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2nd ITU Inter-regional Workshop on WRC-19 Preparation

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Organized by:

2nd ITU INTER-REGIONAL WORKSHOP ON WRC-19 PREPARATION (Geneva, 20-22 November 2018)

Status of CEPT preparations for WRC-19

CEPT / ECC / Conference Preparatory Group (CPG19) for WRC-19 and RA-19

CEPT ECC
Electronic Communications Committee

Status of CEPT preparation for WRC-19

2nd ITU Inter-regional Workshop on WRC-19 Preparation
Geneva, Switzerland, 20-22 November 2018

Structure of CPG19

- The Conference Preparatory Group (CPG19) of CEPT/ECC is responsible for developing the ECPs and Briefs for WRC-19 and RA-19.

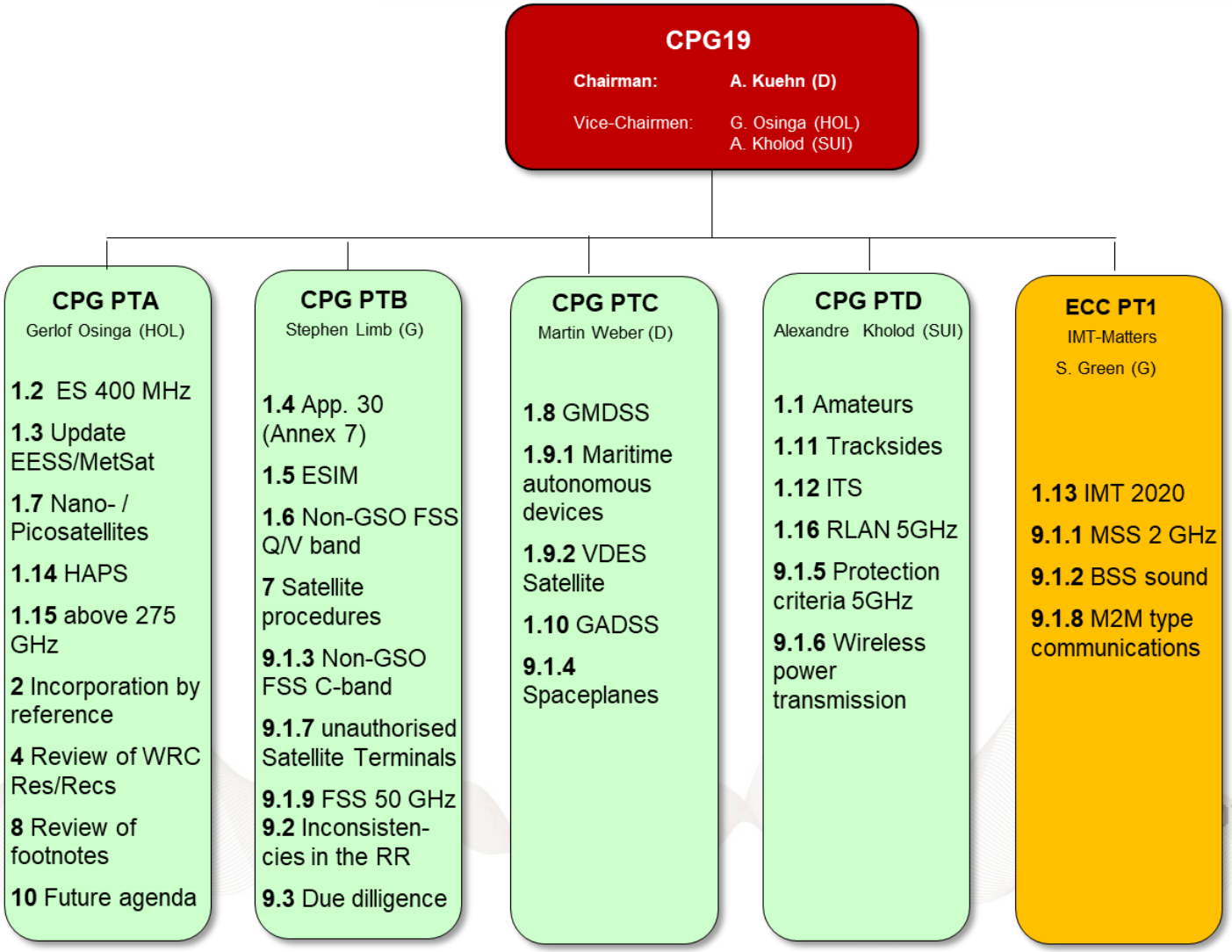
- The CPG management team:

  - Chairman: Alexander Kühn, Germany

  - Vice-Chairmen: Gerlof Osinga, The Netherlands
    Alexandre Kholod, Switzerland

  - Secretary: Karsten Buckwitz, Germany

CPG19 Project Teams



CPG19 Deliverables

For both WRC-19 and the RA-19:

- **European Common Proposals (ECPs)**
  - At least 10 administrations in support
  - No more than 6 opposing – as a general guideline
- **CEPT Briefs**
  - Describe each agenda item
  - Contains the CEPT view – agreed by consensus at each stage
- **CEPT co-ordination in ITU-R meetings**
  - Agreed contributions (also for non-WRC issues)
  - Co-ordination on lines to take

Agenda Item 1.1 (approved by PTD-7)

Issue: *to consider an allocation of the frequency band 50-54 MHz to the amateur service in Region 1, in accordance with Resolution* ***658 (WRC-15)****;*

Preliminary CEPT position:

CEPT supports an allocation of 2 MHz in the frequency range 50-52 MHz to the amateur service in Region 1 on a secondary basis. CEPT is still discussing the future regulatory status of the amateur service in part of the band 50-52 MHz.

CEPT is of the view that the amateur service shall not cause harmful interference to, nor claim protection from harmful interference caused by the incumbent services.

CEPT Coordinator: Mr Hans Blondeel Timmerman (Netherlands)

Agenda Item 1.2 (approved by PTA-5)

Issue: *to consider in-band power limits for earth stations operating in the mobile-satellite service, meteorological-satellite service and Earth exploration-satellite service in the frequency bands 401-403 MHz and 399.9-400.05 MHz, in accordance with Resolution* ***765 (WRC-15)****;*

Preliminary CEPT position:

In order to ensure long term continuity for the operation of satellite data collection systems, CEPT supports the establishment of in-band e.i.r.p. limits, as appropriate, for earth stations in the EESS and MetSat in the frequency band 401-403 MHz (for GSO and non-GSO) and the MSS in the frequency band 399.9-400.05 MHz, taking into account the result of studies.

In addition, CEPT proposes specific provisions for both frequency bands until 22 November 2024 for existing and planned satellite systems exceeding these e.i.r.p. limits, for which complete notification information has been received by the Radiocommunication Bureau, and that have been brought into use before 22 November 2019.

CEPT Coordinator: Mr Jean Pla (France)

CEPT ECC
Electronic Communications Committee

Agenda Item 1.3 (approved by PTA-5)

Issue: *to consider possible upgrading of the secondary allocation to the meteorological-satellite service (space-to-Earth) to primary status and a possible primary allocation to the Earth exploration-satellite service (space-to-Earth) in the frequency band 460-470 MHz, in accordance with Resolution* ***766 (WRC-15)****;*

Preliminary CEPT position:

CEPT supports that the MetSat (space-to-Earth) allocation should be upgraded from secondary to primary status and that a primary EESS (space-to-Earth) allocation should be added in the frequency band 460-470 MHz provided that

- the protection of primary services in the frequency band and in adjacent frequency bands is ensured by the introduction of relevant pfd masks for GSO and non-GSO satellites;
- "MetSat and EESS earth stations shall not claim protection from stations in the fixed and mobile services", as stated in recognizing f) of Res **766**;
- priority of MetSat over EESS as currently expressed in the RR is retained.

CEPT Coordinator: Ralf Ewald (Germany)

Agenda Item 1.4 (approved by PTB-7)

Issue: *to consider the results of studies in accordance with Resolution* ***557 (WRC-15)****, and review, and revise if necessary, the limitations mentioned in Annex 7 to Appendix* ***30 (Rev.WRC-12)****, while ensuring the protection of, and without imposing additional constraints on, assignments in the Plan and the List and the future development of the broadcasting-satellite service within the Plan, and existing and planned fixed-satellite service networks;*

Preliminary CEPT position:

CEPT does not support method A (No Change) of the draft CPM text.

CEPT still continues discussing methods B and C, that only differ on the limitations A1a and A2a. The preliminary CEPT position, limitation by limitation is:

CEPT supports the deletions of the limitations:

- Limitation A1a (No assignments in the Region 1 List further west than 37.2°W)
- Limitation A2a (No modification in the Region 2 Plan further east than 54°W)

CEPT is still considering whether these limitations can be suppressed without any additional regulatory measure (method B of draft CPM text) or if new additional measures, including a new Resolution to not limit future deployment of Region 1 and Region 2 FSS with respect to new BSS assignments (method C of draft CPM text), are necessary.

CEPT Coordinator: Adrian Herbera Gonzalez (Spain)

Agenda Item 1.4 (approved by PTB-7)

Issue: *to consider the results of studies in accordance with Resolution* ***557 (WRC-15)****, and review, and revise if necessary, the limitations mentioned in Annex 7 to Appendix* ***30 (Rev.WRC-12)****, while ensuring the protection of, and without imposing additional constraints on, assignments in the Plan and the List and the future development of the broadcasting-satellite service within the Plan, and existing and planned fixed-satellite service networks;*

Preliminary CEPT position (continued):

CEPT also supports the deletions of the limitations:

- Limitation A2b (No modification in the Region 2 Plan further east than 44°W)
- Limitation A3b (Maximum e.i.r.p. of 56 dBW for assignments in the Regions 1 & 3 List at specific allowable portions of the orbital arc between 37.2°W and 10°E specified in Table 1 of Annex 7 to Appendix **30**)
- Limitation A3c (Maximum power flux density of -138 dB(W/(m2·27 MHz)) at any point in Region 2 by assignments in the Regions 1 & 3 List located at 4°W and 9°E)
- Limitation A3a (No assignments in the Regions 1 & 3 List outside specific allowable portions of the orbital arc between 37.2°W and 10°E specified in Table 1 of Annex 7 to Appendix **30**)

CEPT Coordinator: Adrian Herbera Gonzalez (Spain)

Agenda Item 1.4 (approved by PTB-7)

Issue: *to consider the results of studies in accordance with Resolution* ***557 (WRC-15)****, and review, and revise if necessary, the limitations mentioned in Annex 7 to Appendix* ***30 (Rev.WRC-12)****, while ensuring the protection of, and without imposing additional constraints on, assignments in the Plan and the List and the future development of the broadcasting-satellite service within the Plan, and existing and planned fixed-satellite service networks;*

Preliminary CEPT position (continued):

Regarding the A3a limitation, CEPT considers that the protection of the BSS satellite networks implemented in accordance with the current provisions of Annex 7 to Appendix **30** (which includes antennas smaller than 60 cm in the allowable portions of the orbital arc), must be guaranteed. To achieve it, CEPT supports the solution which proposes that in the examination to determine if these implemented satellite networks will be affected by new Region 1 and 3 BSS satellite networks from some orbital locations, only the EPM criteria will be applied and the PFD mask criteria will not be considered. This solution implies the deletion of this limitation and the incorporation of a new Resolution.

CEPT Coordinator: Adrian Herbera Gonzalez (Spain)

Agenda Item 1.4 (approved by PTB-7)

Issue: *to consider the results of studies in accordance with Resolution* ***557 (WRC-15)****, and review, and revise if necessary, the limitations mentioned in Annex 7 to Appendix* ***30 (Rev.WRC-12)****, while ensuring the protection of, and without imposing additional constraints on, assignments in the Plan and the List and the future development of the broadcasting-satellite service within the Plan, and existing and planned fixed-satellite service networks;*

Preliminary CEPT position (continued):

CEPT supports the retentions of the limitations:

- Limitation A2c (No modification in the Region 2 Plan further west than 175.2°W)
- Limitation A1b (No assignments in the Region 1 List further east than 146°E)

CEPT is of the view that Limitation B deals with the grouping concept of space stations in the Region 2 Plan and therefore decisions over this limitation are out of the scope of CEPT.

In addition, after the removal of the relevant limitations described above, CEPT supports the application of a new Resolution that would give 90 days priority to submit new satellite networks to those Administrations with national assignments in the Regions 1 and 3 Plan with equivalent downlink protection margin values equal or below -10 dB.

CEPT Coordinator: Adrian Herbera Gonzalez (Spain)

Agenda Item 1.5 (approved by PTB-7)

Issue: *to consider the use of the frequency bands 17.7-19.7 GHz (space-to-Earth) and 27.5-29.5 GHz (Earth-to-space) by earth stations in motion communicating with geostationary space stations in the fixed-satellite service and take appropriate action, in accordance with Resolution* ***158 (WRC-15)****;*

Preliminary CEPT position:

CEPT supports a regulatory framework for the operation of earth stations in motion (ESIM) in the bands 17.7-19.7 GHz and 27.5-29.5 GHz, while ensuring protection of, and not imposing undue constraints on, services allocated in those frequency bands.

Due to the foreseen growing demand for ESIM and because ESIM terminals are 'in motion' and used world-wide, the regulatory framework for these terminals needs to be as simple and practicable as possible. The following conditions are considered in the 27.5-29.5 GHz bands as a way forward:

- **Maritime ESIM** – together with other technical conditions, minimum distance of 70 km from the low water mark officially recognized by coastal states similar to the method adopted in Resolution **902 (WRC-03)**. ESIM should comply with this minimum distance unless prior agreement of the concerned administrations has been given.

CEPT Coordinator: Mr Nandan Patel (United Kingdom)

Agenda Item 1.5 (approved by PTB-7)

Issue: *to consider the use of the frequency bands 17.7-19.7 GHz (space-to-Earth) and 27.5-29.5 GHz (Earth-to-space) by earth stations in motion communicating with geostationary space stations in the fixed-satellite service and take appropriate action, in accordance with Resolution* ***158 (WRC-15)****;*

Preliminary CEPT position (continued):

- **Aircraft ESIM** – together with other technical conditions, the pfd limits on the earth's surface as specified in ECC Decision (13)01, should be used to ensure protection of MS and FS. This together with other consideration would ensure protection of terrestrial
  systems. ESIM should comply with these pfd limits unless prior agreement of the concerned administrations has been given.
- **Land ESIM –** operating within national boundaries no specific regulatory action or amendments to the Radio Regulations at WRC-19 are needed, but further consideration may be needed on methods for:
  a) identifying with which countries an administration intending on authorising / deploying Land ESIM should first effect coordination and seek agreement with;
  b) which methodology(-ies) may be used to effect such coordination.

CEPT Coordinator: Mr Nandan Patel (United Kingdom)

Agenda Item 1.5 (approved by PTB-7)

Issue: *to consider the use of the frequency bands 17.7-19.7 GHz (space-to-Earth) and 27.5-29.5 GHz (Earth-to-space) by earth stations in motion communicating with geostationary space stations in the fixed-satellite service and take appropriate action, in accordance with Resolution* ***158 (WRC-15)****;*

Preliminary CEPT position (continued):

Regarding the 17.7-19.7 GHz band, CEPT is of the view that ESIM shall not claim protection from the fixed and mobile services in the band.

Regarding the 27.5-29.5 GHz band, the CEPT supports studying appropriate sharing techniques, including e.i.r.p. or pfd values for ESIM in order to protect the fixed and mobile services allocated in the bands. CEPT has developed a Roadmap on 5G (http://www.cept.org/ecc/topics/spectrum-for-wireless-broadband-5g#roadmap). In this respect it is noted that “Europe has harmonised the 27.5-29.5 GHz band for broadband satellite and is supportive of the worldwide use of this band for ESIM.
This band is therefore not available for 5G”.

CEPT Coordinator: Mr Nandan Patel (United Kingdom)

Agenda Item 1.6 (approved by PTB-7)

Issue: *to consider the development of a regulatory framework for non-GSO FSS satellite systems that may operate in the frequency bands 37.5-39.5 GHz (s-E), 39.5-42.5 GHz (s-E), 47.2-50.2 GHz (E-s) and 50.4-51.4 GHz (E-s), in accordance with Resolution* ***159 (WRC-15)****;*

Preliminary CEPT position:

CEPT supports the development of regulatory provisions, technical and operational conditions that would enable spectrally efficient operation of non-GSO FSS satellite systems in the frequency bands 37.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space) while ensuring protection for GSO satellite networks and stations of other existing services including passive services in the adjacent frequency bands.

CEPT considers that the limits currently in Resolution **750 (Rev. WRC-15)** are not sufficient for the protection of EESS (passive) in the adjacent frequency band 50.2-50.4 GHz from operation of non-GSO FSS satellite systems in the frequency bands under consideration in accordance with Resolution 159 (WRC-15). Appropriate unwanted emission limits for the protection of EESS (passive) are [-61.9] dBW/200 MHz for non-GSO user terminals and [-63] dBW/200 MHz for non-GSO gateways when the aggregate effect of FSS GSO and non-GSO is not taken into account. CEPT is of the view that the effects of aggregate FSS interference from GSO satellite networks and non-GSO systems operating in the relevant bands should be taken into account to ensure the protection of the EESS (passive).

CEPT Coordinator: Maxim Strelets (Russian Federation)

Agenda Item 1.6 (approved by PTB-7)

Issue: *to consider the development of a regulatory framework for non-GSO FSS satellite systems that may operate in the frequency bands 37.5-39.5 GHz (s-E), 39.5-42.5 GHz (s-E), 47.2-50.2 GHz (E-s) and 50.4-51.4 GHz (E-s), in accordance with Resolution* ***159 (WRC-15)****;*

Preliminary CEPT position (continued):

CEPT supports the development of the new Recommendation ITU-R S. [50/40 GHz Sharing Methodology] which describes in particular the methodology to calculate the maximum permissible level of interference from non-GSO satellite systems specified as single entry and aggregate limits for: a) increase in unavailability time allowance for degradation of GSO networks short term performance objectives; b) a maximum reduction of the average throughput or spectral efficiency for GSO networks using Adaptive Coding Modulation. CEPT supports that this methodology takes into account the correlation between a fading event attenuating both the wanted signal and interfering signals in the frequency bands 40/50 GHz. In addition, CEPT supports that the conformity with these single-entry limits be evaluated using the calculation procedures in the new Recommendation ITU-R S.[50/40 GHz Sharing Methodology] and using the statistics of degradations due to the non-GSO system interference and fading issued from the latest versions of Recommendations ITU-R S.1503 and P.618, respectively.

CEPT also supports the development the new Recommendation ITU-R S. [50/40 GHz Reference links] which contains characteristics of representative FSS GSO reference links.

CEPT Coordinator: Maxim Strelets (Russian Federation)

Agenda Item 1.7 (approved by PTA-5)

Issue: *to study the spectrum needs for telemetry, tracking and command in the space operation service for non-GSO satellites with short duration missions, to assess the suitability of existing allocations to the space operation service and, if necessary, to consider new allocations, in accordance with Resolution* ***659 (WRC-15)****;*

Preliminary CEPT position:

CEPT supports additional allocations or upgrades of existing allocations to the space operation service for short duration mission satellites provided that:

- Studies of spectrum requirements are based on satellite missions planned and constellation development.
- Studies of spectrum requirements show the need for additional allocations or upgrades of existing allocations.
- Studies show compatibility with existing services.

CEPT Coordinator: Mr Wouter Jan Ubbels (The Netherlands)

Agenda Item 1.7 (approved by PTA-5)

Issue: *to study the spectrum needs for telemetry, tracking and command in the space operation service for non-GSO satellites with short duration missions, to assess the suitability of existing allocations to the space operation service and, if necessary, to consider new allocations, in accordance with Resolution* ***659 (WRC-15)****;*

Preliminary CEPT position: (continued)

CEPT supports the use of the current primary allocation to the space operation service in the space-to-Earth direction in the band 137-138 MHz, associated with relevant technical conditions (e.g. pfd limits).

CEPT supports studies for possible modifications to the current regulatory situation including the removal of No **9.21** in the existing allocation to the space operation service in the Earth-to-space direction in the band 148-149.9 MHz.

As an alternative to the band 148-149.9 MHz, CEPT is still investigating a possible 1 MHz allocation to the space-operation service in the Earth-to-space direction limited to non-GSO satellites with short duration missions within the band 403-405 MHz.

CEPT Coordinator: Mr Wouter Jan Ubbels (The Netherlands)

Agenda Item 1.7 (approved by PTA-5)

Issue: *to study the spectrum needs for telemetry, tracking and command in the space operation service for non-GSO satellites with short duration missions, to assess the suitability of existing allocations to the space operation service and, if necessary, to consider new allocations, in accordance with Resolution* ***659 (WRC-15)****;*

Preliminary CEPT position: (continued)

For the following bands, considered under this agenda item, CEPT supports a “No Change”:

- 150.05-174 MHz
- 400.15-403 MHz
- 405-420 MHz

CEPT is of the view that the band 272-273 MHz does not provide a solution to satisfy Agenda Item 1.7 and hence supports a “No Change” for this band.

CEPT recognises that studies under this agenda item will have to take into account the considerations under Agenda Item 1.2.

CEPT Coordinator: Mr Wouter Jan Ubbels (The Netherlands)

Agenda Item 1.8 (approved by PTC-6)

Issue: *to consider possible regulatory actions to support Global Maritime Distress Safety Systems (GMDSS) modernization and to support the introduction of additional satellite systems into the GMDSS, in accordance with Resolution* ***359 (Rev.WRC-15)****;*

Preliminary CEPT position:

Issue A: modernisation of GMDSS

- CEPT supports the introduction of the MF frequencies for international NAVDAT, defined in the Recommendation ITU-R M.2010-0, in RR Article **5**.
- CEPT opposes of the introduction of the MF frequencies for international NAVDAT, defined in the Recommendation ITU-R M.2010-0, in RR Appendix **15** for this WRC.

- CEPT supports the introduction of the HF NAVDAT frequencies, defined in the Recommendation ITU-R M.2058-0, in RR Appendix **17**.
- CEPT opposes the introduction of the HF NAVDAT frequencies, defined in the Recommendation ITU-R M.2058-0, in RR Appendix **15** for this WRC.

CEPT Coordinator: Talayeh Hezareh (Germany)

Agenda Item 1.8 (approved by PTC-6)

Issue: *to consider possible regulatory actions to support Global Maritime Distress Safety Systems (GMDSS) modernization and to support the introduction of additional satellite systems into the GMDSS, in accordance with Resolution* ***359 (Rev.WRC-15)****;*

Preliminary CEPT position (continued):

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

CEPT supports regulatory actions to introduce an additional satellite system into the GMDSS as follows:

- the frequency band 1621.35-1626.5 MHz used for GMDSS is allocated to the maritime mobile satellite service (for both space-to-Earth and Earth-to-space) on a primary basis
- Regulatory provisions are amended as necessary in order to ensure the protection of services operating in the frequency bands concerned and in adjacent frequency bands is maintained.

CEPT Coordinator: Talayeh Hezareh (Germany)

Agenda Item 1.9.1 (approved by PTC-6)

Issue: *to consider, based on the results of ITU-R studies: regulatory actions within the frequency band 156-162.05 MHz for autonomous maritime radio devices to protect the GMDSS and automatic identifications system (AIS), in accordance with Resolution* ***362 (WRC-15)****;*

Preliminary CEPT position:

CEPT is of the view that the operation of autonomous maritime radio devices needs to be harmonized and regulated.

CEPT is of the view that the operation of autonomous maritime radio devices shall not reduce the integrity of AIS and of GMDSS.

CEPT supports the identification of spectrum for autonomous maritime radio devices within the frequency band 156-162.05 MHz.

CEPT believes that the AMRD of Group B shall operate in the bands of RR Appendix **18**. In connection with this, CEPT does not support Method B3 to satisfy Agenda item 1.9.1 of WRC-19.

CEPT also believes that the power of the AMRD transmitters of Group B shall be limited to a value that ensures their compatibility with radio systems operating in accordance with the existing frequency distribution.

CEPT Coordinator: Heinrich Peters (Germany)

Agenda Item 1.9.2 (approved by PTC-6)

Issue: *to consider, based on the results of ITU-R studies: modifications of the Radio Regulations, including new spectrum allocations to the maritime mobile-satellite service (Earth to space and space-to-Earth), preferably within the frequency bands 156.0125-157.4375 MHz and 160.6125-162.0375 MHz of Appendix* ***18****, to enable a new VHF data exchange system (VDES) satellite component, while ensuring that this component will not degrade the current terrestrial VDES components, applications specific messages (ASM) and AIS operations and not impose any additional constraints on existing services in these and adjacent frequency bands as stated in recognizing d) and e) of Resolution* ***360 (Rev.WRC-15);***

Preliminary CEPT position:

CEPT supports sharing and compatibility studies between the proposed VDES satellite component (VDE-SAT) and the systems in the radiocommunication services allocated in the same and in adjacent frequency bands.

CEPT is of the view that implementability of VDE-SAT and feasibility of its sharing and compatibility with the systems in the radiocommunication services allocated in the same and adjacent frequency bands without imposing any limitations on those services have been confirmed by appropriate studies and measurement results.

CEPT Coordinator: Lars Løge (Norway)

Agenda Item 1.9.2 (approved by PTC-6)

Issue: *to consider, based on the results of ITU-R studies: modifications of the Radio Regulations, including new spectrum allocations to the maritime mobile-satellite service (Earth to space and space-to-Earth), preferably within the frequency bands 156.0125-157.4375 MHz and 160.6125-162.0375 MHz of Appendix* ***18****, to enable a new VHF data exchange system (VDES) satellite component, while ensuring that this component will not degrade the current terrestrial VDES components, applications specific messages (ASM) and AIS operations and not impose any additional constraints on existing services in these and adjacent frequency bands as stated in recognizing d) and e) of Resolution* ***360 (Rev.WRC-15);***

Preliminary CEPT position (continued):

CEPT supports the introduction of a new primary maritime mobile-satellite (space-to-Earth) service allocation within the frequency band 160.9625-161.4875 MHz, which is not channelized in RR Appendix **18**, and the introduction of a new primary maritime mobile-satellite (Earth-to-space) service allocation for the channels 24, 84, 25, 85, 26 and 86 of RR Appendix **18**. The coordination mechanism under No. **9.14** is introduced through a new footnote in the RR, taking into account the pfd-mask contained in Recommendation ITU-R M.2092. This is in line with Method B of the draft CPM Report (Document CPM19-2/1).

CEPT Coordinator: Lars Løge (Norway)

Agenda Item 1.10 (approved by PTC-6)

Issue: *to consider spectrum needs and regulatory provisions for the introduction and use of the Global Aeronautical Distress and Safety System (GADSS), in accordance with Resolution* ***426 (WRC-15)****;*

Preliminary CEPT position:

CEPT is of the view that:

- systems contributing to the GADSS shall operate in accordance with ICAO requirements or recommendations contained in Standard and Recommended Practices (SARPs), manuals or guidance material;
- any changes to the Radio Regulations should be determined on the basis of the GADSS concept developed by ICAO;
- systems identified to contribute to the GADSS do not require any change to Article **5** of the Radio Regulations;
- [the list of the frequency bands and systems used by GADSS and also their technical and operational characteristics and operational parameters should be included in the corresponding ITU-R Recommendations.]
- additional regulatory actions for the introduction and use of GADSS should not place any additional constraints on the existing and planned systems.

CEPT Coordinator: Jérôme André (France)

Agenda Item 1.11 (approved by PTD-7)

Issue: *to take necessary actions, as appropriate, to facilitate global or regional harmonized frequency bands to support railway radiocommunication systems between train and trackside within existing mobile service allocations, in accordance with Resolution* ***236 (WRC-15)****;*

Preliminary CEPT position:

CEPT is of the view that the harmonized use of frequencies for RSTT within existing mobile service allocations serves current and future demands of railway organisations on all operational levels.

CEPT is of the view that no change to the RR is needed in response to WRC-19 Agenda item 1.11, except suppression of Resolution **236 (WRC-15)**.

CEPT is of the view that harmonisation of frequencies for RSTT can be achieved through the course of ITU-R study group work by an applicable ITU-R Recommendation and/or Reports (e.g. non-mandatory Recommendation ITU-R M.[RSTT_FRQ] containing regional harmonisation measures). In this regard, CEPT highlights its existing framework for RSTT train radio on the basis of GSM-R, which serves interoperable cross-border railway operations. CEPT recognizes that there are other standards/technologies and frequency bands providing for RSTT. In addition, CEPT is of the view that Agenda item 1.11 does not cover the provision of public communication services for passengers.

* RSTT systems considered by CEPT: train radio, train positioning, train remote, train surveillance

CEPT Coordinator : Dirk Schattschneider (Germany)

Agenda Item 1.12 (approved by PTD-7)

Issue: *to consider possible global or regional harmonized frequency bands, to the maximum extent possible, for the implementation of evolving Intelligent Transport Systems (ITS) under existing mobile-service allocations, in accordance with Resolution* ***237 (WRC-15)****;*

Preliminary CEPT position:

CEPT is of the view that its existing regional harmonisation measures for ITS in the band 5 855-5 925 MHz are sufficient and no changes to the RR are required in response to WRC-19 Agenda item 1.12 except the suppression of Resolution **237 (WRC-15)**. CEPT is developing a revision of its existing harmonisation framework for ITS around 63-64 GHz.

CEPT is of the view that harmonisation measures for ITS at ITU-R level can be achieved through the course of ITU-R study group work by applicable ITU-R Recommendations (e.g. Recommendation ITU-R M.[ITS_FRQ]).

CEPT is also of the view that harmonisation of ITS under AI 1.12 is limited to the exchange of information to improve traffic management and to assist driving safety.

In addition, CEPT is of the view that Road tolling (also known as Electronic Toll Collection (ETC)) in 5 795-5 815 MHz is not part of Agenda Item 1.12.

CEPT co-Coordinators: Andrianilana Rakotondradalo (France)
Tobias Vieracker (Germany)

CEPT ECC
Electronic Communications Committee

Agenda Item 1.13 (approved by ECC PT1#60)

Issue: *to consider identification of frequency bands for the future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution* ***238 (WRC-15);***

Preliminary CEPT position:

CEPT supports the results of the ITU-R studies* on IMT spectrum needs in the range 24.25-86 GHz. CEPT supports sharing and compatibility studies for the bands listed in Resolves 2 of Resolution **238** (24.25-27.5 GHz, 31.8-33.4 GHz, 37-43.5 GHz, 45.5-50.2 GHz, 50.4-52.6 GHz, 66-76 GHz and 81-86 GHz), with the focus on the frequency bands 24.25-27.5 GHz, 40.5-43.5 GHz and 66-71 GHz.

CEPT supports the identification of global bands for IMT among the bands listed in resolves 2 of Resolution **238**, taking into account the results of sharing and compatibility studies with existing services. Bands outside those listed in resolves to invite ITU-R 2 of Resolution **238** are not supported for consideration under this Agenda item.

*i.e. excluding Annex B from Doc ITU-R TG5/1 Document 5-1/36 Attachment 1: Information on spectrum needs in some countries

CEPT Coordinator: Robert Cooper (United Kingdom)
coordination team: Vladislav Sorokin (Russian Federation), Sarunas Oberauskas (Lithuania)

Agenda Item 1.13 (approved by ECC PT1#60)

Issue: *to consider identification of frequency bands for the future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution* ***238 (WRC-15);***

Preliminary CEPT position (continued):

The following bands are supported for IMT identification and where appropriate, allocation to the Mobile Service on a primary basis:

- 24.25-27.5 GHz

  CEPT has confirmed the clear priority for this band through the adoption of a harmonisation decision (ECC Decision (18)06) including relevant conditions for the protection of other services in the band and adjacent bands. The Decision was developed based on studies that assumed an individual authorisation regime.

  CEPT supports the unwanted emission limits of −42 dBW/200 MHz Total Radiated Power (TRP) for base stations and −38 dBW/200 MHz TRP for mobile terminals, into the 23.6-24 GHz band, to be included as mandatory limits in Resolution **750**.

  CEPT is considering RR N° **5.536A**, **5.536B** and **5.536C** in relation with coexistence with EESS and SRS earth stations.

CEPT Coordinator: Robert Cooper (United Kingdom)
coordination team: Vladislav Sorokin (Russian Federation), Sarunas Oberauskas (Lithuania)

Agenda Item 1.13 (approved by ECC PT1#60)

Issue: *to consider identification of frequency bands for the future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution* ***238 (WRC-15);***

Preliminary CEPT position (continued):

The following bands are supported for IMT identification and where appropriate, allocation to the Mobile Service on a primary basis:

- 40.5 – 43.5 GHz

  CEPT proposes an IMT identification for 40.5-43.5 GHz. This is a priority band for CEPT and already identified for future harmonisation in Europe. CEPT considers that the bands 40.5-43.5 GHz has good potential for future harmonisation in Europe. The process for developing harmonisation decisions for additional bands (other than 26 GHz) may be launched immediately after WRC-19, under the assumption of an individual authorisation regime. Industry has indicated that 40.5-43.5 GHz is expected to be part of a tuning range for equipment from 37-43.5 GHz. The potential of this tuning range would enable different countries outside CEPT to identify the most appropriate frequencies to be used for 5G (see also CEPT position below on 37 - 40.5 GHz).

CEPT Coordinator: Robert Cooper (United Kingdom)
coordination team: Vladislav Sorokin (Russian Federation),
Sarunas Oberauskas (Lithuania)

Agenda Item 1.13 (approved by ECC PT1#60)

Issue: *to consider identification of frequency bands for the future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution* ***238 (WRC-15);***

Preliminary CEPT position (continued):

The following bands are supported for IMT identification and where appropriate, allocation to the Mobile Service on a primary basis:

- 66 – 71 GHz

  CEPT supports that IMT and MGWS/WAS should have equal access to the frequency band 66-71 GHz. An identification should not confer any priority to IMT and this should be emphasized in the footnote identifying the band and associated WRC Resolution. CEPT supports modifying No. **5.553** to remove the frequency band 66-71 GHz from this footnote.

CEPT Coordinator: Robert Cooper (United Kingdom)
coordination team: Vladislav Sorokin (Russian Federation),
Sarunas Oberauskas (Lithuania)

Agenda Item 1.13 (approved by ECC PT1#60)

Issue: *to consider identification of frequency bands for the future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution* ***238 (WRC-15);***

Preliminary CEPT position (continued):

Other candidate bands considered:

- 37-40.5 GHz

  Whilst CEPT will not propose identification and has no intention of using 37-40.5 GHz for IMT, CEPT recognises that the frequency range 37-43.5 GHz has strong potential to become a 5G tuning range, facilitating harmonisation of equipment. CEPT is focusing on the top part of the range (40.5-43.5 GHz) while other countries outside of CEPT could focus on other parts of the range. In this respect, CEPT would not oppose a global IMT identification for the full 37-43.5 GHz range (see also CEPT position above on 40.5–43.5 GHz).

  The benefit of identifying this wide tuning range that can be harmonised globally is that equipment manufacturers and vendors can serve the global market with the same products, thus maximising economies of scale, while allowing different administrations/regions the ability to identify the most appropriate frequencies within the range to be used for 5G. National regulators can make spectrum for 5G available when and where required.

CEPT Coordinator: Robert Cooper (United Kingdom)
coordination team: Vladislav Sorokin (Russian Federation), Sarunas Oberauskas (Lithuania)

Agenda Item 1.13 (approved by ECC PT1#60)

Issue: *to consider identification of frequency bands for the future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution* ***238 (WRC-15);***

Preliminary CEPT position (continued):

Other candidate bands considered:

- [45.5-50.2 GHz and 50.4-52.6 GHz

- 45.5-47.0 and 47.0 – 47.2 GHz

  Position to be developed by January 2019 PT1 meeting noting that there are currently no studies for 45.5 – 47.2 GHz

- 47.2 - 50.2 GHz and 50.4-52.6 GHz

  Position to be developed by January 2019 PT1 meeting]

CEPT Coordinator: Robert Cooper (United Kingdom)
coordination team: Vladislav Sorokin (Russian Federation), Sarunas Oberauskas (Lithuania)

Agenda Item 1.13 (approved by ECC PT1#59)

Issue: *to consider identification of frequency bands for the future development of International Mobile Telecommunications (IMT), including possible additional allocations to the mobile service on a primary basis, in accordance with Resolution* ***238 (WRC-15);***

Preliminary CEPT position (continued):

The following bands are not supported for the IMT identification and CEPT is proposing NOC:

- 31.8-33.4 GHz
- 71-76 GHz
- 81-86 GHz

Note: CEPT has developed a Roadmap on 5G *(*http://cept.org/ecc/topics/spectrum-for-wireless-broadband-5g#roadmap*). In this respect it is noted that "Europe has harmonised the 27.5-29.5 GHz band for broadband satellite and is supportive of the worldwide use of this band for ESIM. This band is therefore not available for 5G".*

CEPT Coordinator: Robert Cooper (United Kingdom)
coordination team: Vladislav Sorokin (Russian Federation),
Sarunas Oberauskas (Lithuania)

Agenda Item 1.14 (approved by PTA-5)

Issue: *to consider, on the basis of ITU-R studies in accordance with Resolution* ***160 (WRC-15),*** *appropriate regulatory actions for high-altitude platform stations (HAPS), within existing fixed-service allocations*

Preliminary CEPT position:

CEPT supports, while ensuring protection of existing services and their future development including other applications of the fixed service (in accordance with Resolution 160 (WRC-15)) and subject to the conclusions of the ongoing sharing and co-existence studies for the bands mentioned below and, as appropriate, in the adjacent bands:

- Worldwide identifications for transmissions from high altitude platform stations (downlink) in the bands 6440- 6520 MHz, 27.9-28.2 GHz
- Worldwide identifications for transmissions to high altitude platform stations (uplink and downlink) in the bands 31-31.3 GHz and 38-39.5 GHz

For the bands 6440- 520 MHz, 27.9-28.2 GHz, 31-31.3 GHz, 38-39.5 GHz, 47.2-47.5 GHz and 47.9-48.2 GHz, CEPT is supporting new footnotes and associated resolutions and/or appropriate modifications to the existing footnotes and associated resolutions.

CEPT Coordinator: Nasarat Ali (United Kingdom)

Agenda Item 1.14 (approved by PTA-5)

Issue: *to consider, on the basis of ITU-R studies in accordance with Resolution* ***160 (WRC-15),*** *appropriate regulatory actions for high-altitude platform stations (HAPS), within existing fixed-service allocations*

Preliminary CEPT position (continued):

CEPT is of the view that any consideration of the frequency bands 21.4-22 GHz and 24.25-27.5 GHz in Region 2 under this Agenda item shall by accompanied by appropriate protection of: ISS in the band 24.45-24.75 GHz, ISS in the band 25.25-27.5 GHz, EESS (passive) in the bands 21.2-21.4 GHz, 22.21-22.5 GHz and 23.6-24 GHz, EESS and SRS (space-to-Earth) in the band 25.5-27 GHz and FSS in the bands 24.75-25.25 GHz and 27-27.5 GHz. This includes the appropriate protection of the mobile service in the 24.25-27.5 GHz as results of consideration under WRC-19 AI 1.13.

CEPT is of the view that any consideration of the frequency band 24.25-27.5 GHz in Region 2 under this Agenda item should not limit the possibility to identify the band for IMT on a global level under Agenda item 1.13.

CEPT Coordinator: Nasarat Ali (United Kingdom)

Agenda Item 1.15 (approved by PTA-5)

Issue: *to consider identification of frequency bands for use by administrations for the land-mobile and fixed services applications operating in the frequency range 275-450 GHz, in accordance with Resolution* ***767 (WRC-15);***

Preliminary CEPT position:

CEPT supports the inclusion of a new footnote to Article **5** of the Radio Regulations identifying the following frequency bands for fixed and mobile service applications in the range 275-450 GHz while maintaining the protection of the passive services identified in No. **5.565**:

- 275-296 GHz
- 306-313 GHz
- 318-333 GHz
- 356-450 GHz

With a total bandwidth of 137 GHz, CEPT stresses that this is exceeding the assessed spectrum requirements of the land mobile and fixed services. In addition to the 23 GHz already allocated to land mobile and fixed services in the lower adjacent band 252-275 GHz, this is hence providing a contiguous band of 44 GHz.

CEPT Coordinator: Sebastian Rey (Germany)

Agenda Item 1.15 (approved by PTA-5)

Issue: *to consider identification of frequency bands for use by administrations for the land-mobile and fixed services applications operating in the frequency range 275-450 GHz, in accordance with Resolution* ***767 (WRC-15);***

Preliminary CEPT position (continued):

However, CEPT does not support land mobile and fixed services identification in the EESS (passive) bands 296-306 GHz, 313-318 GHz and 333-356 GHz (as identified in No. **5.565**) since study results show that they are not compatible.

Active services other than land mobile and fixed services are not subject to WRC-19 agenda item 1.15. Consequently, CEPT is of the view that the corresponding regulatory provisions to other active services have to remain unchanged.

CEPT Coordinator: Sebastian Rey (Germany)

Agenda Item 1.16 (approved by PTD-7)

Issue: *to consider issues related to wireless access systems, including radio local area networks (WAS/RLAN), in the frequency bands between 5 150 MHz and 5 925 MHz, and take the appropriate regulatory actions, including additional spectrum allocations to the mobile service, in accordance with Resolution* ***239 (WRC-15);***

Preliminary CEPT position:

In the 5 150-5 250 MHz band, CEPT notes that an outdoor relaxation to WAS/RLAN would affect the operation of the MSS feeder links, aeronautical radionavigation and aeronautical telemetry (see No. **5.446C**). However, CEPT is still studying usage restrictions (e.g. in vehicle use) combined with appropriate mitigation techniques to achieve co-existence with incumbent services to enable outdoor WAS/RLAN use in this band.

In the 5 250-5 350 MHz band, CEPT notes that the current studies have shown difficulties in achieving co-existence with incumbent services and therefore supports no change to the RR in this band.

In the 5 350-5 470 MHz band, CEPT supports no change to the RR in this band.

CEPT Coordinator: Andrew Gowans (United Kingdom)

Agenda Item 1.16 (approved by PTD-7)

Issue: *to consider issues related to wireless access systems, including radio local area networks (WAS/RLAN), in the frequency bands between 5 150 MHz and 5 925 MHz, and take the appropriate regulatory actions, including additional spectrum allocations to the mobile service, in accordance with Resolution* ***239 (WRC-15);***

Preliminary CEPT position (continued):

In the 5 725-5 850 MHz band, CEPT would support a new mobile allocation to accommodate WAS/RLANs use if sharing and compatibility studies can demonstrate the effectiveness of any new proposed interference mitigation techniques to ensure the protection of radars, fixed service (see No. **5.455**) and FSS space station receivers. It is to be noted that CEPT will take into account compatibility studies between RLAN and specific applications within CEPT (e.g. road tolling systems). At this time, no effective mitigation techniques has been proposed to enable co-existence with certain modes of frequency hopping radars operated in this band in some CEPT countries.

In the 5 850-5 925 MHz band, CEPT notes that the current studies have shown difficulties in achieving co-existence with other incumbent services without imposing any additional constraints on existing services such as FSS (space station receivers) and existing applications under the mobile service such as ITS (including urban rail). Therefore, CEPT supports no change to the RR in this band.

CEPT Coordinator: Andrew Gowans (United Kingdom)

Agenda Item 2 (approved by PTA-5)

Issue: *to examine the revised ITU-R Recommendations incorporated by reference in the Radio Regulations communicated by the Radiocommunication Assembly, in accordance with Resolution* ***28 (Rev.WRC-15)****, and to decide whether or not to update the corresponding references in the Radio Regulations, in accordance with the principles contained in Annex 1 to Resolution* ***27 (Rev.WRC-12);***

Preliminary CEPT position:

CEPT supports the revision of ITU-R Recommendations P.525-2, P.526-13 and RS.1260-2 incorporated by reference based on outcomes of work of the relevant ITU-R Study Groups.

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

CEPT supports update of the RR Volume 4 cross references list.

CEPT Coordinator: Karel Antousek (Czech Republic)

Agenda Item 4 (approved by PTA-5)

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

Preliminary CEPT position:

CEPT encourages the constant review of Resolutions and Recommendations from previous conferences and will follow activities, in particular of ITU, associated with this effort.

- CEPT proposes to suppress Resolutions: RES **99 (WRC-15),** RES **809 (WRC-15)** and RES **810 (WRC-15)**
- CEPT proposes to modify Resolutions: RES **517 (REV.WRC-15),** RES **543 (WRC-03),** RES **641 (REV.HFBC-87),** RES **647 (REV.WRC-15)** and RES **731 (REV.WRC-12)**
- CEPT proposes to suppress Recommendation TBD
- CEPT proposes to modify Recommendation TBD

CEPT Coordinator: Karel Antousek (Czech Republic)

Agenda Item 7 (approved by PTB-7)

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

Preliminary CEPT position:

CEPT is studying possible improvements of the coordination and notification procedures for space services. CEPT supports retaining the current process of continuing evolution at successive WRCs of the regime governing space services. 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 characterized issues whose improvement is urgent and impacting.

CEPT also favours a stable and predictable regulatory framework for efficient and economical use of spectrum and orbit resources.

CEPT supports to include into consideration under WRC agenda item 7 only the issues considered by the relevant Working Parties prior to the deadline for the draft CPM Report and included into the draft CPM Report, in order to give administrations and regional organizations sufficient time to draw up a position and develop regulatory texts.

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 7 (approved by PTB-7)

Issue A: *Bringing into use of frequency assignments to all non-GSO satellite systems, and consideration of a milestone-based approach for the deployment of non-GSO satellite systems in specific bands and services*

Preliminary CEPT position :

CEPT supports that a solution to address this issue should follow the principles established by ITU-R WP 4A (Annex **30** of 4A/826, Section 3/7/1.3).

CEPT supports that the definition of the BIU of frequency assignments to non-GSO systems in accordance with the current practice as contained in then RoP adopted by the 73rd meeting of the RRB to be left unchanged from the current practice. This means that CEPT supports considering that the frequency assignments to a non-GSO system be brought into use with the deployment of one of its satellites in one of the notified orbital planes with the operational capability of transmitting or receiving those frequency assignments. Further consideration needs to be given on the most appropriate length of the period during which such satellite needs to operate in one of the notified orbital planes of the non-GSO system.

At the same time, CEPT supports a milestone-based approach for the maintenance of the recording in the MIFR of assignments to non-GSO systems associated with a minimum number of satellites to be deployed over time. In assessing milestone timelines and objectives, CEPT will seek a balance between the need to prevent spectrum warehousing, the proper functioning of coordination mechanisms and the operational requirements related to the deployment of a non-GSO satellite system.

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 7 (approved by PTB-7)

Issue A: *Bringing into use of frequency assignments to all non-GSO satellite systems, and consideration of a milestone-based approach for the deployment of non-GSO satellite systems in specific bands and services*

Preliminary CEPT position (continued):

CEPT supports that any milestone-based approach should be applicable to FSS/BSS/MSS and other primary satellite services in the same direction as these services at least in the frequency bands 10.7-13.25, 13.75-14.5, 17.3-21.2, 27-31, 37.5-47, 47.2-50.2 and 50.4-51.4 GHz.

CEPT believes that the milestone-based proposal gives regulatory certainty to networks and systems and gives recognition that constellations of non-GSO satellites may generally take time to be fully deployed. CEPT supports the adoption of a unique method encompassing all types of constellations.

CEPT supports three milestones to be applied to networks recorded in the MIFR. Recognizing that some constellations may deploy some satellites but may fail to meet the milestones, a provision is proposed to reduce the number of satellites recorded in the MIFR while preserving the rights for the already in-orbit satellites. The reduction of the characteristics of the constellation recorded in the MIFR should be based on the number of actual satellites launched.

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 7 (approved by PTB-7)

Issue A: *Bringing into use of frequency assignments to all non-GSO satellite systems, and consideration of a milestone-based approach for the deployment of non-GSO satellite systems in specific bands and services*

Preliminary CEPT position (continued):

In the absence of a ITU-R Recommendation dealing with calculation for interference as a result of modification, CEPT supports the non-application of No. **11,43B** if modifications to notified orbital parameters, following milestone failure, are limited to the reduction of the number of orbital planes, reduction of the number of satellites per plane, modification of the right ascension of the ascending node of each plane and the modification of the initial phase angle of each satellite provided that notifying administration submit a commitment stating that the modified characteristics shall not cause more interference or require more protection than the initial notified characteristics.

CEPT supports that those systems brought into use and notified, but not fully deployed before a date to be set by the Conference, will have the same regulatory certainty as that available to those systems which will be brought into use and notified after this date. CEPT supports a methodology that would ensure that at one point in time after WRC-19, the recorded frequency assignments and their associated characteristics must reflect the actual deployment of such systems. Appropriate transitional measures are needed in order to allow administrations having systems brought into use and notified before a date to be set by the Conference to have sufficient time to adapt their current development and deployment schedules to meet milestones after an appropriate date after WRC-19.

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 7 (approved by PTB-7)

Issue A: *Bringing into use of frequency assignments to all non-GSO satellite systems, and consideration of a milestone-based approach for the deployment of non-GSO satellite systems in specific bands and services*

Preliminary CEPT position (continued):

CEPT supports that the suspension of frequency assignments does not extend the milestone period nor reduce the requirements associated with any of the remaining milestones.

CEPT will study further whether provisions should be developed so as to avoid that the same space station may be used to gain undue advantage in the deployment of the constellation by bringing into use multiple filings.

CEPT supports the adoption of a new Resolution by WRC-19 based on the principles and methodology set out above to address this issue.

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 7 (approved by PTB-7)

Issue B: *Application of coordination arc in the Ka-band, to determine coordination requirements between FSS and other satellite services*

Preliminary CEPT position:

CEPT supports to apply the coordination arc to both MSS primary and secondary frequency assignments without modifying the current conditions related to the category of allocation applicable to assignments to be taken into account in coordination. Coordination arc criteria would substitute the ΔT/T>6% criteria that currently applies, improving and making more efficient the coordination procedures, while keeping the possibility for Administrations to request ΔT/T criteria under No **9.41**. CEPT supports adequate modifications to Table 5-1 of RR Appendix **5** to implement this proposal, as outlined in Method B2 in the draft CPM text.

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 7 (approved by PTB-7)

Issue C: *Issues for which consensus was readily achieved in ITU-R and a single method has been identified*

- *C1: AR**11** and AP**30/30A/30B** discrepancies*
- *C2: Frequency bands submitted under AP**30B** Article **6***
- *C3: AP**30B** MOD to Article **6** No. **6.10***
- *C4: AP**30/30A** single AP**4** notice for List and Notification*
- *C5: MOD to No. **11.46** and six month resubmission*
- *C6: AP**30B** single AP**4** notice for List and Notification*
- *C7: harmonization of AP**30B** with AP**30** & **30A** § 4.1.13 for R1 & 3 and § 4.2.17 for R2; re-introducing a regulatory option to capture obtaining agreements for a specific period*

Preliminary CEPT position:

CEPT supports the consensus achieved at ITU-R level.

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 7 (approved by PTB-7)

Issue D: *Identification of those specific satellite networks and systems with which Coordination needs to be effected under RR Nos* ***9.12****,* ***9.12A*** *and* ***9.13***

Preliminary CEPT position:

CEPT proposes that the Bureau publish in the CR/D special section the “definitive lists” of those specific GSO networks or non-GSO systems, as appropriate, with which coordination under Nos **9.12**, **9.12A** or **9.13** needs to be effected, similarly to what is currently done under the provisions of No **9.36.2**, as outlined in Method D2 in the draft CPM text.

CEPT understands that, once the relevant software currently used by the Bureau will be amended as needed, such an approach would not significantly increase the daily workload of the Bureau for producing such lists. In fact, the Bureau carries out a similar analysis to produce the list of Administrations currently published in the BR IFIC under the provisions of No **9.36.1**; the proposed changes would just modify the details published in the BR IFIC, together with simplifying the administrative burden currently born by many Administrations.

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 7 (approved by PTB-7)

Issue E: *Resolution related to RR Appendix* ***30B***

Preliminary CEPT position:

CEPT supports to pursue a solution that directly addresses the concern for administrations having nothing in the RR Appendix **30B** List, to allow these administrations to convert their national allotments into assignments with characteristics outside the envelope of the allotment or make a submission for a new network provided that the assignment are limited to national service and coverage area. CEPT therefore supports the WRC Resolution as contained in the draft CPM text following the philosophy of Resolution **553** (**WRC-15**) which addresses a similar issue for the 21.4-22 GHz BSS band for Regions 1 and 3, as outlined in the single method.

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 7 (approved by PTB-7)

Issue F: *Measures to facilitate entering new assignments into the RR Appendix* ***30B*** *List*

Preliminary CEPT position:

CEPT supports to revise and restructure the coordination triggers used in Appendix **30B** to take into account technological advances and the development of the use of the geostationary orbit to facilitate access for newcomers by avoiding overprotection and unnecessary coordination requirements, as outlined in Method F1 in the draft CPM text. CEPT believes that this would help to alleviate the difficulties faced by administrations in attempting to enter assignments into the Appendix **30B** List and to facilitate coordination of networks, at the same time appropriately protecting the Appendix **30B** Plan and List.

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 7 (approved by PTB-7)

Issue G: *Updating the reference situation for Region 1 and 3 networks under Appendices* ***30*** *and* ***30A*** *when provisionally recorded assignments are converted into definitive recorded assignments*

Preliminary CEPT position:

CEPT supports that when a network enters the List under § 4.1.18 of Appendix **30** or **30A**, while there is still disagreement, the reference situation of the interfered-with network shall only be updated if and when the Bureau is informed by the affected administration to do so. CEPT suggests modifying § 4.1.18*bis* to reflect this view as outlined in Method G1 in the draft CPM text. .

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 7 (approved by PTB-7)

Issue H: *Modifications to RR Appendix **4** data elements to be provided for non-GSO satellite systems not subject to the procedures of Section II of RR Article **9***

Preliminary CEPT position:

CEPT supports the only method proposed for agenda item 7 Issue H.

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 7 (approved by PTB-7)

Issue I: *Additional RR Appendix **4** data items to be provided for non-geostationary satellite systems with multiple orbital planes*

Preliminary CEPT position:

CEPT supports to further study the impact of this proposal in detail before taking any action.

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 7 (approved by PTB-7)

Issue J: *Modification of Section 1, Annex 1 of RR Appendix **30**, pfd limit*

Preliminary CEPT position:

CEPT supports to further study the impact of this proposal in detail before taking any action.

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 7 (approved by PTB-7)

Issue K: *Difficulties for Part B examinations under § 4.1.12 or 4.2.16 of RR Appendices* ***30*** *and* ***30A*** *and § 6.21 c) of RR Appendix* ***30B***

Preliminary CEPT position:

CEPT supports that the examination under § 4.1.12 or 4.2.16 of RR Appendices **30** and **30A** and § 6.21 c) of RR Appendix **30B** is performed in two steps, if needed, to better reflect the actual situation and to enable newcomers to benefit from the reduction of satellite networks parameters and characteristics of other networks emerging during the coordination process, and thus increase the efficiency of spectrum use, as outlined in the single method in the draft CPM text.

CEPT believes that this method avoids over protection of earlier networks based on part A characteristics which could be obsolete and no longer valid due to changes during the coordination process and in entering into the List (Part B). This method would hence enable spectrum efficiency by addressing potential difficulties encountered by notifying administrations in the Part B examination to enter into the List with favourable findings.

CEPT support the overall aim to facilitate entering new assignments into the RR Appendix **30B** List and to facilitate coordination of networks for newcomers which the proposal in Issue K targets.

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 7 (approved by PTB-7)

Issue L: *Update to Appendix **4** data elements required for RR Article **22** EPFD verification after revision of Recommendation ITU-R S.1503*

Preliminary CEPT position:

CEPT supports revision of RR Appendix **4** as a consequence to the Recommendation ITU-R S.1503-3 coming into force, as outlined in the single method in the draft CPM text.

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 7 (approved by PTB-7)

Issue M: *Simplified regulatory regime for non-GSO satellite systems with short duration missions*

Preliminary CEPT position:

CEPT supports the regulatory framework in the draft CPM text method where the short lifetimes of non-GSO space stations are taken into account. CEPT proposes to introduce this simplified regulatory regime for the advance publication, notification and recording procedures for non-GSO satellite systems with short duration missions not subject to Section II of RR Article **9** and in that respect supports the principles of the draft new WRC Resolution together with the associated regulatory regime.

This regulatory regime for non-GSO satellite systems with short duration missions not subject to Section II of RR Article **9** shall be based on the following principles:

- The satellite operator shall stop the emission of the space station in case of harmful interference experienced by current assignments such in line with RR No. **22.1**;
- The API and the corresponding notification shall be accurate and complete regarding the orbital parameters and the number of carriers;
- The amount of time of 4 months for comments raised by administrations following a publication of an API shall not be changed;
- The API associated to a limited number of small satellites (maximum of 10) shall be unique, shall not be duplicated or re used, and any extension of the maximum duration of the lifetime (less than 3 years) is prohibited.

CEPT Coordinator: Anna Marklund (Sweden)

Agenda Item 8 (approved by CPG19-6)

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

Preliminary CEPT position:

General

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

Issue A – Deletion of country footnotes or country names from footnotes

- CEPT supports Administrations taking the initiative to review their footnotes and to propose the deletion of their country names or the deletion of country footnotes, if no longer required.

Issue B – Addition of country names into footnotes or new country footnotes

- CEPT is of the view that this agenda item is not intended for adding country names into footnotes and the addition of new country footnotes.
- CEPT is of the view that Conferences may continue to deal with requests to add country names to existing footnotes on a case by case basis, 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.
- Furthermore CEPT is of the view that proposals for the addition of new country footnotes which are not related to agenda items of this Conference should not be considered.

CEPT Coordinator: Dmytro Protsenko (Ukraine)

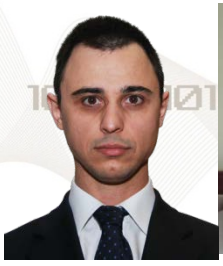
Agenda Item 9.1 Issue 9.1.1 (approved by ECC PT1#60)

Issue: *to study possible technical and operational measures to ensure coexistence and compatibility between the terrestrial component of IMT (in the mobile service) and the satellite component of IMT (in the mobile service and the mobile-satellite service) in the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz where those frequency bands are shared by mobile service and the mobile-satellite service in different countries, in particular for the deployment of independent satellite and terrestrial components of IMT and to facilitate development of both the satellite and terrestrial components of IMT;*

Preliminary CEPT position:

CEPT supports adequate measures to ensure the compatibility and co-existence of the satellite and terrestrial components of IMT, taking into account that the bands 1980-2010 MHz and 2170-2200 MHz are prioritised for MSS (mobile satellite service) use in CEPT (see ECC/DEC(06)09 and European Commission Decision 2007/98/EC) while MSS and MS (mobile service) have co-primary status in the RR.

CEPT co-Coordinators: Marco Marcovina (France)
Denise Urbach (Germany)



Agenda Item 9.1 Issue 9.1.1 (approved by ECC PT1#60)

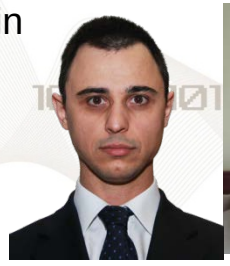
Issue: *to study possible technical and operational measures to ensure coexistence and compatibility between the terrestrial component of IMT (in the mobile service) and the satellite component of IMT (in the mobile service and the mobile-satellite service) in the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz where those frequency bands are shared by mobile service and the mobile-satellite service in different countries, in particular for the deployment of independent satellite and terrestrial components of IMT and to facilitate development of both the satellite and terrestrial components of IMT;*

Preliminary CEPT position (continued):

CEPT is of the view that protection of the MSS uplinks in CEPT countries (Interference scenario A1) is not ensured by the current Radio Regulations (RR). There is currently no provision in the RR that would prevent interference from mobile base stations to MSS space stations and there is no coordination process between the administration responsible for terrestrial services and the administration responsible for satellite and no process to identify the concerned administrations. Therefore potential revisions to the RR should be developed [region 1/2/3?]:

- to ensure that the band 1980-2010 MHz is not used for IMT base station transmitters or
- limiting the e.i.r.p. of IMT base stations in the uplink band (1980-2010 MHz)

An exception would be made in the 1980-1990 MHz band for those countries listed in RR No. **5.389B** where terrestrial systems have already been authorised.



CEPT co-Coordinators: Marco Marcovina (France)
Denise Urbach (Germany)

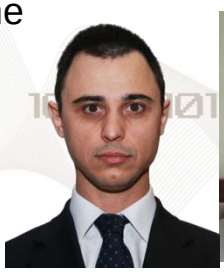
Agenda Item 9.1 Issue 9.1.1 (approved by ECC PT1#60)

Issue: *to study possible technical and operational measures to ensure coexistence and compatibility between the terrestrial component of IMT (in the mobile service) and the satellite component of IMT (in the mobile service and the mobile-satellite service) in the frequency bands 1 980-2 010 MHz and 2 170-2 200 MHz where those frequency bands are shared by mobile service and the mobile-satellite service in different countries, in particular for the deployment of independent satellite and terrestrial components of IMT and to facilitate development of both the satellite and terrestrial components of IMT;*

Preliminary CEPT position (continued):

CEPT is of the view that potential interference between the terrestrial IMT systems and MSS earth stations and vice versa (Interference scenarios A2 and B1) can be managed by cross-border coordination provisions in the RR Appendix 7 and there is no requirement for additional regulatory measures.

CEPT is of the view that the protection of the terrestrial component of IMT (Interference scenario B2) could be achieved by using the current space station pfd thresholds contained in Table 5-2 of Appendix 5 RR. [Also it is proposed to add an additional pfd coordination threshold value of 105.8 dB(W/m2) in 1 MHz in Table 5-2 of Appendix 5 RR in the band 2 170-2 200 MHz for protection of terrestrial component of IMT systems. This additional threshold value would avoid the need of unnecessary coordination by MSS systems with respect to countries which operate terrestrial IMT systems.]



CEPT co-Coordinators: Marco Marcovina (France)
Denise Urbach (Germany)

Agenda Item 9.1 Issue 9.1.2 (approved by ECC PT1#60)

Issue: *to conduct, in time for WRC-19, the appropriate regulatory and technical studies, with a view to ensuring the compatibility of IMT and BSS (sound) in the frequency band 1 452-1 492 MHz in Regions 1 and 3, taking into account IMT and BSS (sound) operational requirements;*

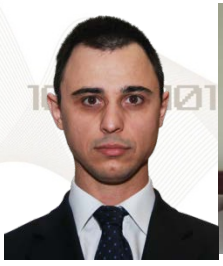
Preliminary CEPT position:

CEPT has harmonised the frequency band 1 452-1 492 MHz for supplemental downlink under the mobile service. Therefore CEPT supports the protection of this application from BSS (sound). CEPT is of the view that the new harmonized solution in the addressed Regions is necessary to be developed.

In order to facilitate coexistence between IMT and BSS in the band 1 452-1 492 MHz, the current regulatory procedures governing the relation between BSS and terrestrial services need to be modified by inserting a pfd value of -112 dBW/m²/MHz for Regions 1 and 3 in Article **21** RR with the view to provide a more stable (long-term) situation to IMT.

RR Appendix **5** needs to be modified so as to enable countries of Regions 1 and 3 that wish to do so to continue to apply coordination under RR No. **9.11**. Therefore a pfd limit will apply to BSS in Regions 1 and 3 with respect to all terrestrial services except for countries wishing to continue to apply RR No. **9.11**, because of more stringent protection requirement
(e.g. in order to protect aeronautical telemetry systems (ATS)).

CEPT co-Coordinators: Marco Marcovina (France)
Denise Urbach (Germany)



Agenda Item 9.1 Issue 9.1.3 (approved by PTB-7)

Issue: *to study technical and operational issues and regulatory provisions for new non-geostationary-satellite orbit systems in the 3 700-4 200 MHz, 4 500-4 800 MHz, 5 925-6 425 MHz and 6 725-7 025 MHz frequency bands allocated to the fixed-satellite service;*

Preliminary CEPT position:

CEPT supports no changes to the provisions of RR Article **21** and Article **22** in the frequency bands 3700 - 4200 MHz, 4500-4800 MHz, 5925-6425 MHz and 6725-7025 MHz.

CEPT is considering the introduction of a coordination procedure under RR No. **9.12** in order to address coordination between non-GSO FSS systems in the frequency bands 3700−4200 MHz and 5925−6425 MHz.

CEPT Coordinator: Ethan Lavan (France)

Agenda Item 9.1 Issue 9.1.4 (approved by PTC-6)

Issue: *to conduct studies to identify any required technical and operational measures, in relation to stations on board sub-orbital vehicles, that could assist in avoiding harmful interference between radiocommunication services;*

Preliminary CEPT position:

CEPT recognises that:

- the delimitation between atmosphere and outer space has not been legally defined at an international level by the competent organisations;
- the definitions of status of the stations for suborbital flights for radiocommunication purpose by ITU-R do not prevent the competent international organisations (ICAO, UNOOSA) to potentially propose in the future, relevant definitions or other orientations concerning the kind of law (Air law, Space law, Sui generis) which could be applicable for the various types of suborbital systems concepts and projects;
- the current satellite/space launch systems including re-usable part are already operated under the Radio Regulation.

Acting CEPT Coordinator: PTC Chairman

Agenda Item 9.1 Issue 9.1.4 (approved by PTC-6)

Issue: *to conduct studies to identify any required technical and operational measures, in relation to stations on board sub-orbital vehicles, that could assist in avoiding harmful interference between radiocommunication services;*

Preliminary CEPT position (continued):

CEPT is of the view that:

- No change to the Radio Regulations is proposed for WRC-19;
- suborbital vehicles need to be differentiated from current satellite/space launch vehicles;
- suborbital vehicles need to be split in two different categories:
  - first category with trajectory and/or speed allowing continuous direct communication with ground during all the suborbital flight phase, then the stations fitted on board are considered as terrestrial stations or earth stations;
  - second category with trajectory and/or speed implying a reentry in the atmosphere avoiding direct communication to the ground (communication black out), then stations fitted on board are considered as space stations during the suborbital flight phase.

Acting CEPT Coordinator: PTC Chairman

Agenda Item 9.1 Issue 9.1.5 (approved by PTD-7)

Issue: *to consider the technical and regulatory impacts of referencing Recommendations ITU-R M.1638-1 and ITU-R M.1849-1 in Nos.* ***5.447F*** *and* ***5.450A*** *of the Radio Regulations;*

Preliminary CEPT position:

CEPT is investigating the potential technical and regulatory impacts of a solution which would consist of deleting the references to Recommendations ITU-R M.1638 and M. 1849 in the footnotes Nos **5.447F** and **5.450A**, and replacing these references with information related to the applicability of sharing conditions and mitigation measures given in Resolution **229 (Rev. WRC-12)**.

CEPT Coordinator: Andrew Gowans (United Kingdom)

Agenda Item 9.1 Issue 9.1.6 (approved by PTD-7)

Issue: *a) to assess the impact of WPT for electric vehicles on radiocommunication services;*

b) to study suitable harmonized frequency ranges which would minimize the impact on radiocommunication services from WPT for electrical vehicles;

Preliminary CEPT position:

CEPT is of the view that no regulatory action to the RR will be required in order to resolve AI 9.1, issue 9.1.6. ITU-R Report SM.[WPT.SPEC.MNGM] and Recommendations ITU-R SM.2110 and ITU-R SM.[WPT-UNWANTED], are considered sufficient to specify suitable frequency bands and limits on unwanted emissions for WPT-EV, along with determination of the related centre frequencies.

CEPT has identified the following candidate bands as suitable for WPT-EV, which can minimise the impact of WPT-EV on radiocommunication services:

- 19-21 kHz for the highest power category (specific heavy-duty electric vehicles), and
- 79-90 kHz for the medium power category (all types of electric vehicles).

In addition CEPT is of the view that no bands above 90 kHz should be considered for use by WPT-EV.

CEPT is of the view that bands at 60 kHz and 77.5 kHz used by applications of the standard frequency and time signal service are not suitable for WPT-EV and require specific protection.

CEPT Coordinator: Fatih Yurdal (Turkey)

Agenda Item 9.1 Issue 9.1.7 (approved by CPG19-6)

Issue: *to examine whether there is a need for possible additional measures in order to limit uplink transmissions of terminals to those authorized terminals in accordance with No.* ***18.1****, and the possible methods that will assist administrations in managing the unauthorized operation of earth station terminals deployed within its territory, as a tool to guide their national spectrum management programme, in accordance with Resolution ITU-R* ***64 (RA-15)****;*

Preliminary CEPT position:

CEPT notes that this Agenda Item addresses the issue of enforcement of unauthorized ubiquitous earth stations and not the issue of earth stations in motion (ESIM) which is covered by Agenda item 1.5.

CEPT is of the view that the issue referred to in studies under 2a) is already addressed in Article **18**. Thus CEPT does not see the need for any changes of the Radio Regulations, as portrayed in Option 1 of the draft CPM text.

CEPT supports, for the issues referred to in studies under 2b), possible ITU-R studies on best practices, related to national management of unauthorized operation of earth station terminals deployed within territory of concerned administration. Thus CEPT does not see the need for any changes of the Radio Regulations.

CEPT Coordinator: Guy Christiansen (Germany)

Agenda Item 9.1 Issue 9.1.8 (approved by ECC PT1#60)

Issue: *to study the technical and operational aspects of radio networks and systems, as well as spectrum needed, including possible harmonized use of spectrum to support the implementation of narrowband and broadband machine-type communication infrastructures, in order to develop Recommendations, Reports and/or Handbooks, as appropriate, and to take appropriate actions within the ITU Radiocommunication Sector (ITU-R) scope of work;*

Preliminary CEPT position:

CEPT supports studies on the technical and operational aspects of radio networks and systems, as well as spectrum needed, including possible harmonized use of spectrum to support the implementation of narrowband and broadband machine-type communication infrastructures, in order to develop Recommendations, Reports and/or Handbooks, as appropriate. CEPT is of the view that no modifications to the Radio Regulations are required in order to resolve Agenda item 9.1 issue 9.1.8.

CEPT supports the consideration of IMT technologies within Agenda item 9.1 issue 9.1.8 as well as the consideration of non-IMT technologies in the purview of WPs 1B and 5A related to machine-type communications.

CEPT Coordinator: Evgeny Tonkikh (Russian Federation)

Agenda Item 9.1 Issue 9.1.9 (approved by PTB-7)

Issue: *to conduct studies relating to spectrum needs and possible allocation of the frequency band 51.4-52.4 GHz to the fixed-satellite service (Earth-to-space) GSO feeder links, Including the protection of the RAS, as appropriate;*

Preliminary CEPT position:

Based on the results of studies on additional spectrum needs for development of the fixed-satellite service and on the sharing and compatibility studies conducted in accordance with Resolution **162 (WRC-15)**, CEPT supports the additional allocation of 1 GHz spectrum in 51.4-52.4 GHz band for the GSO FSS (Earth-to-space) gateways.

To ensure the protection of the EESS (passive) operating in the band 52.6-54.25 GHz CEPT is proposing an unwanted emission limit of -37/-39 dBW/100 MHz associated to a maximum elevation angle of 74°/78° for FSS Earth stations that would operate in the 51.4 - 52.4 GHz band. For elevation angles equal or higher than 74°/78° the proposed unwanted emission limit is -52 dBW/100 MHz. This assumes a 3 dB apportionment of the EESS (passive) protection criterion to take into account the aggregate interference from all the active services allocated in the 51.4-52.4 GHz band. CEPT supports studies regarding the impact on radio astronomy observations in the band 51.4-54.25 GHz.

FSS gateways Earth stations shall operate with a minimum antenna diameter of [4.5] m.

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CEPT Coordinator: Soraya Contreras (F)

Agenda Item 9.3 (approved by CPG-6)

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

Preliminary CEPT position:

CEPT follows the ITU-R studies on this aspect.

Acting CEPT Coordinator: PTB Chairman

Agenda Item 10 (approved by PTA-5)

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

- CEPT supports the inclusion of the preliminary Agenda Items 2.1, 2.2, 2.3 and 2.5, as contained in Resolution 810 (WRC15) and the corresponding Resolutions for the Agenda of WRC23.
- CEPT is further considering the preliminary Agenda Item 2.4 as well as proposals for new Agenda Items.
- CEPT is of the view that agenda item 9.1 shall not include issues that are intended to be addressed through modifications to the Radio Regulations, including issues related to frequency allocation for radiocommunication services and/or changing the conditions of their use. In order to implement the above proposals, CEPT proposes to modify Resolution 804 (Rev. WRC-12).

CEPT Coordinator: Pasi Toivonen (Finland)
coordination team: Karsten Buckwitz (Germany),
Wesley Milton (United Kingdom)

Agenda items yet to be addressed:

- AI 9.2

Next meetings

CPG19 will meet

- 26-30 November 2018, Hilversum, The Netherlands
- 21-24 May 2019, TBD, Sweden

next Project Team meetings are:

- ECC PT1 #61: 14-18 January 2019, Ankara, Turkey
- PTB #8: 19-22 March 2019, TBD, Ireland
- PTD #7: 26-29 March 2019, TBD, Latvia
- PTA #6 1-5 April 2019, TBD
- PTC #7: 9-11 April 2018, TBD, Slovenia

We look forward to welcoming representatives from the other regional organisations to these meetings

Useful links:

General information: http://www.cept.org/ecc

CPG19 page: http://www.cept.org/ecc/groups/ecc/cpg

Questions/Answers regarding CPG19:
https://cept.org/files/4200/CPG%20role%20in%20WRC%20preparation%20process%2011oct13.pdf

Coordinators:
http://www.cept.org/ecc/groups/ecc/cpg/page/list-of-cept-coordinators-wrc-19/

CEPT Briefs/ECPs:
http://www.cept.org/ecc/groups/ecc/cpg/page/cept-briefs-and-ecps-for-wrc-19

CPG19 Meeting Schedule:
https://cept.org/Documents/cpg/37802/cpg-18-adm23r4_cpg-preliminary-schedules-cpg-till-wrc-19

ECC PT1 page:
http://www.cept.org/ecc/groups/ecc/ecc-pt1

CEPT ECC
Electronic Communications Committee

Thank you