



Radiocommunication Bureau (BR)

Administrative Circular
CA/226

23 December 2015

To Administrations of Member States of the ITU, and Radiocommunication Sector Members

Subject: **Results of the first session of the Conference Preparatory Meeting for WRC-19 (CPM19-1)**

Introduction

The World Radiocommunication Conference (Geneva, 2015) decided in its Resolutions 809 [COM6/16] and 810 [COM6/2] to recommend to the Council the agenda for the World Radiocommunication Conference 2019 (WRC-19) and a preliminary agenda for the World Radiocommunication Conference 2023 (WRC-23). These agendas are contained in Annex 1 and Annex 2 to this Circular Letter. The list of the provisional numbers for new Resolutions from WRC-15 is provided in Annex 3.

The Radiocommunication Assembly 2015 (RA-15), by its Resolution ITU-R 2-7 (<http://www.itu.int/pub/R-RES-R.2-7-2015>) reconfirmed the Conference Preparatory Meeting (CPM) and WRC-15 agreed that preparatory studies for WRC-19 are to be carried out by the CPM process.

First session of the Conference Preparatory Meeting for WRC-19 (CPM19-1)

CPM19-1 was held in Geneva from 30 November to 1 December 2015. It organized the preparatory studies for WRC-19 and proposed a structure for its Report to WRC-19. Furthermore, the meeting nominated six (6) Chapter Rapporteurs who will assist the Chairman in managing the development of the draft Report to WRC-19. With one exception, all the preparatory work, as agreed by CPM19-1, will be performed within the framework of the foreseen work programme and organization of the ITU-R Study Groups. However, ITU-R Study Group 5 has been invited to establish a dedicated Task Group (TG 5/1) to deal with complex issues related to WRC-19 agenda item 1.13.

The results of CPM19-1 are contained in the following Annexes:

- Annex 1 Resolution 809 [COM6/16] (WRC-15) - Agenda for the 2019 World Radiocommunication Conference
- Annex 2 Resolution 810 [COM6/2] (WRC-15) - Preliminary agenda for the 2023 World Radiocommunication Conference
- Annex 3 Provisional numbers for new Resolutions from WRC-15
- Annex 4 Report on the first session of the Conference Preparatory Meeting for WRC-19
- Annex 5 Duties of the Chapter Rapporteurs and CPM-19 working procedures, in accordance with Resolution ITU-R 2-7
- Annex 6 Chapters and table of contents of the draft CPM Report to WRC-19 and structure for the agenda item sections in the Chapters
- Annex 7 Allocation of ITU-R preparatory work for WRC-19
- Annex 8 Allocation of ITU-R preparatory work for WRC-23
- Annex 9 CPM19-1 Decision on the establishment and Terms of Reference of Study Group 5 Task Group 5/1 (TG 5/1) on WRC-19 agenda item 1.13
- Annex 10 Outline of the draft CPM Report to WRC-19
- Annex 11 Proposed detailed structure for the draft CPM Report to WRC-19
- Annex 12 Contact information of the CPM-19 Chairman, Vice-Chairmen and Chapter Rapporteurs



François Rancy
Director

Distribution:

- Administrations of Member States of ITU
- Radiocommunication Sector Members
- Chairmen and Vice-Chairmen of Radiocommunication study groups and
- Chairman and Vice-Chairmen of the Radiocommunication Advisory Group
- Chairman and Vice-Chairmen of the Conference Preparatory Meeting
- Members of the Radio Regulations Board
- Secretary-General of ITU, Director of the Telecommunication Standardization Bureau,
Director of the Telecommunication Development Bureau

ANNEX 1

RESOLUTION 809 [COM6/16] (WRC-15)

Agenda for the 2019 World Radiocommunication Conference

The World Radiocommunication Conference (Geneva, 2015),

considering

- a) that, in accordance with No. 118 of the ITU Convention, the general scope of the agenda for a world radiocommunication conference should be established four to six years in advance and that a final agenda shall be established by the ITU Council two years before the conference;
- b) Article 13 of the ITU Constitution relating to the competence and scheduling of world radiocommunication conferences and Article 7 of the Convention relating to their agendas;
- c) the relevant resolutions and recommendations of previous world administrative radio conferences (WARCs) and world radiocommunication conferences (WRCs),

recognizing

- a) that this conference has identified a number of urgent issues requiring further examination by WRC-19;
- b) that, in preparing this agenda, some items proposed by administrations could not be included and have had to be deferred to future conference agendas,

resolves

to recommend to the Council that a world radiocommunication conference be held in 2019 for a maximum period of four weeks, with the following agenda:

1 on the basis of proposals from administrations, taking account of the results of WRC-15 and the Report of the Conference Preparatory Meeting, and with due regard to the requirements of existing and future services in the frequency bands under consideration, to consider and take appropriate action in respect of the following items:

1.1 to consider an allocation of the frequency band 50-54 MHz to the amateur service in Region 1, in accordance with Resolution **658 [COM6/6] (WRC-15)**;

1.2 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 [COM6/7] (WRC-15)**;

1.3 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 [COM6/8] (WRC-15)**;

1.4 to consider the results of studies in accordance with Resolution **557 [COM6/9] (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;

1.5 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 [COM6/17] (WRC-15)**;

1.6 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 (space-to-Earth), 39.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space), in accordance with Resolution **159 [COM6/18] (WRC-15)**;

1.7 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 [COM6/19] (WRC-15)**;

1.8 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)**;

1.9 to consider, based on the results of ITU-R studies:

1.9.1 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 [COM6/10] (WRC-15)**;

1.9.2 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)**;

1.10 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 [COM6/11] (WRC-15)**;

1.11 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 [COM6/12] (WRC-15)**;

1.12 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 [COM6/13] (WRC-15)**;

1.13 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 [COM6/20] (WRC-15)**;

1.14 to consider, on the basis of ITU-R studies in accordance with Resolution **160 [COM6/21] (WRC-15)**, appropriate regulatory actions for high-altitude platform stations (HAPS), within existing fixed-service allocations;

1.15 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 [COM6/14] (WRC-15)**;

1.16 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 [COM6/22] (WRC-15)**;

2 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)**;

3 to consider such consequential changes and amendments to the Radio Regulations as may be necessitated by the decisions of the conference;

4 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;

5 to review, and take appropriate action on, the Report from the Radiocommunication Assembly submitted in accordance with Nos. 135 and 136 of the Convention;

6 to identify those items requiring urgent action by the radiocommunication study groups in preparation for the next world radiocommunication conference;

7 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)**, in order to facilitate rational, efficient and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit;

8 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)**;

9 to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention:

9.1 on the activities of the Radiocommunication Sector since WRC-15;

9.2 on any difficulties or inconsistencies encountered in the application of the Radio Regulations^{*}; and

^{*} This agenda item is strictly limited to the Report of the Director on any difficulties or inconsistencies encountered in the application of the Radio Regulations and the comments from administrations.

9.3 on action in response to Resolution **80 (Rev.WRC-07)**;

10 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,

resolves further

to activate the Conference Preparatory Meeting,

invites the Council

to finalize the agenda and arrange for the convening of WRC-19, and to initiate as soon as possible the necessary consultations with Member States,

instructs the Director of the Radiocommunication Bureau

to make the necessary arrangements to convene meetings of the Conference Preparatory Meeting and to prepare a report to WRC-19,

instructs the Secretary-General

to communicate this resolution to international and regional organizations concerned.

ANNEX 2

RESOLUTION 810 [COM6/2] (WRC-15)

Preliminary agenda for the 2023 World Radiocommunication Conference

The World Radiocommunication Conference (Geneva, 2015),

considering

- a) that, in accordance with No. 118 of the ITU Convention, the general scope of the agenda for WRC-23 should be established four to six years in advance;
- b) Article 13 of the ITU Constitution relating to the competence and scheduling of world radiocommunication conferences and Article 7 of the Convention relating to their agendas;
- c) the relevant resolutions and recommendations of previous world administrative radio conferences (WARCs) and world radiocommunication conferences (WRCs),

resolves to give the view

that the following items should be included in the preliminary agenda for WRC-23:

- 1 to take appropriate action in respect of those urgent issues that were specifically requested by WRC-19;
- 2 on the basis of proposals from administrations and the Report of the Conference Preparatory Meeting, and taking account of the results of WRC-19, to consider and take appropriate action in respect of the following items:
 - 2.1 to consider possible spectrum needs and regulatory actions to support Global Maritime Distress and Safety System (GMDSS) modernization and the implementation of e-navigation, in accordance with Resolution **361 [COM6/3] (WRC-15)**;
 - 2.2 to conduct, and complete in time for WRC-23, studies for a possible new allocation to the Earth exploration-satellite (active) service for spaceborne radar sounders within the range of frequencies around 45 MHz, taking into account the protection of incumbent services, in accordance with Resolution **656 [COM6/4] (WRC-15)**;
 - 2.3 in accordance with Resolution **657 [COM6/5] (WRC-15)**, to 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 providing appropriate recognition and protection in the Radio Regulations without placing additional constraints on incumbent services;
 - 2.4 study of spectrum needs and possible new allocations to the fixed-satellite service in the frequency band 37.5-39.5 GHz (Earth-to-space), in accordance with Resolution **161 [COM6/23] (WRC-15)**;
 - 2.5 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 [COM4/6] (WRC-15)**;

3 to examine the revised ITU Radiocommunication Sector (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)**;

4 to consider such consequential changes and amendments to the Radio Regulations as may be necessitated by the decisions of the conference;

5 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;

6 to review, and take appropriate action on, the Report from the Radiocommunication Assembly submitted in accordance with Nos. 135 and 136 of the Convention;

7 to identify those items requiring urgent action by the radiocommunication study groups;

8 to consider possible changes, and other options, 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;

9 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)**;

10 to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention:

10.1 on the activities of ITU-R since WRC-19;

10.2 on any difficulties or inconsistencies encountered in the application of the Radio Regulations;
and

10.3 on action in response to Resolution **80 (Rev.WRC-07)**;

11 to recommend to the ITU Council items for inclusion in the agenda for the following WRC, in accordance with Article 7 of the Convention,

invites the Council

to consider the views given in this resolution,

instructs the Director of the Radiocommunication Bureau

to make the necessary arrangements to convene meetings of the Conference Preparatory Meeting and to prepare a report to WRC-23,

instructs the Secretary-General

to communicate this resolution to international and regional organizations concerned.

ANNEX 3

Provisional numbers for new Resolutions from WRC-15

Res. No.	Provisional No.	Res. No.	Provisional No.	Res. No.	Provisional No.
COM4/1	424	COM5/8	556	COM6/14	767
COM4/2	425			COM6/15	958
COM4/3	759	COM6/1	764	COM6/16	809
COM4/4	760	COM6/2	810	COM6/17	158
COM4/5	155	COM6/3	361	COM6/18	159
COM4/6	235	COM6/4	656	COM6/19	659
COM4/7	761	COM6/5	657	COM6/20	238
		COM6/6	658	COM6/21	160
COM5/1	655	COM6/7	765	COM6/22	239
COM5/2	156	COM6/8	766	COM6/23	161
COM5/3	31	COM6/9	557	COM6/24	162
COM5/4	40	COM6/10	362	COM6/25	99
COM5/5	762	COM6/11	426		
COM5/6	157	COM6/12	236	PLEN/1	163
COM5/7	763	COM6/13	237	PLEN/2	164

ANNEX 4

Report on the first session of the Conference Preparatory Meeting for WRC-19

The 2019 Conference Preparatory Meeting (CPM-19) held its first session (CPM19-1) in Geneva on 30 November and 1 December 2015, to organize and coordinate the conference preparatory studies for WRC-19, based on the outputs from the World Radiocommunication Conference 2015 (WRC-15) (i.e. the WRC-15 Provisional Final Acts) and from the Radiocommunication Assembly 2015 (RA-15) (i.e. the RA-15 Resolutions, in particular Resolutions ITU-R 1-7 and ITU-R 2-7).

WRC-15, by its Resolution **809 [COM6/16] (WRC-15)**, activated the CPM to initiate preparation for WRC-19. The preparatory process shall be in conformity with Resolution ITU-R 2-7.

Two hundred and sixty-nine participants from 63 Member States, 1 Observer from the State of Palestine (Resolution 99 (Rev. Busan, 2014)) and 25 Sector Members, including the Chairmen of ITU-R Study Groups 1, 3, 4, 5 and 6, attended the meeting.

Following thorough consideration of thirteen contributions, the working procedures for the preparation of the draft CPM Report were agreed (see Annex 5) together with the Chapters, table of contents and the structure of the agenda items of the draft CPM Report to WRC-19 (see Annex 6).

The allocation of preparatory work was based on the ITU-R Study Group structure, as contained in Document CPM19-1/1. For each WRC-19 agenda item or issue, a single ITU-R Working Party has normally been identified to take responsibility for the preparatory work, inviting input and/or participation from other concerned* ITU-R groups as necessary (see Annexes 7 and 8). When this was not possible for two of the issues under agenda item 9.1, notes were added to clarify the responsibilities of the Working Parties identified. However, on an exceptional basis, the decision was taken to invite Stud Group 5 to establish a Task Group 5/1 (TG 5/1), in order to carry out preparatory studies on WRC-19 agenda item 1.13 (see the CPM19-1 Decision in Annex 9 to this Administrative Circular). The TG 5/1 Chairman is to be determined by the Study Group 5 taking into account the informal discussions and consultations that took place during CPM19-1.

The outline of the draft CPM Report to WRC-19 can be found in Annex 10 to this Administrative Circular.

The meeting appointed Rapporteurs for the six (6) Chapters (see Annex 6) to assist the Chairman in managing the flow of contributions and the development of the draft CPM texts. The contact information of the Chapter Rapporteurs may be found in Annex 12.

In the interests of economy and in recognition of the need for a timely distribution of the draft CPM Report, the responsible groups are invited to apply the guidelines described in Annex 2 to Resolution ITU-R 2-7 and to provide their contributions in a concise form, following the Chapter structure as contained in Annexes 6, 10 and 11, by a date yet to be determined. It was also recognized that the responsible groups would normally need to meet at least twice a year to accomplish their work.

* A concerned ITU-R group may be either a contributing group on a specific item, or an interested group that will follow the work on a specific issue and act as appropriate (see also Annex 5).

The exact dates of the second session of CPM-19 (CPM19-2), as well as the agreed deadline (i.e. 14 calendar days prior to the start of the meeting for documents *not requiring translation*) for submission of contributions to this second session, will be communicated to the membership at a later stage (as soon as the exact time of WRC-19 is decided by the ITU Council). The CPM-19 Steering Committee, in consultation with the Chairmen of the ITU-R Study Groups and responsible Working Parties/Task Group, will determine the deadline for the completion of the draft CPM texts by the responsible groups. It was agreed that the CPM-19 Steering Committee will also review on an ad-hoc basis the information submitted by the Chairmen of the ITU-R Study Groups, in particular with respect to the list of the identified concerned groups in order to make necessary adjustments, as appropriate. It was also agreed that, in view of the overlapping of the frequency bands under consideration in different agenda items (see section 2.2 and Table 1 of Annex 5), the progress of the studies in that respect would need to be reviewed in order to address potential difficulties, as appropriate. The resulting information from the CPM-19 Steering Committee will be communicated to the membership.

ANNEX 5

Duties of the Chapter Rapporteurs and CPM-19 working procedures, in accordance with Resolution ITU-R 2-7

1 Duties of Chapter Rapporteurs

1.1 To ensure that the consistency of format and structure and the guidelines established are met.

1.2 To ensure integration of most recent Working Party outputs into consolidated CPM text by consultation with or assistance from Working Party Chairmen to ensure that CPM work is complete and on time.

2 CPM-19 working procedures

2.1 The *responsible* Study Group or Working Party has the responsibility to prepare a draft element of the CPM Report addressing the specific agenda item or sub-item for which it has main responsibility. The Study Group or Working Party should ensure that the necessary coordination with the *contributing/interested* groups is carried out.

2.2 CPM19-1 identified several overlaps of frequency bands under the agenda items of WRC-19 (see Table 1). The responsible groups should therefore take this fact into account during their studies, when coordinating between the various involved groups. The aim of this coordination is to address mutual compatibility and sharing feasibility among the services/applications for which allocation/identification is envisaged under the corresponding resolutions relating to agenda items in the overlapping frequency bands.

TABLE 1

1.6 NGSO FSS Res. 159 [COM6/18] Frequencies in GHz	1.13 IMT Res. 238 [COM6/20] Frequencies in GHz	1.14 HAPS Res. 160 [COM6/21] Frequencies in GHz	[9.1 (issue 9.1.9) Res. 162 [COM6/24] Frequencies in GHz
	24.25-27.5	24.25-27.5 (Region 2)	
37.5-39.5 (s-E*)	37-40.5	38-39.5 (globally)	
39.5-42.5 (s-E*)	40.5-42.5		
47.2-50.2 (E-s*)	47.2-50.2		
50.4-51.4 (E-s*)	50.4-52.6		51.4-52.4 (E-s*)
* E-s: Earth-to-space; s-E: space-to-Earth.			

2.3 In the preparation of the CPM Report, differences in approach as contained in the source material shall be reconciled to the extent possible. In the case where the approaches cannot be reconciled, the differing views and their justification shall be included in the CPM Report.

2.4 The *contributing/interested* Study Groups or Working Parties for any item or sub-item, will not contribute directly to the CPM, but may contribute to the work of the *responsible* group for that item or sub-item, by the following means in order of preference:

- participation of members of the *contributing/interested* groups in the work and meetings of the *responsible* group;
- appointment of rapporteurs to represent their interests in the work and meetings of the *responsible* group;
- liaison statements if time permits.

NOTE – The *contributing/interested* group may be either:

- a *contributing* group, a contribution from which is expected on a specific item; or
- an *interested* group that will follow the work on a specific issue and act as appropriate.

2.5 As far as possible, *contributing/interested* groups should avoid establishing specific groups or meetings to agree on contributions to the *responsible* group, as this will inevitably create some duplication with the work of the *responsible* group, and increase the number of meetings that the interested experts would need to attend.

2.6 The output of the *responsible* group shall be submitted to the CPM in accordance with Resolution ITU-R 2-7, its working methods and guidelines.

2.7 A consolidated draft CPM Report shall be prepared by the CPM Management Team assisted, as appropriate, by the Chairmen of Study Groups or Working Parties, for submission to Member States and Sector Members in time for the second session of CPM-19.

NOTE – The Chairman, Vice-Chairman, the Chapter Rapporteurs, and the CPM Secretary will be called the CPM Steering Committee.

ANNEX 6

Chapters and table of contents of the draft CPM Report to WRC-19 and structure for the agenda item sections in the Chapters

1 Chapters and table of contents of the draft CPM Report to WRC-19

CHAPTER 1 Land mobile and fixed services

Agenda items: 1.11, 1.12, 1.14, 1.15

Rapporteur: Ms Keer ZHU (China (People's Republic of))

CHAPTER 2 Broadband applications in the mobile service

Agenda items: 1.13, 1.16, 9.1 (issues 9.1.1, 9.1.5, 9.1.8)

Rapporteur: Mr José ARIAS (Mexico)

CHAPTER 3 Satellite services

Agenda items: 1.4, 1.5, 1.6, 7, 9.1 (issues 9.1.2, 9.1.3, 9.1.9)

Rapporteur: Mr Nicolay VARLAMOV (Russian Federation)

CHAPTER 4 Science services

Agenda items: 1.2, 1.3, 1.7

Rapporteur: Mr Vicent MEENS (France)

CHAPTER 5 Maritime, aeronautical and amateur services

Agenda items: 1.1, 1.8, 1.9, 1.10, 9.1 (issue 9.1.4)

Rapporteur: Mr Wael EL SAYED (Egypt (Arab Republic of))

CHAPTER 6 General issues

Agenda items: 2, 4, 9.1 (issues 9.1.6, 9.1.7), 10

Rapporteur: Mr Peter N. NGIGE (Kenya (Republic of))

2 Structure for the agenda item sections in the Chapters of the draft CPM Report to WRC-19

AGENDA ITEM 1.x

1.x [label of the agenda item];

[If the agenda item is associated with a Resolution, then] Resolution **XXX (WRC-15)**: [Title of the Resolution]

[Chapter number]/1.x/1 Executive summary

[Text of the executive summary, not more than half a page of text to describe briefly the purpose of the agenda item, summarize the results of the studies carried out and, most importantly, provide a brief description of the method(s) identified that may satisfy the agenda item]

[Chapter number]/1.x/2 Background

[Text of the background, not more than half a page of text to provide general information in a concise manner, in order to describe the rationale of the agenda items (or issue(s))]

[Chapter number]/1.x/3 Summary and Analysis of the results of ITU-R studies

[This section should contain a summary of the technical and operational studies performed within ITU-R, including a list of relevant ITU-R Recommendations. Depending on the agenda item, this section could be divided in two parts, one part dealing with the summary of technical and operational studies and the other part dealing with the analysis of the results of studies. The results of the ITU-R studies should also be analysed with respect to the possible methods of satisfying the agenda item, and presented in a concise manner.]

[Chapter number]/1.x/4 Methods to satisfy the agenda item

[This section should contain the brief description of the Method or Methods to satisfy the agenda item as per section 4 of Annex 2 to Resolution ITU-R 2-7]

[Chapter number]/1.x/4.1 Method A

Advantages / Disadvantages

...

[Chapter number]/1.x/5 Regulatory and procedural considerations

[Example(s) of regulatory text relating to the Method(s) to satisfy the agenda item]

AGENDA ITEM 9.1

9.1.x *[label of the issue];*

[If the issue is associated with a Resolution, then] Resolution **XXX (WRC-15)**: *[Title of the Resolution]*

[Chapter number]/9.1.x/1 Executive summary

[Text of the executive summary, not more than half a page of text to describe briefly the purpose of the issue, summarize the results of the studies carried out and provide a conclusion]

[Chapter number]/9.1.x/2 Background

[Text of the background, not more than half a page of text to provide general information in a concise manner, in order to describe the rationale of the issue]

[Chapter number]/9.1.x/3 Summary and Analysis of the results of ITU-R studies

[This section should contain a summary of the technical and operational studies performed within ITU-R, including a list of relevant ITU-R Recommendations. The results of the ITU-R studies should also be analysed with respect to the possible conclusions, and presented in a concise manner.]

[Chapter number]/9.1.x/4 Conclusions

[This section should contain the conclusions of the studies on this issue]

ANNEX 7

Allocation of ITU-R preparatory work for WRC-19

The attached Table contains the allocation of ITU-R preparatory work for the WRC-19 agenda items, as proposed in Resolution **809 [COM6/16] (WRC-15)**.

It includes entries for the identification of the ITU-R “responsible groups” and “concerned groups” for the WRC-19 agenda items.

NOTE 1 – The ITU-R Working Parties indicated in the following Table have been identified based on the ITU-R Study Group structure contained in Document CPM19-1/1.

NOTE 2 – The responsible groups are invited to communicate on a regular basis the progress and results of their studies to the concerned groups.

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
1.1 to consider an allocation of the frequency band 50-54 MHz to the amateur service in Region 1, in accordance with Resolution 658 [COM6/6] (WRC-15) ;			
Resolution 658 [COM6/6] (WRC-15) Allocation of the frequency band 50-54 MHz to the amateur service in Region 1	WP 5A	<p><i>resolves to invite the 2019 World Radiocommunication Conference</i></p> <p>to consider the results of the studies below and take appropriate actions, including spectrum allocation,</p> <p><i>invites ITU-R</i></p> <p>1 to study spectrum needs in Region 1 for the amateur service in the frequency band 50-54 MHz;</p> <p>2 taking into account the results of the above studies, to study sharing between the amateur service and the mobile, fixed, radiolocation and broadcasting services, in order to ensure protection of these services.</p>	<p>WP 5B</p> <p>WP 5C</p> <p>WP 6A</p> <p>(WP 3K)</p> <p>(WP 3M)</p>
1.2 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 [COM6/7] (WRC-15) ;			
Resolution 765 [COM6/7] (WRC-15) Establishment of in-band power limits for earth stations operating in mobile-satellite service, the meteorological-satellite service and the Earth exploration-satellite service in the frequency bands 401-403 MHz and 399.9-400.05 MHz	WP 7B	<p><i>resolves to invite the 2019 World Radiocommunication Conference</i></p> <p>to take into account the results of ITU-R studies, and consider the possibility of establishing in-band power limits for earth stations in the EESS and MetSat in the frequency bands 401-403 MHz and in the MSS frequency band 399.9-400.05 MHz,</p> <p><i>invites ITU-R</i></p> <p>to conduct and complete, in time for WRC-19, the necessary technical, operational and regulatory studies on the possibility of establishing in-band power limits for earth stations in the EESS and MetSat in the frequency band 401-403 MHz and the MSS in the frequency band 399.9-400.05 MHz,</p>	<p>WP 4C</p> <p>WP 5A</p> <p>WP 7C</p> <p>(WP 3M)</p>

¹ A concerned ITU-R group may be either a contributing group on a specific item (indicated in bold), or an interested group (indicated between round brackets) that will follow the work on a specific issue and act as appropriate.

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
<p>1.3 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 [COM6/8] (WRC-15);</p>			
<p>Resolution 766 [COM6/8] (WRC-15); Consideration of possible upgrading of the secondary allocation to the meteorological-satellite service (space-to-Earth) to primary status and a primary allocation to the Earth exploration-satellite service (space-to-Earth) in the frequency band 460-470 MHz</p>	<p>WP 7B</p>	<p><i>resolves to invite the 2019 World Radiocommunication Conference</i></p> <p>to consider, based on the results of ITU Radiocommunication Sector (ITU-R) studies, the possibility of upgrading the secondary MetSat (space-to-Earth) allocation to primary status and adding a primary EESS (space-to-Earth) allocation in the frequency band 460-470 MHz, while providing protection and not imposing any additional constraints on existing primary services to which the frequency band is already allocated and in the adjacent frequency bands,</p> <p><i>invites ITU-R</i></p> <p>1 to conduct and complete, in time for WRC-19, sharing and compatibility studies to determine the feasibility of upgrading the MetSat (space-to-Earth) allocation to primary status, and the addition of a primary EESS (space-to-Earth) allocation in the frequency band 460-470 MHz, while protecting the primary fixed and mobile services to which the frequency band is already allocated and maintaining the conditions contained in No. 5.289;</p> <p>2 to complete the studies, taking into account the present usage of the frequency band 460-470 MHz by incumbent services, to determine the appropriate pfd limit to be placed on MetSat (space-to-Earth) and EESS (space-to-Earth) to protect the existing primary services to which this frequency band is already allocated, provided that, if the studies conclude that a less restrictive pfd limit than that contained in <i>considering further a</i>) can protect incumbent services, then the pfd limit contained in <i>considering further a</i>) shall apply,</p>	<p>WP 5A WP 5D WP 6A (WP 3M)</p>
<p>1.4 to consider the results of studies in accordance with Resolution 557 [COM6/9] (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;</p>			
<p>Resolution 557 [COM6/9] (WRC-15) Consideration of possible revision of Annex 7 to Appendix 30 of the Radio Regulations</p>	<p>WP 4A</p>	<p><i>resolves to invite the 2019 World Radiocommunication Conference</i></p> <p>to consider the results of the ITU-R studies and take necessary actions, as appropriate,</p> <p><i>invites ITU-R</i></p> <p>to conduct studies on, review, and identify possible revisions to, 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 in the List and the future of BSS networks mentioned in <i>recognizing c</i>) and existing and planned FSS networks mentioned in <i>recognizing d</i>).</p>	<p>(WP 3M)</p>

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
<p>1.5 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 [COM6/17] (WRC-15);</p>			
<p>Resolution 158 [COM6/17] (WRC-15) 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</p>	<p>WP 4A</p>	<p><i>resolves to invite ITU-R</i></p> <p>1 to study the technical and operational characteristics and user requirements of different types of earth stations in motion that operate or plan to operate within geostationary FSS allocations in the frequency bands 17.7-19.7 GHz and 27.5-29.5 GHz, including the use of spectrum to provide the envisioned services to various types of earth station in motion and the degree to which flexible access to spectrum can facilitate sharing with services identified in <i>recognizing further a) to n)</i>;</p> <p>2 to study sharing and compatibility between earth stations in motion operating with geostationary FSS networks and current and planned stations of existing services allocated in the frequency bands 17.7-19.7 GHz and 27.5-29.5 GHz to ensure protection of, and not impose undue constraints on, services allocated in those frequency bands, and taking into account <i>recognizing further a) to n)</i>;</p> <p>3 to develop, for different types of earth stations in motion and different portions of the frequency bands studied, technical conditions and regulatory provisions for their operation, taking into account the results of the studies above,</p> <p><i>resolves</i></p> <p>that these earth stations not be used or relied upon for safety-of-life applications,</p> <p><i>resolves to further invite the 2019 World Radiocommunication Conference</i></p> <p>to consider the results of the above studies and take necessary actions, as appropriate, provided that the results of the studies referred to in <i>resolves to invite ITU-R</i> are complete and agreed by ITU-R study groups.</p>	<p>WP 4B WP 4C WP 5A WP 5C WP 7B WP 7C (WP 3M) (WP 5D)</p>

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
<p>1.6 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 (space-to-Earth), 39.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space), in accordance with Resolution 159 [COM6/18] (WRC-15);</p>			
<p>Resolution 159 [COM6/18] (WRC-15) Studies of technical, operational issues and regulatory provisions for non-geostationary fixed-satellite services satellite systems in the frequency bands 37.5-39.5 GHz (space-to-Earth), 39.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz (Earth-to-space)</p>	<p>WP 4A</p>	<p><i>resolves to invite ITU-R</i> to conduct, and complete in time for WRC-19: 1 studies of technical and operational issues and regulatory provisions for the operation of non-GSO FSS satellite systems in the frequency bands 37.5-42.5 GHz (space-to-Earth) and 47.2-48.9 GHz (limited to feeder links only), 48.9-50.2 GHz and 50.4-51.4 GHz (all Earth-to-space), while ensuring protection of GSO satellite networks in the FSS, MSS and BSS, without limiting or unduly constraining the future development of GSO networks across those bands, and without modifying the provisions of Article 21; 2 studies carried out under <i>resolves to invite ITU-R</i> 1 shall focus exclusively on the development of equivalent power flux-density limits produced at any point in the GSO by emissions from all the earth stations of a non-GSO system in the fixed-satellite service or into any geostationary FSS earth station, as appropriate; 3 studies and development of sharing conditions between non-GSO FSS systems operating in the frequency bands listed in <i>resolves to invite ITU-R</i> 1 above; 4 studies of possible necessary revisions to Resolution 750 (Rev.WRC-15) to ensure protection of the EESS (passive) in the frequency bands 36-37 GHz and 50.2-50.4 GHz from non-GSO FSS transmission, taking into account <i>recognizing i</i>) above, including study of aggregate FSS interference effects from networks and systems operating or planned to operate in the frequency bands described in <i>resolves to invite ITU-R</i> 1 above; 5 studies towards ensuring protection of the radio astronomy frequency bands 42.5-43.5 GHz, 48.94-49.04 GHz and 51.4-54.25 GHz from non-GSO FSS transmissions, taking into account <i>recognizing i</i>) above, including study of aggregate FSS interference effects from networks and systems operating or planned to operate in the frequency bands described in <i>resolves to invite ITU-R</i> 1 above, <i>further resolves</i> to invite WRC-19 to consider the results of the above studies and take appropriate action,</p>	<p>WP 5A WP 5B WP 5C WP 5D WP 6A WP 7B WP 7C WP 7D (WP 3M) (WP 4B)</p>

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
<p>1.7 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 [COM6/19] (WRC-15);</p>			
<p>Resolution 659 [COM6/19] (WRC-15) Studies to accommodate requirements in the space operation service for non-geostationary satellites with short duration missions</p>	<p>WP 7B</p>	<p><i>resolves to invite the 2019 World Radiocommunication Conference</i> to consider the results of ITU-R studies and take necessary action, as appropriate, provided that the results of the studies referred to in <i>invites ITU-R</i> below are complete and agreed by ITU-R study groups, <i>invites ITU-R</i> 1 to study the spectrum requirements for telemetry, tracking and command in the space operation service for the growing number of non-GSO satellites with short duration missions, taking into account No. 1.23; 2 to assess the suitability of existing allocations to the space operation service in the frequency range below 1 GHz, taking into account <i>recognizing a)</i> and current use; 3 if studies of the current allocations to the space operations service indicate that requirements cannot be met under <i>invites ITU-R</i> 1 and 2, to conduct sharing and compatibility studies, and study mitigation techniques to protect the incumbent services, both in-band as well as in adjacent bands, in order to consider possible new allocations or an upgrade of the existing allocations to the space operation service within the frequency ranges 150.05-174 MHz and 400.15-420 MHz, <i>invites Member States and ITU-R Sector Members, Associates and Academia</i> to participate in studies by submitting contributions to ITU-R.</p>	<p>WP 4A WP 4C WP 5A WP 5B WP 5C WP 6A WP 7C WP 7D (WP 1A) (WP 3M) (WP 4B)</p>

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
<p>1.8 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);</p>			
<p>Resolution 359 (Rev.WRC-15) Consideration of regulatory provisions for updating and modernization of the Global Maritime Distress and Safety System</p>	<p>WP 5B</p>	<p><i>resolves to invite ITU-R</i></p> <p>1 to conduct studies, taking into consideration the activities of IMO, as well as information and requirements provided by IMO, in order to determine the regulatory provisions to support GMDSS modernization;</p> <p>2 to conduct studies, taking into consideration the activities of IMO and the recognition of additional satellite systems for use in the GMDSS, including consideration of the mobile-satellite service (MSS) allocations used and the potential impact of possible modifications to the provisions of the Radio Regulations on sharing and compatibility with other services and systems in the frequency band and adjacent frequency bands,</p> <p><i>invites the 2019 World Radiocommunication Conference</i></p> <p>1 to consider the result of ITU Radiocommunication Sector (ITU-R) studies and take necessary actions, as appropriate, to support GMDSS modernization;</p> <p>2 to consider regulatory provisions, if appropriate, based on the ITU-R studies, and taking into consideration the activities of IMO, related to the introduction of additional satellite systems into the GMDSS, including consideration of the MSS allocations used, while ensuring the protection of all incumbent services, including those in adjacent frequency bands, from harmful interference, as stated in <i>recognizing e</i>),</p>	<p>WP 4C (in charge of developing studies and draft CPM text on resolves 2 and sending that to WP 5B) WP 7D (WP 1A) (WP 3M) (WP 5A)</p>

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
1.9		to consider, based on the results of ITU-R studies:	
1.9.1		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 [COM6/10] (WRC-15) ;	
<p>Resolution 362 [COM6/10] (WRC-15) Autonomous maritime radio devices operating in the frequency band 156-162.05 MHz</p>	<p>WP 5B</p>	<p><i>resolves to invite the 2019 World Radiocommunication Conference</i> to consider the results of ITU-R studies and take appropriate actions, <i>invites ITU-R</i></p> <p>1 to conduct the necessary studies in time for WRC-19 to determine the spectrum needs and technical and operational characteristics of autonomous maritime radio devices operating in the frequency band 156-162.05 MHz;</p> <p>2 to conduct the necessary studies to categorize the various autonomous maritime radio devices;</p> <p>3 to conduct sharing and compatibility studies, based on the results of <i>invites ITU-R</i> 1 and 2, to ensure that no undue constraints are placed on the GMDSS and AIS;</p> <p>4 to conduct studies, taking into account the results of <i>invites ITU-R</i> 1 to 3, and existing maritime technology, to determine potential regulatory actions and appropriate frequencies for autonomous maritime radio devices within the frequency band 156-162.05 MHz,</p>	<p>WP 4C WP 5A WP 5C (WP 1B) (WP 3M)</p>

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
<p>1.9.2 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 <i>recognizing d)</i> and <i>e)</i> of Resolution 360 (Rev.WRC-15);</p>			
<p>Resolution 360 (Rev.WRC-15) Consideration of regulatory provisions and spectrum allocations to the maritime mobile-satellite service to enable the satellite component of the VHF Data Exchange System and enhanced maritime radiocommunication</p>	<p>WP 5B</p>	<p><i>resolves to invite the 2019 World Radiocommunication Conference</i> 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 (MMSS) (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 VDES satellite component, while ensuring that this component will not degrade the current terrestrial VDES components, ASM and AIS operations and not impose any additional constraints on existing services in these and adjacent frequency bands as stated in <i>recognizing d)</i> and <i>e)</i>, <i>invites ITU-R</i> to conduct, as a matter of urgency, and in time for WRC-19, sharing and compatibility studies between VDES satellite components and incumbent services in the same and adjacent frequency bands specified in <i>recognizing d)</i> and <i>e)</i> to determine potential regulatory actions, including spectrum allocations to the MMSS (Earth-to-space and space-to-Earth) for VDES applications,</p>	<p>WP 4C WP 5A WP 5C (WP 1A) (WP 3M)</p>

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
1.10 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 [COM6/11] (WRC-15) ;			
Resolution 426 [COM6/11] (WRC-15) Studies on spectrum needs and regulatory provisions for the introduction and use of the Global Aeronautical Distress and Safety System	WP 5B	<p><i>resolves to invite the 2019 World Radiocommunication Conference</i></p> <p>1 to take appropriate actions, taking into account the results of ITU-R studies;</p> <p>2 to analyse the necessity for further studies, and consider whether this matter should be brought to the attention of a future competent conference,</p> <p><i>invites ITU-R</i></p> <p>1 to conduct the relevant studies, taking into account information and requirements provided by ICAO for both the terrestrial and satellite components, including:</p> <p>a) quantification and characterization of radiocommunication requirements related to GADSS, such as:</p> <ul style="list-style-type: none"> – data traffic requirements for different system components of GADSS (such as the aircraft tracking, autonomous distress and flight data recovery systems) and their terrestrial and satellite components at each phase of the operation; – information on the radiocommunication requirement related to safety-of-life applications; – performance criteria for terrestrial and satellite systems; <p>b) analysis of the existing allocations to the relevant aeronautical services and determining whether any additional spectrum is required;</p> <p>c) studies on sharing and/or compatibility with the existing services;</p> <p>2 to undertake studies of the existing regulatory provisions to determine whether it might be necessary to apply additional regulatory measures,</p>	<p>WP 4A</p> <p>WP 4B</p> <p>WP 4C</p> <p>WP 5A</p> <p>WP 5C</p> <p>WP 5D</p> <p>WP 6A</p> <p>WP 7C</p> <p>WP 7B</p> <p>WP 7D</p> <p>(WP 3M)</p>

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
<p>1.11 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 [COM6/12] (WRC-15);</p>			
<p>Resolution 236 [COM6/12] (WRC-15) Railway radiocommunication systems between train and trackside</p>	<p>WP 5A</p>	<p><i>resolves to invite the 2019 World Radiocommunication Conference</i> based on the results of ITU-R studies, to take necessary actions, as appropriate, to facilitate global or regional harmonized frequency bands, to the extent possible, for the implementation of railway radiocommunication systems between train and trackside, within existing mobile-service allocations, <i>invites ITU-R</i> to study the spectrum needs, technical and operational characteristics and implementation of railway radiocommunication systems between train and trackside,</p>	<p>WP 4A WP 4B WP 4C WP 5B WP 5C WP 5D WP 7C WP 7B WP 7D (WP 3K) (WP 6A)</p>
<p>1.12 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 [COM6/13] (WRC-15);</p>			
<p>Resolution 237 [COM6/13] (WRC-15) Intelligent Transport Systems applications</p>	<p>WP 5A</p>	<p><i>resolves to invite the 2019 World Radiocommunication Conference</i> taking into account the results of ITU Radiocommunication Sector (ITU-R) studies, to consider possible global or regional harmonized frequency bands for the implementation of evolving ITS under existing mobile-service allocations, <i>invites ITU-R</i> to carry out studies on technical and operational aspects of evolving ITS implementation using existing mobile-service allocations,</p>	<p>WP 4A WP 4B WP 4C WP 5B WP 5C WP 5D WP 7C WP 7B WP 7D (WP 3K) (WP 6A)</p>

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
1.13		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 [COM6/20] (WRC-15);	
<p>Resolution 238 [COM6/20] (WRC-15) Studies on frequency-related matters for International Mobile Telecommunications identification including possible additional allocations to the mobile services on a primary basis in portion(s) of the frequency range between 24.25 and 86 GHz for the future development of International Mobile Telecommunications for 2020 and beyond</p>	<p>TG 5/1*</p>	<p><i>resolves to invite ITU-R</i></p> <p>1 to conduct and complete in time for WRC-19 the appropriate studies to determine the spectrum needs for the terrestrial component of IMT in the frequency range between 24.25 GHz and 86 GHz, taking into account:</p> <ul style="list-style-type: none"> – technical and operational characteristics of terrestrial IMT systems that would operate in this frequency range, including the evolution of IMT through advances in technology and spectrally efficient techniques; – the deployment scenarios envisaged for IMT-2020 systems and the related requirements of high data traffic such as in dense urban areas and/or in peak times; – the needs of developing countries; – the time-frame in which spectrum would be needed; <p>2 to conduct and complete in time for WRC-19 the appropriate sharing and compatibility studies¹, taking into account the protection of services to which the band is allocated on a primary basis, for the frequency bands:</p> <ul style="list-style-type: none"> – 24.25-27.5 GHz², 37-40.5 GHz, 42.5-43.5 GHz, 45.5-47 GHz, 47.2-50.2 GHz, 50.4-52.6 GHz, 66-76 GHz and 81-86 GHz, which have allocations to the mobile service on a primary basis; and – 31.8-33.4 GHz, 40.5-42.5 GHz and 47-47.2 GHz, which may require additional allocations to the mobile service on a primary basis, <p><i>further resolves</i></p> <p>1 to invite CPM19-1 to define the date by which technical and operational characteristics needed for sharing and compatibility studies are to be available, to ensure that studies referred to in <i>resolves to invite ITU-R</i> can be completed in time for consideration at WRC-19;</p> <p>2 to invite WRC-19 to consider, based on the results of the above studies, additional spectrum allocations to the mobile service on a primary basis and to consider identification of frequency bands for the terrestrial component of IMT; the bands to be considered being limited to part or all of the bands listed in <i>resolves to invite ITU-R 2</i>,</p> <p>_____</p> <p>¹ Including studies with respect to services in adjacent bands, as appropriate.</p> <p>² When conducting studies in the band 24.5-27.5 GHz, to take into account the need to ensure the protection of existing earth stations and the deployment of future receiving earth stations under the EESS (space-to-Earth) and SRS (space-to-Earth) allocation in the frequency band 25.5-27 GHz.</p>	<p>Note: the groups below are involved groups contributing to this issue.</p> <p>WP 3J WP3K WP 3M WP 4A WP 4B WP 4C WP 5A WP 5B WP 5C WP 5D WP 6A WP 7B WP 7C WP 7D</p>

* See the CPM19-1 Decision in Annex 9 to this Administrative Circular.

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
1.14 to consider, on the basis of ITU-R studies in accordance with Resolution 160 [COM6/21] (WRC-15) , appropriate regulatory actions for high-altitude platform stations (HAPS), within existing fixed-service allocations;			
Resolution 160 [COM6/21] (WRC-15) Facilitating access to broadband applications delivered by high-altitude platform stations	WP 5C	<p><i>resolves to invite ITU-R</i></p> <p>1 to study additional spectrum needs for gateway and fixed terminal links for HAPS to provide broadband connectivity in the fixed service taking into account:</p> <ul style="list-style-type: none"> – the existing identifications and deployments of HAPS systems; – the deployment scenarios envisioned for HAPS broadband systems and related requirements such as in remote areas; – the technical and operational characteristics of HAPS systems, including the evolution of HAPS through advances in technology and spectrally-efficient techniques, and their deployment; <p>2 to study the suitability of using the existing identifications in <i>recognizing c</i>), on a global or regional level, taking into account the regulatory provisions, such as geographical and technical restrictions associated with existing HAPS identifications based on the study performed in <i>resolves to invite ITU-R 1</i>;</p> <p>3 to study appropriate modifications to the existing footnotes and associated resolutions in the identifications in <i>recognizing c</i>) in order to facilitate the use of HAPS links on a global or regional level, limited to the currently identified frequency bands and, where the use of an identification is not technically feasible for HAPS use, the possible removal of the unsuitable identification;</p> <p>4 to study, in order to meet any spectrum needs which could not be satisfied under <i>resolves to invite ITU-R 1</i> and <i>2</i>, for the use of gateway and fixed terminal links for HAPS, the following frequency bands already allocated to the fixed service on a primary basis, not subject to Appendices 30, 30A, and 30B in any region:</p> <ul style="list-style-type: none"> – on a global level: 38-39.5 GHz, and – on a regional level: in Region 2, 21.4-22 GHz and 24.25-27.5 GHz, <p><i>further resolves</i></p> <p>1 that the studies referred to in <i>resolves to invite ITU-R 3</i> and <i>4</i> include sharing and compatibility studies to ensure protection of existing services allocated in the frequency ranges identified and, as appropriate, adjacent band studies, taking into account studies already performed in ITU-R;</p> <p>2 that modifications studied under <i>resolves to invite ITU-R 3</i> shall not consider the use of HAPS links in the frequency bands subject to Appendix 30B;</p> <p>3 to develop ITU-R Recommendations and Reports, as appropriate, on the basis of the studies called for in <i>resolves to invite ITU-R 1</i>, <i>2</i>, <i>3</i>, and <i>4</i> above,</p> <p>...</p> <p><i>resolves to invite the 2019 World Radiocommunication Conference</i></p> <p>to consider the results of the above studies and take necessary regulatory actions, as appropriate, provided that the results referred to in <i>resolves to invite ITU-R</i> are complete and agreed by ITU-R study groups.</p>	<p>WP 4A WP 4C WP 5A WP 5D WP 7B WP 7C (WP 3M) (WP 7D)</p>

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
<p>1.15 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 [COM6/14] (WRC-15);</p>			
<p>Resolution 767 [COM6/14] (WRC-15) Studies towards an identification for use by administrations for land-mobile and fixed services applications operating in the frequency range 275-450 GHz</p>	<p>WP 1A</p>	<p><i>resolves to invite the 2019 World Radiocommunication Conference</i> taking into account the results of ITU-R studies on sharing and compatibility between passive and active services as well as spectrum needs for those services, to consider identification for use by administrations for the land-mobile and fixed service applications operating in the frequency range 275-450 GHz, while maintaining protection of the passive services identified in No. 5.565, and take appropriate action, <i>invites ITU-R</i> 1 to identify technical and operational characteristics of systems in the land-mobile and fixed services operating at frequencies above 275 GHz; 2 to study spectrum needs of systems in the land-mobile and fixed services, taking into account the results of the above studies; 3 to develop propagation models within the frequency range 275-450 GHz so as to enable sharing and compatibility studies between the land-mobile, fixed and passive services in this frequency range; 4 to conduct sharing and compatibility studies between the land-mobile, fixed and passive services operating in the frequency range 275-450 GHz, while maintaining protection of the passive services identified in No. 5.565; 5 to identify candidate frequency bands for use by systems in the land-mobile and fixed services, taking into account the results of the studies under <i>invites ITU-R 1, 2 and 4</i>, and the protection of passive services identified in No. 5.565,</p>	<p>WP 3J WP 3K WP 3M (see Note 1)</p> <p>WP 5A WP 5C (see Note 2)</p> <p>WP 7C WP 7D (see Note 3)</p> <p>(WP 4A) (WP 5D) (WP 6A)</p>
<p><u>Note 1:</u> WP 3J, WP 3K and WP 3M will undertake studies with respect to the <i>invite ITU-R 3</i> and submit the initial results to WP 1A by November 2016 and final results of the studies before June 2017. <u>Note 2:</u> WP 5A and WP 5C will undertake studies with respect to the <i>invite ITU-R 1 and 2</i> for applications in the land-mobile and fixed services and submit the initial results to WP 1A by November 2016 and final results of the studies before June 2017. <u>Note 3:</u> WP 7C and WP 7D will developed technical and operational characteristics of passive systems and submit the initial information with this regards to WP1A by November 2016 and final information before June 2017.</p>			

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
<p>1.16 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 [COM6/22] (WRC-15);</p>			
<p>Resolution 239 [COM6/22] (WRC-15) Studies concerning Wireless Access Systems including radio local area networks in the frequency bands between 5 150 MHz and 5 925 MHz</p>	<p>WP 5A</p>	<p><i>resolves to invite the 2019 World Radiocommunication Conference</i> to consider the results of the ITU-R studies and take appropriate actions, <i>invites ITU-R</i> to conduct and complete the following in time for WRC-19: <i>a)</i> to study WAS/RLAN technical characteristics and operational requirements in the 5 GHz frequency range; <i>b)</i> to conduct studies with a view to identify potential WAS/RLAN mitigation techniques to facilitate sharing with incumbent systems in the frequency bands 5 150-5 350 MHz, 5 350-5 470 MHz, 5 725-5 850 MHz and 5 850-5 925 MHz, while ensuring the protection of incumbent services including their current and planned use; <i>c)</i> to perform sharing and compatibility studies between WAS/RLAN applications and incumbent services in the frequency band 5 150-5 350 MHz with the possibility of enabling outdoor WAS/RLAN operations including possible associated conditions; <i>d)</i> to conduct further sharing and compatibility studies between WAS/RLAN applications and incumbent services addressing: <i>i)</i> whether any additional mitigation techniques in the frequency band 5 350-5 470 MHz beyond those analysed in the studies referred to in <i>recognizing a)</i> would provide coexistence between WAS/RLAN systems and EESS (active) and SRS (active) systems; <i>ii)</i> whether any mitigation techniques in the frequency band 5 350-5 470 MHz would provide compatibility between WAS/RLAN systems and radio determination systems; <i>iii)</i> whether the results of studies under points <i>i)</i> and <i>ii)</i> would enable an allocation of the frequency band 5 350-5 470 MHz to the mobile service with a view to accommodating WAS/RLAN use; <i>e)</i> to also conduct detailed sharing and compatibility studies, including mitigation techniques, between WAS/RLAN and incumbent services in the frequency band 5 725- 5 850 MHz with a view to enabling a mobile service allocation to accommodate WAS/RLAN use; <i>f)</i> to also conduct detailed sharing and compatibility studies, including mitigation techniques, between WAS/RLAN and incumbent services in the frequency band 5 850-5 925 MHz with a view to accommodating WAS/RLAN use under the existing primary mobile service allocation while not imposing any additional constraints on the existing services,</p>	<p>WP 4A WP 4C WP 5B WP 5C WP 7C (WP 1B) (WP 3J) (WP 3K) (WP 3M) (WP 5D)</p>

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
<p>2 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);</p>			
<p>Resolution 28 (Rev.WRC-15) Revision of references to the text of ITU-R Recommendations incorporated by reference in the Radio Regulations</p>	<p>CPM19-2</p>	<p><i>instructs the Director of the Radiocommunication Bureau</i> to provide the CPM immediately preceding each WRC with a list, for inclusion in the CPM Report, of those ITU-R Recommendations containing texts incorporated by reference that have been revised or approved since the previous WRC, or that may be revised in time for the following WRC,</p>	<p>–</p>
<p>Resolution 27 (Rev.WRC-12) Use of incorporation by reference in the Radio Regulations</p>	<p>CPM19-2</p>	<p><i>resolves</i> 1 that for the purposes of the Radio Regulations, the term “incorporation by reference” shall only apply to those references intended to be mandatory; 2 that when considering the introduction of new cases of incorporation by reference, such incorporation shall be kept to a minimum and made by applying the following criteria: – only texts which are relevant to a specific WRC agenda item may be considered; – the correct method of reference shall be determined on the basis of the principles set out in Annex 1 to this Resolution; – the guidance contained in Annex 2 to this Resolution shall be applied in order to ensure that the correct method of reference for the intended purpose is employed; 3 that the procedure described in Annex 3 to this Resolution shall be applied for approving the incorporation by reference of ITU-R Recommendations or parts thereof; 4 that existing references to ITU-R Recommendations shall be reviewed to clarify whether the reference is mandatory or non-mandatory in accordance with Annex 2 to this Resolution; 5 that ITU-R Recommendations, or parts thereof, incorporated by reference at the conclusion of each WRC, and a cross-reference list of the regulatory provisions, including footnotes and Resolutions, incorporating such ITU-R Recommendations by reference, shall be collated and published in a volume of the Radio Regulations (see Annex 3 to this Resolution),</p>	<p>–</p>

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
<p>4 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;</p>			
<p>Resolution 95 (Rev.WRC-07) General review of the Resolutions and Recommendations of world administrative radio conferences and world radiocommunication conferences</p>	<p>CPM19-2</p>	<p><i>instructs the Director of the Radiocommunication Bureau</i></p> <p>1 to conduct a general review of the Resolutions and Recommendations of previous conferences and, after consultation with the Radiocommunication Advisory Group and the Chairmen and Vice-Chairmen of the Radiocommunication Study Groups, submit a report to the second session of the Conference Preparatory Meeting (CPM) in respect of <i>resolves</i> 1 and <i>resolves</i> 2, including an indication of any associated agenda items;</p> <p>2 to include in the above report, with the cooperation of the chairmen of the Radiocommunication Study Groups, the progress reports of ITU-R studies on the issues which have been requested by the Resolutions and Recommendations of previous conferences, but which are not placed on the agendas of the forthcoming two conferences,</p>	<p>–</p>
<p>7 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), in order to facilitate rational, efficient and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit;</p>			
<p>Resolution 86 (Rev.WRC-07) Implementation of Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference</p>	<p>WP 4A</p>	<p><i>resolves to invite future world radiocommunication conferences</i></p> <p>1 to consider any proposals which deal with deficiencies and improvements in the advance publication, coordination, notification and recording procedures of the Radio Regulations for frequency assignments pertaining to space services which have either been identified by the Board and included in the Rules of Procedure or which have been identified by administrations or by the Radiocommunication Bureau, as appropriate;</p> <p>2 to ensure that these procedures, and the related appendices of the Radio Regulations reflect the latest technologies, as far as possible,</p>	<p>–</p>
<p>8 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);</p>			
<p>Resolution 26 (Rev.WRC-07) Footnotes to the Table of Frequency Allocations in Article 5 of the Radio Regulations</p>	<p>–</p>	<p>Not in the scope of the CPM</p>	<p>–</p>

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
9		to consider and approve the Report of the Director of the Radiocommunication Bureau, in accordance with Article 7 of the Convention:	
9.1		on the activities of the Radiocommunication Sector since WRC-15;	
<p><u>Issue 9.1.1:</u> Resolution 212 (Rev.WRC-15) Implementation of International Mobile Telecommunications in the frequency bands 1 885-2 025 MHz and 2 110-2 200 MHz</p>	<p>WP 4C (see Note 1)</p> <p>WP 5D (see Note 2)</p> <p>(see also Note 3)</p>	<p><i>resolves</i></p> <p>that administrations which implement IMT:</p> <p>a) should make the necessary frequencies available for system development;</p> <p>b) should use those frequencies when IMT is implemented;</p> <p>c) should use the relevant international technical characteristics, as identified by ITU-R and ITU-T Recommendations,</p> <p><i>invites ITU-R</i></p> <p>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,</p> <p><i>encourages administrations</i></p> <p>1 to give due consideration to the accommodation of other services currently operating in these frequency bands when implementing IMT;</p> <p>2 to participate actively in the ITU-R studies in accordance with <i>invites ITU-R</i> above,</p> <p><i>instructs the Director of the Radiocommunication Bureau</i></p> <p>to include in his report, for consideration by WRC-19, the results of the ITU-R studies referred to in <i>invites ITU-R</i> above,</p> <p><i>further invites ITU-R</i></p> <p>to continue its studies with a view to developing suitable and acceptable technical characteristics for IMT that will facilitate worldwide use and roaming, and ensure that IMT can also meet the telecommunication needs of the developing countries and rural areas.</p>	<p>–</p>
<p>Note 1: WP 4C is responsible for the studies requested in the <i>invites ITU-R</i> with respect to the satellite component of IMT, taking into account the technical and operational characteristics provided by WP 5D.</p> <p>Note 2: WP 5D is responsible for the studies requested in the <i>invites ITU-R</i> with respect to the terrestrial component of IMT, taking into account the technical and operational characteristics provided by WP 4C.</p> <p>Note 3: The conclusion of the draft CPM text shall be agreed by both WP 4C and WP 5D. For this purpose, the Chairmen of both WPs shall coordinate the schedule of the meetings, as appropriate.</p>			

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
<p><u>Issue 9.1.2:</u> Resolution 761 [COM4/7] (WRC-15) Compatibility of International Mobile Telecommunications and broadcasting-satellite service (sound) in the frequency band 1 452-1 492 MHz in Regions 1 and 3</p>	<p>WP4A (see Note 1)</p> <p>WP 5D (see Note 2)</p> <p>(see also Note 3)</p>	<p><i>resolves to invite ITU-R</i></p> <p>1 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;</p> <p>2 to prepare, <i>inter alia</i>, the regulatory action that could be taken, based on the studies carried out under <i>resolves to invite ITU-R 1</i> above, in order to facilitate the long-term stability of IMT and BSS (sound) in the frequency band 1 452-1 492 MHz,</p> <p><i>invites the 2019 World Radiocommunication Conference</i></p> <p>to consider the above-mentioned results and to take necessary actions, as appropriate,</p> <p><i>invites Member States</i></p> <p>1 to actively participate in the ITU-R activities with regard to the studies referred to above;</p> <p>2 in Region 1, to use guidance from the ITU-R studies to determine the need for bilateral coordination between IMT systems and BSS earth stations, taking into account <i>noting b</i>), until WRC-19 defines regulatory and technical conditions for this bilateral coordination;</p> <p>3 in Region 3, to use guidance from ITU-R studies to determine the need for bilateral coordination to protect BSS earth stations, taking into account <i>noting b</i>), until WRC-19 defines regulatory and technical conditions for this bilateral coordination,</p> <p><i>instructs the Director of the Radiocommunication Bureau</i></p> <p>to report to WRC-19, under agenda item 9.1, the results of the studies referred to in <i>resolves to invite ITU-R 1</i>.</p>	<p>(WP 6A)</p>
<p>Note 1: WP 4A is responsible for the studies requested in the <i>resolves to invites ITU-R</i> with respect to the BSS (Sound), taking into account the technical and operational characteristics provided by WP 5D.</p> <p>Note 2: WP 5D is responsible for the studies requested in the <i>resolves to invites ITU-R</i> with respect to the IMT, taking into account the technical and operational characteristics provided by WP 4A.</p> <p>Note 3: The conclusion of the draft CPM text shall be agreed by both WP 4A and WP 5D. For this purpose, the Chairmen of both WPs shall coordinate the schedule of the meetings, as appropriate.</p>			

<p><u>Issue 9.1.3:</u> Resolution 157 [COM5/6] (WRC-15) Study of 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</p>	<p>WP 4A</p>	<p><i>resolves to invite the ITU Radiocommunication Sector</i></p> <p>to study the following issues relating to non-GSO systems in the following frequency bands allocated to the FSS:</p> <p>a) in the frequency band 3 700-4 200 MHz (space-to-Earth), identification of possible revision of Article 21, Table 21-4 for non-GSO FSS satellites, with a view to enabling new non-GSO systems to operate in these FSS frequency bands, while ensuring that existing primary services, i.e. the mobile service and fixed service, are protected and maintaining the existing Article 21 pfd limits for GSO networks;</p> <p>b) in the frequency bands 3 700-4 200 MHz (space-to-Earth) and 5 925-6 425 MHz (Earth-to-space), the Article 22 epfd↓ limits and epfd↑ limits applicable to non-GSO systems with a view to enabling additional non-GSO systems to operate in these frequency bands, while ensuring that GSO networks are protected from unacceptable interference pursuant to No. 22.2 and existing protection criteria;</p> <p>c) in the frequency bands 4 500-4 800 MHz (space-to-Earth) and 6 725-7 025 MHz (Earth-to-space), the possible development of Article 22 epfd↓ and epfd↑ limits similar to those in other FSS frequency bands with a view to enabling non-GSO systems to operate in these frequency bands, while ensuring that GSO networks are protected from unacceptable interference pursuant to No. 22.2 and existing protection criteria;</p> <p>d) in the frequency band 6 700-7 025 MHz, the protection of feeder links for MSS systems operating in the space-to-Earth direction from unacceptable interference, pursuant to existing criteria, from non-GSO FSS system earth stations operating in the Earth-to-space direction;</p> <p>e) in the frequency band 4 500-4 800 MHz (space-to-Earth), the development of appropriate regulatory provisions for non-GSO FSS systems to protect terrestrial services;</p> <p>f) in the frequency bands 4 500-4 800 MHz (space-to-Earth) and 5 925-6 425 MHz (Earth-to-space), the development of regulatory provisions to clarify that Nos. 5.440A and 5.457C would apply in a manner to ensure that non-GSO FSS systems do not cause harmful interference to, or claim protection from, AMT for flight testing by aircraft stations,</p> <p><i>further resolves</i></p> <p>1 that the results of studies referred to in the <i>resolves</i> above shall:</p> <ul style="list-style-type: none"> – in no way change the protection criteria and protection levels defined in those criteria for the GSO FSS, the fixed service and the mobile service; – ensure protection of the existing non-GSO FSS systems with highly-elliptical orbits, <p>2 that new non-GSO systems that operate in FSS bands subject to the provisions of Appendix 30B shall ensure that the allotments appearing in the Plan and the assignments of the List of Appendix 30B will be fully protected,</p>	<p>WP 5A WP 5C (WP 3M)</p>
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Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
		<p><i>invites administrations</i> to participate in the studies by submitting contributions to the ITU Radiocommunication Sector, <i>instructs the Director of the Radiocommunication Bureau</i> to include in his report, for consideration by WRC-19, the results of the ITU-R studies referred to in <i>resolves to invite the ITU Radiocommunication Sector</i> above.</p>	
<p><u>Issue 9.1.4:</u> Resolution 763 [COM5/7] (WRC-15) Stations on board sub-orbital vehicles</p>	<p>WP 5B</p>	<p><i>resolves to invite the ITU Radiocommunication Sector</i></p> <p>1 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;</p> <p>2 to conduct studies to determine spectrum requirements and, based on the outcome of those studies, to consider a possible future agenda item for WRC-23;</p> <p>3 to complete the studies within the next ITU Radiocommunication Sector (ITU-R) study cycle, <i>instructs the Director of the Radiocommunication Bureau</i></p> <p>1 to bring this resolution to the attention of the ITU-R study groups;</p> <p>2 to include in his report, for consideration by WRC-19, the results of the ITU-R studies referred to in <i>resolves to invite the ITU Radiocommunication Sector</i> above,</p>	<p>WP 4A WP 4C WP 7B</p>
<p><u>Issue 9.1.5:</u> Resolution 764 [COM6/1] (WRC-15) Consideration of 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</p>	<p>WP 5A</p>	<p><i>resolves to invite the ITU Radiocommunication Sector</i></p> <p>1 to investigate the technical and regulatory impacts on the services referred to in Nos. 5.447F and 5.450A that would result from referencing Recommendation ITU-R M.1638-1 in place of Recommendation ITU-R M.1638-0 in those footnotes, while ensuring that no undue constraints are imposed on the services referenced in these footnotes;</p> <p>2 to investigate the technical and regulatory impacts on the services referred to in Nos 5.447F and 5.450A that would result from adding a new reference to Recommendation ITU-R M.1849-1 to these footnotes, while ensuring that no undue constraints are imposed on the services referenced in these footnotes, <i>instructs the Director of the Radiocommunication Bureau</i> to include the results of these studies in the Director's Report to WRC-19 for consideration of any regulatory action in response to <i>resolves to invite the ITU Radiocommunication Sector</i> above.</p>	<p>WP 5B (WP 3M)</p>

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
<p>Resolution 958 [COM6/15] (WRC-15) Urgent studies required in preparation for the 2019 World Radiocommunication Conference</p> <p><u>Issue 9.1.6:</u> Issue 1) in the Annex to Resolution 958 [COM6/15] (WRC-15)</p> <p><u>Issue 9.1.7:</u> Issue 2) in the Annex to Resolution 958 [COM6/15] (WRC-15)</p> <p><u>Issue 9.1.8:</u> Issue 3) in the Annex to Resolution 958 [COM6/15] (WRC-15)</p>	<p>(see below)</p> <p>WP 1B</p> <p>WP 1B</p> <p>WP 5D</p>	<p><i>resolves</i> to complete studies on the topics identified in this resolution and its annex, <i>invites ITU-R</i> as a matter of urgency, to complete the studies called for in this resolution, <i>instructs the Director of the Radiocommunication Bureau</i> <i>to report on these studies under agenda item 9.1 of WRC-19, as appropriate, based on the results of studies.</i></p> <p style="text-align: center;">ANNEX TO RESOLUTION 958 [COM6/15] (WRC-15) Urgent studies required in preparation for the 2019 World Radiocommunication Conference</p> <p>1) Studies concerning Wireless Power Transmission (WPT) for electric vehicles: 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.</p> <p>These studies should take into account that the International Electrotechnical Commission (IEC), the International Organization for Standardization (ISO) and the Society of Automotive Engineers (SAE) are in the process of approving standards intended for global and regional harmonization of WPT technologies for electric vehicles.</p> <p>2) Studies to examine: a) 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; b) 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).</p> <p>3) 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, and to take appropriate actions within the ITU Radiocommunication Sector (ITU-R) scope of work.</p>	<p>(see below)</p> <p>WP 1A WP 5B WP 6A</p> <p>WP 1C WP 4A</p> <p>WP 1B WP 5A</p>

Allocation of ITU-R preparatory work for WRC-19

Topic	Responsible group	Action to be taken by the group	Concerned group ¹
<p><u>Issue 9.1.9:</u> Resolution 162 [COM6/24] (WRC-15) 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)</p>	<p>WP 4A</p>	<p><i>resolves to invite ITU-R</i> to conduct, and complete in time for WRC-19: 1 studies considering additional spectrum needs for development of the fixed-satellite service, taking into account the frequency bands currently allocated to the fixed-satellite service, the technical conditions of their use, and the possibility of optimizing the use of these frequency bands with a view to increasing spectrum efficiency; 2 subject to justification resulting from studies conducted under <i>resolves to invite ITU-R 1</i>, sharing and compatibility studies with existing services, on a primary and secondary basis, including in adjacent bands as appropriate, to determine the suitability, including protection of fixed and mobile services, of new primary allocations to the FSS in the frequency band 51.4-52.4 GHz (Earth-to-space) limited to FSS feeder links for geostationary orbit use, and the possible associated regulatory actions; 3 studies towards possible revision of Resolution 750 (Rev.WRC-12) so that systems operating in the passive frequency band 52.6-54.25 GHz are protected; 4 studies regarding the protection of radio astronomy, as described in <i>recognizing c</i>), including regulatory measures, as appropriate, <i>instructs the Director of the Radiocommunication Bureau</i> to report on the results of the ITU-R studies to WRC-19, <i>invites administrations</i> to participate actively in these studies by submitting contributions to ITU-R.</p>	<p>WP 4B WP 5A WP 5C WP 5D WP 7C WP 7D (WP 3M)</p>
<p>9.2 on any difficulties or inconsistencies encountered in the application of the Radio Regulations* ; and</p>			
<p>* This agenda item is strictly limited to the Report of the Director on any difficulties or inconsistencies encountered in the application of the Radio Regulations and the comments from administrations.</p>			
<p>9.3 on action in response to Resolution 80 (Rev.WRC-07);</p>			
<p>Resolution 80 (Rev.WRC-07)</p>	<p>–</p>		<p>–</p>
<p>10 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,</p>			
<p>Resolution 810 [COM6/2] (WRC-15) Preliminary agenda for the 2023 World Radiocommunication Conference</p>	<p>–</p>	<p>For information at CPM19-2.</p>	<p>–</p>

ANNEX 8

Allocation of ITU-R preparatory work for WRC-23

The attached Table contains allocation of ITU-R preparatory work for the WRC-23 preliminary agenda items, as proposed in Resolution **810 [COM6/2] (WRC-15)**.

It includes entries for the identification of the ITU-R “responsible groups” and “concerned groups” for the WRC-23 preliminary agenda items.

NOTE 1 – The ITU-R Working Parties indicated in the following Table have been identified based on the ITU-R Study Group structure contained in Document CPM19-1/1.

NOTE 2 – The responsible groups are invited to communicate on a regular basis the progress and results of their studies to the concerned groups.

Allocation of ITU-R preparatory work for WRC-23

Topic	Responsible group	Action to be taken by the group
1		to take appropriate action in respect of those urgent issues that were specifically requested by WRC-19;
2		on the basis of proposals from administrations and the Report of the Conference Preparatory Meeting, and taking account of the results of WRC-19, to consider and take appropriate action in respect of the following items:
2.1		to consider possible spectrum needs and regulatory actions to support Global Maritime Distress and Safety System (GMDSS) modernization and the implementation of e-navigation, in accordance with Resolution 361 [COM6/3] (WRC-15) ;
<p>Resolution 361 [COM6/3] (WRC-15) Consideration of regulatory provisions for modernization of the Global Maritime Distress and Safety System and related to the implementation of e-navigation</p>	<p>WP 5B</p>	<p><i>resolves to invite the 2023 World Radiocommunication Conference</i></p> <p>1 to take into consideration the activities of IMO, as well as information and requirements provided by IMO, in order to determine the regulatory actions to support GMDSS modernization;</p> <p>2 to consider possible regulatory actions, including spectrum allocations based on the ITU Radiocommunication Sector (ITU-R) studies, for the maritime mobile service, supporting e-navigation,</p> <p><i>invites ITU-R</i></p> <p>to conduct studies taking into consideration the activities of IMO, in order to determine spectrum needs and regulatory actions to support GMDSS modernization and the implementation of e-navigation,</p>
2.2		to conduct, and complete in time for WRC-23, studies for a possible new allocation to the Earth exploration-satellite (active) service for spaceborne radar sounders within the range of frequencies around 45 MHz, taking into account the protection of incumbent services, in accordance with Resolution 656 [COM6/4] (WRC-15) ;
<p>Resolution 656 [COM6/4] (WRC-15) Possible allocation to the Earth exploration-satellite service (active) for spaceborne radar sounders in the range of frequencies around 45 MHz</p>	<p>WP 7C</p>	<p><i>resolves to invite the 2023 World Radiocommunication Conference</i></p> <p>to consider the results of studies on spectrum needs for a possible new allocation to the Earth exploration-satellite (active) service for spaceborne radar sounders within the range of frequencies around 45 MHz, taking into account the protection of incumbent services, and take appropriate action,</p> <p><i>invites ITU-R</i></p> <p>1 to conduct studies on spectrum needs and sharing studies between the Earth exploration-satellite (active) service and the radiolocation, fixed, mobile, broadcasting and space research services in the 40-50 MHz frequency range;</p> <p>2 to complete the studies, taking into account the present use of the allocated band, with a view to presenting, at the appropriate time, the technical basis for the work of WRC-23,</p>

Allocation of ITU-R preparatory work for WRC-23

Topic	Responsible group	Action to be taken by the group
<p>2.3 in accordance with Resolution 657 [COM6/5] (WRC-15), to 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 providing appropriate recognition and protection in the Radio Regulations without placing additional constraints on incumbent services;</p>		
<p>Resolution 657 [COM6/5] (WRC-15) Spectrum needs and protection of space weather sensors</p>	<p>WP 7C</p>	<p><i>resolves to invite the 2023 World Radiocommunication Conference</i> while taking into account the results of ITU-R studies and without placing additional constraints on incumbent services, to consider regulatory provisions necessary to provide protection to space weather sensors operating in the appropriately designated radio service that is to be determined during ITU-R studies, <i>invites ITU-R</i></p> <ol style="list-style-type: none"> 1 to document, in time for WRC-19, the technical and operational characteristics of space weather sensors; 2 to determine, in time for WRC-19, the appropriate radio service designations for space weather sensors; 3 to conduct, in time for WRC-23, any necessary sharing studies for incumbent systems operating in frequency bands used by space weather sensors, with the objective of determining regulatory protection that can be provided while not placing additional constraints on incumbent services,
<p>2.4 study of spectrum needs and possible new allocations to the fixed-satellite service in the frequency band 37.5-39.5 GHz (Earth-to-space), in accordance with Resolution 161 [COM6/23] (WRC-15);</p>		
<p>Resolution 161 [COM6/23] (WRC-15) Studies relating to spectrum needs and possible allocation of the frequency band 37.5-39.5 GHz to the fixed-satellite service</p>	<p>WP 4A</p>	<p><i>resolves to invite ITU-R</i> to conduct, and complete in time for WRC-23:</p> <ol style="list-style-type: none"> 1 studies considering additional spectrum needs for development of the fixed-satellite service, taking into account the frequency bands currently allocated to FSS, the technical conditions of their use and the possibility of optimizing the use of these frequency bands with a view to increasing spectrum efficiency; 2 sharing and compatibility studies with existing services, on primary and secondary basis, including in adjacent bands as appropriate, to determine the suitability of new primary allocations to the FSS in the frequency band 37.5-39.5 GHz (Earth-to-space, limited to FSS feeder links only) for both GSO and non-GSO orbit use; 3 studies towards possible revision of Resolution 750 (Rev.WRC-15) so that systems operating in the passive frequency band 36-37 GHz are protected, <p><i>further resolves</i> to invite WRC-23 to consider the results of the above studies and take appropriate actions,</p>

Allocation of ITU-R preparatory work for WRC-23

Topic	Responsible group	Action to be taken by the group
2.5		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 [COM4/6] (WRC-15) ;
<p>Resolution 235 [COM4/6] (WRC-15) Review of the spectrum use of the frequency band 470-960 MHz in Region 1</p>	<p>–</p>	<p><i>resolves to invite ITU-R, after the 2019 World Radiocommunication Conference and in time for the 2023 World Radiocommunication Conference</i></p> <p>1 to review the spectrum use and study the spectrum needs of existing services within the frequency band 470-960 MHz in Region 1, in particular the spectrum requirements of the broadcasting and mobile, except aeronautical mobile, services, taking into account the relevant ITU Radiocommunication Sector (ITU-R) studies, Recommendations and Reports;</p> <p>2 to carry out sharing and compatibility studies, as appropriate, in the frequency band 470-694 MHz in Region 1 between the broadcasting and mobile, except aeronautical mobile, services, taking into account relevant ITU-R studies, Recommendations and Reports;</p> <p>3 to conduct sharing and compatibility studies, as appropriate, in order to provide relevant protection of systems of other existing services, <i>invites administrations</i></p> <p>to participate actively in the studies by submitting contributions to ITU-R, <i>resolves to invite the 2023 World Radiocommunication Conference</i></p> <p>to consider, based on the results of studies above, provided that these studies are completed and approved by ITU-R, possible regulatory actions in the frequency band 470-694 MHz in Region 1, as appropriate, <i>further invites ITU-R</i></p> <p>to ensure intersectoral collaboration with the ITU Telecommunication Development Sector (ITU-D) in the implementation of this resolution.</p>

ANNEX 9

CPM19-1 Decision on the establishment and Terms of Reference of Study Group 5 Task Group 5/1 (TG 5/1) on WRC-19 agenda item 1.13

The first session of the Conference Preparatory Meeting for WRC-19 (CPM19-1),

considering

that WRC-15 by its Resolution **809 [COM6/16] (WRC-15)** recommended to Council to include in the Agenda of WRC-19 (agenda item 1.13) “*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 [COM6/20] (WRC-15)*”,

decides

1 to invite Study Group 5 to establish a Task Group (TG 5/1), in which all involved parties in frequency bands and services mentioned in Resolution **238 [COM6/20] (WRC-15)** are invited to actively participate, as the responsible group for WRC-19 agenda item 1.13 with the terms of reference given below;

2 that Working Party 5D is to conduct and complete the studies as indicated in *resolves to invite ITU-R 1* of Resolution **238 [COM6/20] (WRC-15)**, with regards to spectrum needs, technical and operational characteristics including protection criteria, and deployment scenarios for the terrestrial component of IMT by 31 March 2017 and report the results of these studies to TG 5/1;

3 that the technical characteristics including protection criteria for existing services allocated in, or adjacent to, the bands identified in *resolves to invite ITU-R 2* of Resolution **238 [COM6/20] (WRC-15)** are to be provided by the involved Working Parties to TG 5/1 by 31 March 2017, at the latest;

4 that the Working Parties of Study Group 3 are to provide the relevant propagation models for sharing studies for the frequency bands listed in *resolves to invite ITU-R 2* of Resolution **238 [COM6/20] (WRC-15)** to TG 5/1 by 31 March 2017, at the latest;

5 that the organization of the work of TG 5/1 should be carried out making maximum use of modern means of communication, including remote participation to the extent practicable;

6 that TG 5/1 is responsible for conducting the sharing and compatibility studies, in accordance with Resolution **238 [COM6/20] (WRC-15)**, based on *decides* 2, 3 and 4 above, and the development of draft CPM text under WRC-19 agenda item 1.13 and that it will submit such text directly to the CPM-19 process in accordance with § A1.3.1.5 of Resolution ITU-R 1-7 and Resolution ITU-R 2-7.

ANNEX 10

Outline of the draft CPM Report to WRC-19

WRC-19 Agenda item	Draft CPM Report to WRC-19			
	Section	Agenda item/Issue	References	Responsible Group
Chapter 1 – Land mobile and fixed services				
1.11	1/1.11	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 [COM6/12] (WRC-15)	Resolution 236 [COM6/12] (WRC-15)	WP 5A
1.12	1/1.12	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 [COM6/13] (WRC-15)	Resolution 237 [COM6/13] (WRC-15)	WP 5A
1.14	1/1.14	To consider, on the basis of ITU-R studies in accordance with Resolution 160 [COM6/21] (WRC-15) , appropriate regulatory actions for high-altitude platform stations (HAPS), within existing fixed-service allocations	Resolution 160 [COM6/21] (WRC-15)	WP 5C
1.15	1/1.15	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 [COM6/14] (WRC-15)	Resolution 767 [COM6/14] (WRC-15)	WP 1A
Chapter 2 – Broadband applications in the mobile service				
1.13	2/1.13	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 [COM6/20] (WRC-15)	Resolution 238 [COM6/20] (WRC-15)	TG 1/5 (1)
1.16	2/1.16	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 [COM6/22] (WRC-15)	Resolution 239 [COM6/22] (WRC-15)	WP 5A

¹ See the CPM19-1 Decision in Annex 9 to this Administrative Circular.

WRC-19 Agenda item	Draft CPM Report to WRC-19			
	Section	Agenda item/Issue	References	Responsible Group
9.1 (issue 9.1.1)	2/9.1.1	Implementation of International Mobile Telecommunications in the frequency bands 1 885-2 025 MHz and 2 110-2 200 MHz	Resolution 212 (Rev.WRC-15)	WP 4C (2) WP 5D (3) (4)
9.1 (issue 9.1.5)	2/9.1.5	Consideration of 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	Resolution 764 [COM6/1] (WRC-15)	WP 5A
9.1 (issue 9.1.8)	2/9.1.8	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, and to take appropriate actions within the ITU Radiocommunication Sector (ITU-R) scope of work.	Issue 3) in the Annex to Resolution 958 [COM6/15] (WRC-15)	WP 5D
Chapter 3 – Satellite services				
1.4	3/1.4	to consider the results of studies in accordance with Resolution 557 [COM6/9] (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	Resolution 557 [COM6/9] (WRC-15)	WP 4A
1.5	3/1.5	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 [COM6/17] (WRC-15)	Resolution 158 [COM6/17] (WRC-15)	WP 4A
1.6	3/1.6	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 (space-to-Earth), 39.5-42.5 GHz (space-to-Earth), 47.2-50.2 GHz (Earth-to-space) and 50.4-51.4 GHz	Resolution 159 [COM6/18] (WRC-15)	WP 4A

- (2) WP 4C is responsible for the studies requested in the invites ITU-R with respect to the satellite component of IMT, taking into account the technical and operational characteristics provided by WP 5D.
- (3) WP 5D is responsible for the studies requested in the invites ITU-R with respect to the terrestrial component of IMT, taking into account the technical and operational characteristics provided by WP 4C.
- (4) The conclusion of the draft CPM text shall be agreed by both WP 4C and WP 5D. For this purpose, the Chairmen of both WPs shall coordinate the schedule of the meetings, as appropriate.

WRC-19 Agenda item	Draft CPM Report to WRC-19			
	Section	Agenda item/Issue	References	Responsible Group
		(Earth-to-space), in accordance with Resolution 159 [COM6/18] (WRC-15)		
7	3/7	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) , in order to facilitate rational, efficient and economical use of radio frequencies and any associated orbits, including the geostationary-satellite orbit	Resolution 86 (Rev.WRC-07)	WP 4A
9.1 (issue 9.1.2)	3/9.1.2	Implementation of International Mobile Telecommunications in the frequency bands 1 885-2 025 MHz and 2 110-2 200 MHz	Resolution 212 (Rev.WRC-15)	WP 4A (5) WP 5D (6) (7)
9.1 (issue 9.1.3)	3/9.1.3	Study of 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	Resolution 157 [COM5/6] (WRC-15)	WP 4A
9.1 (issue 9.1.9)	3/9.1.9	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)	Resolution 162 [COM6/24] (WRC-15)	WP 4A
Chapter 4 –Science services				
1.2	4/1.2	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 [COM6/7] (WRC-15)	Resolution 765 [COM6/7] (WRC-15)	WP 7B
1.3	4/1.3	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 [COM6/8] (WRC-15)	Resolution 766 [COM6/8] (WRC-15)	WP 7B

(5) WP 4A is responsible for the studies requested in the resolves to invites ITU-R with respect to the BSS (Sound), taking into account the technical and operational characteristics provided by WP 5D.

(6) WP 5D is responsible for the studies requested in the resolves to invites ITU-R with respect to the IMT, taking into account the technical and operational characteristics provided by WP 4A.

(7) The conclusion of the draft CPM text shall be agreed by both WP 4A and WP 5D. For this purpose, the Chairmen of both WPs shall coordinate the schedule of the meetings, as appropriate.

WRC-19 Agenda item	Draft CPM Report to WRC-19			
	Section	Agenda item/Issue	References	Responsible Group
1.7	4/1.7	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 [COM6/19] (WRC-15)	Resolution 659 [COM6/19] (WRC-15)	WP 7B
Chapter 5 – Maritime, aeronautical and amateur services				
1.1	5/1.1	to consider an allocation of the frequency band 50-54 MHz to the amateur service in Region 1, in accordance with Resolution 658 [COM6/6] (WRC-15)	Resolution 658 [COM6/6] (WRC-15)	WP 5A
1.8	5/1.8	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)	Resolution 359 (Rev.WRC-15)	WP 5B
1.9	5/1.9	to consider, based on the results of ITU-R studies:		
1.9.1	5/1.9.1	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 [COM6/10] (WRC-15)	Resolution 362 [COM6/10] (WRC-15)	WP 5B
1.9.2	5/1.9.2	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 <i>recognizing d) and e)</i> of Resolution 360 (Rev.WRC-15)	Resolution 360 (Rev.WRC-15)	WP 5B
1.10	5/1.10	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 [COM6/11] (WRC-15)	Resolution 426 [COM6/11] (WRC-15)	WP 5B
9.1 (issue 9.1.4)	5/9.1.4	Stations on board sub-orbital vehicles	Resolution 763 [COM5/7] (WRC-15)	WP 5B

WRC-19 Agenda item	Draft CPM Report to WRC-19			
	Section	Agenda item/Issue	References	Responsible Group
Chapter 6 – General issues				
2	6/2	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) ;	Resolution 28 (Rev.WRC-15) Resolution 27 (Rev.WRC-12)	CPM19-2
4	6/4	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;	Resolution 95 (Rev.WRC-07)	CPM19-2
9.1 (issue 9.1.6)	6/9.1.6	1) Studies concerning Wireless Power Transmission (WPT) for electric vehicles: 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. These studies should take into account that the International Electrotechnical Commission (IEC), the International Organization for Standardization (ISO) and the Society of Automotive Engineers (SAE) are in the process of approving standards intended for global and regional harmonization of WPT technologies for electric vehicles.	Issue 1) in the Annex to Resolution 958 [COM6/15] (WRC-15)	WP 1B
9.1 (issue 9.1.7)	6/9.1.7	2) Studies to examine: a) 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 ; b) 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).	Issue 2) in the Annex to Resolution 958 [COM6/15] (WRC-15)	WP 1B
10	6/10	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,	Resolution 810 [COM6/2] (WRC-12)	CPM19-2

ANNEX 11

Proposed detailed structure for the draft CPM Report to WRC-19

See the document at: <http://www.itu.int/oth/ROA0A00000A/en>.

ANNEX 12

Contact information of the CPM-19 Chairman, Vice-Chairmen and Chapter Rapporteurs

For the CPM-19 Chairman and Vice-Chairmen, please see at:

www.itu.int/go/ITU-R/cvc/CPM

For the CPM-19 Chapter Rapporteurs, please see at:

<http://www.itu.int/en/ITU-R/study-groups/rcpm/Pages/cpm-19-chp-rapporteurs.aspx>
