** above 86 GHz;
- Protection of RAS above 76 GHz from active space services: revision of Resolution **739 (WRC-19)**.

In addition, CEPT is supporting the following proposal for a new WRC-27 agenda item:

- FSS (Earth-to-space) 51.4-52.4 GHz for gateway earth stations non-GSO;
- Space-to-space links in C-band (3700-4200 MHz and 5925-6425 MHz) in the FSS;
- Protection of RAS from aggregated interference from large non-GSO constellations.

In case WRC-23 does not approve new primary allocation of the frequency bands 4.2-4.4 GHz and 8.4-8.5 GHz to EESS (passive) for Sea Surface Temperature (SST) (as a consequence of WRC-23 agenda item 1.2), CEPT will propose during WRC-23 a new agenda item for WRC-27 related to new passive EESS allocation in these frequency bands.

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In case WRC-23 does not approve new primary allocation of the frequency bands 4.2-4.4 GHz and 8.4 - 8.5 GHz to EESS (passive) for Sea Surface Temperature (SST) (as a consequence of WRC-23 agenda item 1.2), CEPT will propose during WRC-23 a new agenda item for WRC-27 related to new passive EESS allocation in these frequency bands.

Finally, it should be noted that CEPT discussed the following proposals for possible new WRC-27 agenda items, which were not supported to be included in the European Common Proposal:

- Coexistence/sharing studies on possible IMT identifications of frequency bands in the range 7.125-24 GHz;
- Methodologies related to the computation of aggregate equivalent power flux density levels and compliance with the relevant limits given in Annex 1 to Resolution **76 (Rev. WRC-15)**;
- Review of regulatory provisions for the protection of GSO FSS and BSS networks from unacceptable interference from non-GSO FSS systems in the frequency bands below 30 GHz in which Article **22** epfd limits apply;
- Protection of space stations sharing frequency in some frequency bands above 24 GHz from terrestrial stations in the fixed service or the mobile service, including IMT stations, and that use an array of active elements, in follow-up on the Art **21.5** discussions.

### **SHORT REPORT, INCLUDING STATUS FOR WEEK 3**

The work on agenda item 10 progressed well in the informal drafting groups for some potential items for the agenda of WRC-27 and WRC-31. For some other items the progress was very slow due to the huge interest on the issues but also due to very diverging views. The six drafting groups established under Working Group 6B, covering FSS and BSS, science services, Resolution 804 and general matters, others, MSS and RDSS, and IMT, finalised their work by Thursday. The deadline to finish the work of Working Group 6B was set earlier to Friday.

37 proposals were discussed for the items to be included or suppressed in the (preliminary) agendas of WRC-27 and WRC-31 and some proposals were grouped together. With this grouping and suppression of some items the number of remaining proposals was still more than 30. Agreeing the titles for items and corresponding Resolutions for the agenda of WRC-27 and WRC-31 is ongoing on Friday and probably also over the weekend.

It seems that almost all the proposals will be included in the agendas of WRC-27 and WRC-31 with a similar approach taken during the previous Conference, also noting the workload of the ITU-R Working Parties responsible for preparation of the studies for the agenda items during the next study period.

### **NEXT STEPS**

Discussions to continue.