| Topic | Responsible group | Action to be taken by the group | Concerned group 1 |
|--|-------------------|---|---|
| 1.1 to consider an allocation of | the frequency b | oand 50-54 MHz to the amateur service in Region 1, in accordance with Resolution 658 [COM6/6] (WRC-15 | 5); |
| Resolution 658 [COM6/6] (WRC-15) Allocation of the frequency band 50-54 MHz to the amateur service in Region 1 | WP 5A | resolves to invite the 2019 World Radiocommunication Conference to consider the results of the studies below and take appropriate actions, including spectrum allocation, | WP 5B WP 5C WP 6A (WP 3K) (WP 3M) |
| | | tions operating in the mobile-satellite service, meteorological-satellite service and Earth exploration-sate z, in accordance with Resolution 765 [COM6/7] (WRC-15) ; | llite service in |
| 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 | resolves to invite the 2019 World Radiocommunication Conference 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, invites ITU-R 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, | WP 4C WP 5A WP 7C (WP 3M) |

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.

| Topic | Responsible group | Action to be taken by the group | Concerned group 1 |
|--|-------------------|--|------------------------------------|
| 1 | - | vallocation to the meteorological-satellite service (space-to-Earth) to primary status and a possible primar the frequency band 460-470 MHz, in accordance with Resolution 766 [COM6/8] (WRC-15); | ry allocation to |
| Resolution 766 [COM6/8] (WRC-15); Consideration of possible upgrading of the secondary allocation to the meteorological-satellite service (spaceto-Earth) to primary status and a primary allocation to the Earth exploration-satellite service (space-to-Earth) in the frequency band 460-470 MHz | WP 7B | resolves to invite the 2019 World Radiocommunication Conference 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, invites ITU-R 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; 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 considering further a) can protect incumbent services, then the pfd limit contained in considering further a) shall apply, | WP 5A WP 5D WP 6A (WP 3M) |
| Appendix 30 (Rev.WRC-12), while ensurir | ng the protectio | with Resolution 557 [COM6/9] (WRC-15) , and review, and revise if necessary, the limitations mentioned in of, and without imposing additional constraints on, assignments in the Plan and the List and the future existing and planned fixed-satellite service networks; | |
| Resolution 557 [COM6/9] (WRC-15) Consideration of possible revision of Annex 7 to Appendix 30 of the Radio Regulations | WP 4A | resolves to invite the 2019 World Radiocommunication Conference to consider the results of the ITU-R studies and take necessary actions, as appropriate, | (WP 3M) |

| Topic | Responsible group | Action to be taken by the group | Concerned group 1 |
|---|-------------------|---|---|
| | | 17.7-19.7 GHz (space-to-Earth) and 27.5-29.5 GHz (Earth-to-space) by earth stations in motion comm and take appropriate action, in accordance with Resolution 158 [COM6/17] (WRC-15); | unicating with |
| 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 | WP 4A | resolves to invite ITU-R 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 recognizing further a) to n); 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 recognizing further a) to n); 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, resolves that these earth stations not be used or relied upon for safety-of-life applications, resolves to further invite the 2019 World Radiocommunication Conference to consider the results of the above studies and take necessary actions, as appropriate, provided that the results of the studies referred to in resolves to invite ITU-R are complete and agreed by ITU-R study groups. | WP 4B WP 4C WP 5A WP 5C WP 7B WP 7C (WP 3M) (WP 5D) |

| Topic | Responsible group | Action to be taken by the group | Concerned group 1 |
|--|-------------------|--|---|
| · | • | ramework for non-GSO FSS satellite systems that may operate in the frequency bands 37.5-39.5 GHz (space) and 50.4-51.4 GHz (Earth-to-space), in accordance with Resolution 159 [COM6/18] (WRC-15) ; | pace-to-Earth), |
| 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) | WP 4A | to conduct, and complete in time for WRC-19: 1 | WP 5A WP 5B WP 5C WP 5D WP 6A WP 7B WP 7C WP 7D (WP 3M) (WP 4B) |

| Topic | Responsible group | Action to be taken by the group | Concerned group ¹ |
|---|-------------------|--|---|
| 1 | • | acking and command in the space operation service for non-GSO satellites with short duration missions, ervice and, if necessary, to consider new allocations, in accordance with Resolution 659 [COM6/19] (WRC- | |
| Resolution 659 [COM6/19] (WRC-15) Studies to accommodate requirements in the space operation service for nongeostationary satellites with short duration missions | WP 7B | resolves to invite the 2019 World Radiocommunication Conference to consider the results of ITU-R studies and take necessary action, as appropriate, provided that the results of the studies referred to in invites ITU-R below are complete and agreed by ITU-R study groups, invites ITU-R 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 recognizing a) and current use; 3 if studies of the current allocations to the space operations service indicate that requirements cannot be met under invites ITU-R 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, invites Member States and ITU-R Sector Members, Associates and Academia to participate in studies by submitting contributions to ITU-R. | WP 4A WP 4C WP 5A WP 5B WP 5C WP 6A WP 7C WP 7D (WP 1A) (WP 3M) (WP 4B) |

| Topic | Responsible group | Action to be taken by the group | Concerned group 1 |
|---|-------------------|---|--|
| 1.8 to consider possible regulatory satellite systems into the GMDSS, in accordance | • | port Global Maritime Distress Safety Systems (GMDSS) modernization and to support the introduction solution 359 (Rev.WRC-15); | າ of additional |
| Resolution 359 (Rev.WRC-15) Consideration of regulatory provisions for updating and modernization of the Global Maritime Distress and Safety System | WP 5B | resolves to invite ITU-R 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; 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, invites the 2019 World Radiocommunication Conference 1 to consider the result of ITU Radiocommunication Sector (ITU-R) studies and take necessary actions, as appropriate, to support GMDSS modernization; 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 recognizing e), | 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) |

| Topic | Responsible group | Action to be taken by the group | Concerned group 1 |
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| 1.9 to consider, based on the results | of ITU-R studie | es: | |
| 1.9.1 regulatory actions within the fr (AIS), in accordance with Resolution 362 [| | 156-162.05 MHz for autonomous maritime radio devices to protect the GMDSS and automatic identifice. (C-15); | ations system |
| Resolution 362 [COM6/10] (WRC-15) Autonomous maritime radio devices operating in the frequency band 156-162.05 MHz | WP 5B | resolves to invite the 2019 World Radiocommunication Conference to consider the results of ITU-R studies and take appropriate actions, | WP 4C WP 5A WP 5C (WP 1B) (WP 3M) |

| Topic | Responsible group | Action to be taken by the group | Concerned group ¹ | |
|---|-------------------|---|---|--|
| 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) 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 components that this component will not degrade the current terrestrial VDES components, applications specific messages (ASM) and AIS operations and not impose an 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); | | | | |
| 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 | WP 5B | resolves to invite the 2019 World Radiocommunication Conference 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 recognizing d) and e), invites ITU-R 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 recognizing d) and e) to determine potential regulatory actions, including spectrum allocations to the MMSS (Earth-to-space and space-to-Earth) for VDES applications, | WP 4C WP 5A WP 5C (WP 1A) (WP 3M) | |

| Topic | Responsible group | Action to be taken by the group | Concerned group 1 |
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| 1.10 to consider spectrum needs and Resolution 426 [COM6/11] (WRC-15); | d regulatory pro | ovisions for the introduction and use of the Global Aeronautical Distress and Safety System (GADSS), in account | cordance with |
| 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 | resolves to invite the 2019 World Radiocommunication Conference 1 to take appropriate actions, taking into account the results of ITU-R studies; 2 to analyse the necessity for further studies, and consider whether this matter should be brought to the attention of a future competent conference, | WP 4A WP 4B WP 4C WP 5A WP 5C WP 5D WP 6A WP 7C WP 7B WP 7D (WP 3M) |

| Topic | Responsible group | Action to be taken by the group | Concerned group 1 |
|--|-------------------|---|---|
| | | acilitate global or regional harmonized frequency bands to support railway radiocommunication systems in accordance with Resolution 236 [COM6/12] (WRC-15); | between train |
| Resolution 236 [COM6/12] (WRC-15) | | resolves to invite the 2019 World Radiocommunication Conference | |
| Railway radiocommunication systems between train and trackside | WP 5A | 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, invites ITU-R to study the spectrum needs, technical and operational characteristics and implementation of railway radiocommunication systems between train and trackside, | WP 4A WP 4B WP 4C WP 5B WP 5C WP 5D WP 7C WP 7B WP 7D (WP 3K) (WP 6A) |
| | _ | zed frequency bands, to the maximum extent possible, for the implementation of evolving Intelligent Transce with Resolution 237 [COM6/13] (WRC-15); | nsport Systems |
| Resolution 237 [COM6/13] (WRC-15) | | resolves to invite the 2019 World Radiocommunication Conference | |
| Intelligent Transport Systems applications | WP 5A | 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, invites ITU-R to carry out studies on technical and operational aspects of evolving ITS implementation using existing mobile-service allocations, | WP 4A WP 4B WP 4C WP 5B WP 5C WP 5D WP 7C WP 7B WP 7D (WP 3K) (WP 6A) |

| Topic | Responsible group | Action to be taken by the group | Concerned group 1 |
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| 1.13 to consider identification of free to the mobile service on a primary basis, in | | or the future development of International Mobile Telecommunications (IMT), including possible addition in the future development of International Mobile Telecommunications (IMT), including possible addition in the future development of International Mobile Telecommunications (IMT), including possible addition in the future development of International Mobile Telecommunications (IMT), including possible addition in the future development of International Mobile Telecommunications (IMT), including possible addition in the future development of International Mobile Telecommunications (IMT), including possible addition in the future development of International Mobile Telecommunications (IMT), including possible addition in the future development of International Mobile Telecommunications (IMT), including possible addition in the future development of International Mobile Telecommunications (IMT), including possible addition in the future development of International Mobile Telecommunications (IMT), including possible addition in the future development of International Mobile Telecommunication (IMT), including possible addition in the Internation (IMT), including possible addition (IMT), in | nal allocations |
| 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 | TG 5/1* | resolves to invite ITU-R 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: 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; 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: 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, further resolves 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 resolves to invite ITU-R can be completed in time for consideration at WRC-19; 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 resolves to invite ITU-R 2, | Note: the groups below are involved groups contributing to this issue. 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 |
| | | ¹ Including studies with respect to services in adjacent bands, as appropriate. 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. | |

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

| Topic | Responsible group | Action to be taken by the group | Concerned group 1 |
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| 1.14 to consider, on the basis of ITU- within existing fixed-service allocations; | R studies in acco | rdance with Resolution 160 [COM6/21] (WRC-15) , appropriate regulatory actions for high-altitude platform s | |
| Resolution 160 [COM6/21] (WRC-15) | | resolves to invite ITU-R | |
| Facilitating access to broadband applications delivered by high-altitude platform stations | WP 5C | to study additional spectrum needs for gateway and fixed terminal links for HAPS to provide broadband connectivity in the fixed service taking into account: - 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; 2 to study the suitability of using the existing identifications in recognizing c), 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 resolves to invite ITU-R 1; 3 to study appropriate modifications to the existing footnotes and associated resolutions in the identifications in recognizing c) 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; 4 to study, in order to meet any spectrum needs which could not be satisfied under resolves to invite ITU-R 1 and 2, 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: - 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, further resolves 1 that the studies referred to in resolves to invite ITU-R 3 and 4 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; 2 that modifications studied under resolves to invite ITU-R | WP 4A WP 4C WP 5A WP 5D WP 7B WP 7C (WP 3M) (WP 7D) |

| Topic | Responsible group | Action to be taken by the group | Concerned group 1 |
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| 1.15 to consider identification of fr 275-450 GHz, in accordance with Resoluti | | s for use by administrations for the land-mobile and fixed services applications operating in the fre [14] (WRC-15); | equency range |
| 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 | WP 1A | 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, invites ITU-R 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 invites ITU-R 1, 2 and 4, and the protection of passive services identified in No. 5.565, | WP 3J WP 3K WP 3M (see Note 1) WP 5A WP 5C (see Note 2) WP 7C WP 7D (see Note 3) (WP 4A) (WP 5D) (WP 6A) |

Note 1: WP 3J, WP 3K and WP 3M will undertake studies with respect to the *invite ITU-R 3* and submit the initial results to WP 1A by November 2016 and final results of the studies before June 2017.

Note 2: WP 5A and WP 5C will undertake studies with respect to the *invite ITU-R 1* and 2 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.

Note 3: 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.

| Торіс | Responsible group | Action to be taken by the group | Concerned group 1 |
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| | • | stems, including radio local area networks (WAS/RLAN), in the frequency bands between 5 150 MHz and 5 and 5 pactrum allocations to the mobile service, in accordance with Resolution 239 [COM6/22] (WRC-15); | 925 MHz, and |
| 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 | WP 5A | resolves to invite the 2019 World Radiocommunication Conference to consider the results of the ITU-R studies and take appropriate actions, invites ITU-R to conduct and complete the following in time for WRC-19: a) to study WAS/RLAN technical characteristics and operational requirements in the 5 GHz frequency range; b) 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; c) 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; d) to conduct further sharing and compatibility studies between WAS/RLAN applications and incumbent services addressing: i) whether any additional mitigation techniques in the frequency band 5 350-5 470 MHz beyond those analysed in the studies referred to in recognizing a) would provide coexistence between WAS/RLAN systems and EESS (active) and SRS (active) systems; ii) whether any mitigation techniques in the frequency band 5 350-5 470 MHz would provide compatibility between WAS/RLAN systems and radio determination systems; iii) whether the results of studies under points i) and ii) 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; e) 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; f) to also conduct detailed sharing and compatibility studies, including mitigation techniques, between WAS/RLAN use under the existing primary mobile service allocation while not imposing | WP 4A WP 5B WP 5C WP 7C (WP 1B) (WP 3J) (WP 3K) (WP 3M) (WP 5D) |

| Topic | Responsible group | Action to be taken by the group | Concerned group 1 |
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| | C-15) , and to de | ions incorporated by reference in the Radio Regulations communicated by the Radiocommunication cide whether or not to update the corresponding references in the Radio Regulations, in accordance with | • • |
| Resolution 28 (Rev.WRC-15) Revision of references to the text of ITU-R Recommendations incorporated by reference in the Radio Regulations | CPM19-2 | instructs the Director of the Radiocommunication Bureau 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, | - |
| Resolution 27 (Rev.WRC-12) Use of incorporation by reference in the Radio Regulations | CPM19-2 | that for the purposes of the Radio Regulations, the term "incorporation by reference" shall only apply to those references intended to be mandatory; 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; 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; 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; 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), | _ |

| Topic | Responsible group | Action to be taken by the group | Concerned group 1 |
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| 4 in accordance with Resolution streplacement or abrogation; | 95 (Rev.WRC-0 | 7), to review the resolutions and recommendations of previous conferences with a view to their pos | ssible revision, |
| Resolution 95 (Rev.WRC-07) General review of the Resolutions and Recommendations of world administrative radio conferences and world radiocommunication conferences | CPM19-2 | instructs the Director of the Radiocommunication Bureau 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 resolves 1 and resolves 2, including an indication of any associated agenda items; 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, | |
| coordination, notification and recording | procedures for | ons, in response to Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference, an advance frequency assignments pertaining to satellite networks, in accordance with Resolution 86 (Rev.WRC-0) requencies and any associated orbits, including the geostationary-satellite orbit; | - |
| Resolution 86 (Rev.WRC-07) Implementation of Resolution 86 (Rev. Marrakesh, 2002) of the Plenipotentiary Conference | WP 4A | resolves to invite future world radiocommunication conferences 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; 2 to ensure that these procedures, and the related appendices of the Radio Regulations reflect the latest technologies, as far as possible, | - |
| 8 to consider and take appropriate longer required, taking into account Resol | - | uests from administrations to delete their country footnotes or to have their country name deleted from footnotes or to have their country name deleted from footnotes or to have their country name deleted from footnotes or to have their country name deleted from footnotes or to have their country name deleted from footnotes or to have their country name deleted from footnotes or to have their country name deleted from footnotes or to have their country name deleted from footnotes or to have their country name deleted from footnotes or to have their country name deleted from footnotes or to have their country name deleted from footnotes or to have their country name deleted from footnotes or to have their country name deleted from footnotes or to have their country name deleted from footnotes or to have their country name deleted from footnotes or to have their country name deleted from footnotes or to have their country name deleted from footnotes or to have the footnotes of the footnote | ootnotes, if no |
| Resolution 26 (Rev.WRC-07) Footnotes to the Table of Frequency Allocations in Article 5 of the Radio Regulations | - | Not in the scope of the CPM | - |

| Торіс | Responsible group | Action to be taken by the group | Concerned group 1 |
|---|---|--|-------------------|
| 9 to consider and approve the Rep | ort of the Dire | ctor of the Radiocommunication Bureau, in accordance with Article 7 of the Convention: | I |
| 9.1 on the activities of the Radiocom | nmunication Se | ctor since WRC-15; | |
| Issue 9.1.1: 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 | WP 4C (see Note 1) WP 5D (see Note 2) (see also Note 3) | that administrations which implement IMT: a) should make the necessary frequencies available for system development; b) should use those frequencies when IMT is implemented; c) should use the relevant international technical characteristics, as identified by ITU-R and ITU-T Recommendations, | |
| | | 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. | |

Note 1: 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.

Note 2: 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.

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.

| Торіс | Responsible group | Action to be taken by the group | Concerned group 1 |
|--|-------------------|---|-------------------|
| <u>Issue 9.1.2</u> : | | resolves to invite ITU-R | |
| Resolution 761 [COM4/7] (WRC-15) | WP4A | to conduct, in time for WRC-19, the appropriate regulatory and technical studies, with a view | (WP 6A) |
| Compatibility of International Mobile | (see Note | to ensuring the compatibility of IMT and BSS (sound) in the frequency band 1 452-1 492 MHz in | |
| Telecommunications and broadcasting- satellite service (sound) in the frequency | 1) | Regions 1 and 3, taking into account IMT and BSS (sound) operational requirements; to prepare, <i>inter alia</i> , the regulatory action that could be taken, based on the studies carried | |
| band 1 452-1 492 MHz in Regions 1 | WP 5D | out under resolves to invite ITU-R 1 above, in order to facilitate the long-term stability of IMT and | |
| and 3 | (see Note | BSS (sound) in the frequency band 1 452-1 492 MHz, | |
| | 2) | invites the 2019 World Radiocommunication Conference | |
| | | to consider the above-mentioned results and to take necessary actions, as appropriate, | |
| | (see also | invites Member States | |
| | Note 3) | to actively participate in the ITU-R activities with regard to the studies referred to above; | |
| | | 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; | |
| | | 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, | |
| | | instructs the Director of the Radiocommunication Bureau | |
| | | to report to WRC-19, under agenda item 9.1, the results of the studies referred to in resolves to invite ITU-R 1. | |

Note 1: 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.

Note 2: 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.

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.

| Торіс | Responsible group | Action to be taken by the group | Concerned group 1 |
|--|-------------------|--|-------------------|
| Issue 9.1.3: | | resolves to invite the ITU Radiocommunication Sector | |
| Resolution 157 [COM5/6] (WRC-15) | WP 4A | to study the following issues relating to non-GSO systems in the following frequency bands allocated | WP 5A |
| Study of technical and operational issues | | to the FSS: | WP 5C |
| and regulatory provisions for new non- | | a) in the frequency band 3 700-4 200 MHz (space-to-Earth), identification of possible revision | (WP 3M) |
| geostationary-satellite orbit systems in | | of Article 21 , Table 21-4 for non-GSO FSS satellites, with a view to enabling new non-GSO systems to | |
| the 3 700-4 200 MHz, 4 500-4 800 MHz, 5 925-6 425 MHz and | | 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 | |
| 6 725-7 025 MHz frequency bands | | networks; | |
| allocated to the fixed-satellite service | | 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; | |
| | | 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; | |
| | | 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; | |
| | | 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; | |
| | | 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, further resolves | |
| | | that the results of studies referred to in the <i>resolves</i> above shall: | |
| | | 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, | |
| | | 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, | |
| | | invites administrations | |

| Topic | Responsible group | Action to be taken by the group | Concerned group ¹ |
|--|-------------------|--|------------------------------|
| Issue 9.1.4: Resolution 763 [COM5/7] (WRC-15) Stations on board sub-orbital vehicles | WP 5B | 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; 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; to complete the studies within the next ITU Radiocommunication Sector (ITU-R) study cycle, instructs the Director of the Radiocommunication Bureau to bring this resolution to the attention of the ITU-R study groups; to include in his report, for consideration by WRC-19, the results of the ITU-R studies referred to in resolves to invite the ITU Radiocommunication Sector above, | WP 4A WP 4C WP 7B |
| Issue 9.1.5: 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 | WP 5A | resolves to invite the ITU Radiocommunication Sector 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; 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, instructs the Director of the Radiocommunication Bureau to include the results of these studies in the Director's Report to WRC-19 for consideration of any regulatory action in response to resolves to invite the ITU Radiocommunication Sector above. | WP 5B (WP 3M) |

| Topic | Responsible group | Action to be taken by the group | Concerned group 1 |
|--|-------------------|---|-------------------|
| Resolution 958 [COM6/15] (WRC-15) | | resolves | |
| Urgent studies required in preparation for the 2019 World | (see below) | to complete studies on the topics identified in this resolution and its annex, invites ITU-R | (see below) |
| Radiocommunication Conference | | as a matter of urgency, to complete the studies called for in this resolution, | |
| | | instructs the Director of the Radiocommunication Bureau | |
| | | to report on these studies under agenda item 9.1 of WRC-19, as appropriate, based on the results of studies. | |
| | | ANNEX TO RESOLUTION 958 [COM6/15] (WRC-15) | |
| | | Urgent studies required in preparation for the 2019 World Radiocommunication Conference | |
| Issue 9.1.6: | | Studies concerning Wireless Power Transmission (WPT) for electric vehicles: | |
| Issue 1) in the Annex to | WP 1B | a) to assess the impact of WPT for electric vehicles on radiocommunication services; | WP 1A |
| Resolution 958 [COM6/15] (WRC-15) | | b) to study suitable harmonized frequency ranges which would minimize the impact on radiocommunication services from WPT for electrical vehicles. | WP 5B WP 6A |
| | | 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. | |
| <u>Issue 9.1.7</u> : | | 2) Studies to examine: | |
| Issue 2) in the Annex to Resolution 958 [COM6/15] (WRC-15) | WP 1B | 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; | WP 1C WP 4A |
| | | 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 9.1.8: Issue 3) in the Annex to Resolution 958 [COM6/15] (WRC-15) | WP 5D | 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. | WP 1B WP 5A |

| Торіс | Responsible group | Action to be taken by the group | Concerned group ¹ |
|--|------------------------|--|--|
| Issue 9.1.9: | | resolves to invite ITU-R | |
| Resolution 162 [COM6/24] (WRC-15) | WP 4A | to conduct, and complete in time for WRC-19: | WP 4B |
| 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) | | 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; subject to justification resulting from studies conducted under <i>resolves to invite ITU-R</i> 1, 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; 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; studies regarding the protection of radio astronomy, as described in <i>recognizing c</i>), including regulatory measures, as appropriate, instructs the Director of the Radiocommunication Bureau to report on the results of the ITU-R studies to WRC-19, invites administrations to participate actively in these studies by submitting contributions to ITU-R. | WP 5A WP 5C WP 5D WP 7C WP 7D (WP 3M) |
| 9.2 on any difficulties or inconsisten | cies encounter | ed in the application of the Radio Regulations*; and | |
| comments from administrations. | · | the Director on any difficulties or inconsistencies encountered in the application of the Radio Regula | tions and th |
| 9.3 on action in response to Resolut | ion 80 (Rev.W F | (C-U/); | |
| Resolution 80 (Rev.WRC-07) | _ | | _ |

| ` , | | | | |
|--|---|-----------------------------|---|--|
| 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-15) | - | For information at CPM19-2. | _ | |
| Preliminary agenda for the 2023 World Radiocommunication Conference | | | | |

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

- 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;
- 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;
- 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;
- 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;
- 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.