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| **World Radiocommunication Conference (WRC-19)Sharm el-Sheikh, Egypt, 28 October – 22 November 2019** |  |
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| **PLENARY MEETING** | **Document 24-E** |
|  | **3 October 2019** |
|  | **Original: English** |
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| Asia-Pacific Telecommunity Common Proposals (ACPs) |
| Proposals for the work of the conference |
|  |

This contribution presents the Asia-Pacific Telecommunity Common Proposals (ACPs) for WRC‑19. These proposals were developed over five preparatory meetings and finalized by the 5th Meeting of the APT Conference Preparatory Group for WRC-19 (APG19-5) held in Tokyo, Japan from 31 July to 6 August 2019. The intent of these proposals is to provide a timely and effective response from APT Members to WRC-19 agenda items.

A separate Addendum is provided for each WRC-19 agenda item. Introductory material is provided in each Addendum explaining the basis of the relevant proposals. A Table is annexed in Annex 1 that provides cross-reference information between the Addendum number of each of the ACP documents and the different WRC-19 agenda items (and sub-items).

The Table in Annex 2 shows which of the APT Member Administrations support each of the APT Common Proposals. Many of these Common Proposals have been grouped as they form a logical package of individual proposals to modify the Radio Regulations.

Annex 3 to this contribution provides the list of management team of APT Conference Preparatory Group for WRC-19 as well as the agenda item coordinators of APT for each of the WRC-19 agenda items.

**Annexes:** 3

Annex 1

Cross Reference Table between WRC-19 agenda items
and APT Common Proposals

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| WRC-19 Agenda Item | Sub Agenda Item/Issue | Text of Agenda Item | AddendumNumber to Document 24: | Proposal No.:ACP/24 |
| 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 (WRC-15)**;  | A1 | A1/1 |
| 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 (WRC-15)**;  | A2 | A2/1 to 5 |
| 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 (WRC‑15)**;  | A3 | A3/1 |
| 1.4 |  | to consider the results of studies in accordance with Resolution **557 (WRC-15)**, and review, and revise if necessary, the limitations mentioned in Annex 7 to Appendix **30 (Rev.WRC‑15)**, 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;  | A4 | A4/1 to 14 |
| 1.5 |  | consider the use of the frequency bands 17.7-19.7 GHz (space-to-Earth) and 27.5-29.5 GHz (Earth-to-space) by earth stations in motion communicating with geostationary space stations in the fixed-satellite service and take appropriate action, in accordance with Resolution **158 (WRC-15)**;  | A5 | A5/1 to 6 |
| 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 (WRC‑15)**;  | A6 | A6/1 to 3 |
| 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 (WRC-15)**;  | A7 | A7/1 |
| 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)**;  | A8 | A8/1 to 5 |
| 1.9 |  | to consider, based on the results of ITU-R studies:  | A9 |  |
| 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 (WRC-15)**;  | A9-A1 | A9A1/1 to 3 |
| 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)**;  | A9-A2 | A9A2/1 to 8 |
| 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 (WRC-15)**;  | A10 | A10/1 to 7 |
| 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 (WRC-15)**;  | A11 | A11/1 and 2 |
| 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 (WRC-15)**;  | A12 | A12/1 to 5 |
| 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 (WRC-15)**;  | A13 |  |
| 24.25-27.5 GHz | frequency band 24.25-27.5 GHz | A13-A1 | A13A1/1 to 6 |
| 31.8-33.4 GHz | frequency band 31.8-33.4 GHz | A13-A2 | A13A2/1 |
| 37-43.5 GHz | frequency bands 37-40.5, 40.5-42.5 and 42.5-43.5 GHz | A13-A3 | A13A3/1 to 5 |
| 45.5-47 GHz | frequency band 45.5-47 GHz | A13-A4 | A13A4/1 |
| 47-47.2 GHz | frequency band 47-47.2 GHz | A13-A5 | A13A5/1 |
| 66-71 GHz | the frequency band 66-71 GHz | A13-A6 | A13A6/1 |
| TRP | TRP treatment | A13-A7 | A13A7/1 |
| 1.14 |  | to consider, on the basis of ITU-R studies in accordance with Resolution **160 (WRC-15)**, appropriate regulatory actions for high-altitude platform stations (HAPS), within existing fixed-service allocations;  | A14 | A14/1 to 3 |
| 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 (WRC-15)**;  | A15 | A15/1 to 4 |
| 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 (WRC‑15)**;  | A16 | A16/1 to 7 |
| 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)**;  | A17 | A17/1 to 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;  | A18 | A18/1 to 11 |
| 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;  | A19 |  |
| A | Issue A - Bringing into use of frequency assignments to all non-GSO systems, and consideration of a milestone-based approach for the deployment of non-GSO systems in specific frequency bands and services  | A19-A1 | A19A1/1 |
| B | Issue B - Application of coordination arc in the Ka-band, to determine coordination requirements between the FSS and other satellite services  | A19-A2 | A19A2/1 |
| C | Issue C - Issues for which consensus was achieved in ITU-R and a single method has been identified  | A19-A3 | A19A3/1 to 20 |
| D | Issue D - Identification of those specific satellite networks and systems with which coordination needs to be effected under RR Nos. **9.12**, **9.12A** and **9.13**  | A19-A4 | A19A4/1 to 4 |
| E | Issue E - Resolution related to RR Appendix **30B**  | A19-A5 | A19A5/1 and 2 |
| F | Issue F - Measures to facilitate entering new assignments into the RR Appendix **30B** List  |  | None |
| G | Issue G - Updating the reference situation for Regions 1 and 3 networks under RR Appendices **30** and **30A** when provisionally recorded assignments are converted into definitive recorded assignments  |  | None |
| H | Issue H - Modifications to RR Appendix **4** data items to be provided for non-geostationary satellite systems | A19-A8 | A19A8/1 |
| I | Issue I - Modified regulatory procedure for non-GSO satellite systems with short-duration missions  | A19-A9 | A19A9/1 to 10 |
| J | Issue J - Pfd limit in Section 1, Annex 1 of RR Appendix **30** |  | None |
| K | Issue K - Difficulties for Part B examinations under § 4.1.12 or 4.2.16 of RR Appendices **30** and **30A** and § 6.21 *c)* of RR Appendix **30B**  | A19-A11 | A19A10/1 to 5 |
| 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)**; | A20 | A20/1 and 2 |
| 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;  |  |  |
| 9.1.1 | 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; |  | None |
| 9.1.2 | Resolution **761 (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; |  | None |
| 9.1.3 | Resolution **157 (Rev.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;  | A21-A3 | A21A3/1 to 3 |
| 9.1.4 | Resolution **763 (WRC-15)** - Stations on board sub-orbital vehicles;  | A21-A34 | A21A4/1 and 2 |
| 9.1.5 | Resolution **764 (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;  | A21-A5 | A21A5/1 to 3 |
| 9.1.6 | Resolution **958 (WRC-15)** – Annex item 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;  | A21-A6 | A21A6/1 and 2 |
| 9.1.7 | Resolution **958 (WRC-15)** – Annex item 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 RR 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);  | A21-A7 | A21A7/1 to 3 |
| 9.1.8 | Resolution **958 (WRC-15)** – Annex item 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;  | A21-A8 | A21A8/1 to 3 |
| 9.1.9 | Resolution **162 (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);  | A21-A9 | A21A9/1 to 9 |
| 9.3 | on action in response to Resolution **80 (Rev.WRC-07)** |  | None |
| 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 | A24 |  |
| Standing agenda items | A24-A1 | A24A1/1 to 9 |
| New agenda item GMDSS | A24-A2 | A24A2/1 and 2 |
| New agenda item IMT | A24-A3 | A24A3/1 and 2 |
| New agenda item HIBS | A24-A4 | A24A4/1 and 2 |
| New agenda item Marine VHF | A24-A5 | A24A5/1 and 2 |
| New agenda item Space Based VHF | A24-A6 | A24A6/1 and 2 |
| New agenda item Sub Orbital Vehicle | A24-A7 | A24A7/1 and 2 |

Annex 2

Table of Endorsements for the ACPs

| Agenda Item No. | Addendum No. | Proposal No. ACP/24 | AFG | AUS | BGD | BTN | BRU | CBG | CHN | KRE | FJI | IND | INS | IRN | J | KIR | KOR | LAO | MLA | MLD | MHL | FSM | MNG | BRM | NRU | NPL | NZL | PAK | PLW | PNG | PHL | SMO | SNG | SLM | CLN | THA | TON | TUV | VUT | VTN | Total |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| 1.1 | A1 | A1/1 | - | Y | Y | Y | - |  | - | - | - | Y | Y | Y | Y | Y | Y | - | Y | Y |  | Y | Y | - | Y | - | Y | Y |  | Y | Y | - | - | Y |  | - | - |  | - | - | 19 |
| 1.2 | A2 | A2/1 to 2 | Y | Y | Y | Y | - |  | Y | Y | - | Y | Y | Y | - | Y | Y | - | Y | Y |  | Y | - | Y | Y | - | - | Y |  | Y | Y | - | - | Y |  | Y | Y |  | - | - | 22 |
| A2/3 to 5 | Y | Y | Y | Y | - |  | Y | Y | - | Y | Y | Y | Y | Y | Y | - | Y | Y |  | Y | - | Y | Y | - | - | Y |  | Y | Y | - | - | Y |  | Y | Y |  | - | - | 23 |
| 1.3 | A3 | A3/1 | Y | - | - | Y | - |  | - | Y | - | Y | Y | Y | - | Y | Y | - | - | Y |  | - | - | - | Y | - | - | - |  | Y | - | - | - | Y |  | Y | Y |  | - | - | 13 |
| 1.4 | A4 | A4/1 to 14 | Y | Y | Y | Y | - |  | Y | Y | Y | - | Y | Y | Y | Y | Y | - | Y | Y |  | Y | Y | - | Y | Y | - | Y |  | Y | - | - | - | Y |  | Y | Y |  | - | - | 23 |
| 1.5 | A5 | A5/1 to 4 | Y | Y | Y | Y | Y |  | Y | Y | - | Y | Y | Y | Y | - | Y | - | Y | Y |  | Y | Y | Y | - | - | Y | Y |  | Y | - | - | Y | Y |  | Y | Y |  | - | - | 24 |
| A5/5 | Y | Y | Y | Y | - |  | - | Y | - | - | Y | Y | Y | - | Y | - | - | Y |  | Y | Y | Y | - | - | Y | Y |  | Y | - | - | Y | Y |  | Y | Y |  | - | - | 20 |
| A5/6 | Y | Y | Y | Y | Y |  | Y | Y | - | Y | Y | Y | Y | - | Y | - | Y | Y |  | Y | Y | Y | - | - | Y | Y |  | Y | - | - | Y | Y |  | Y | Y |  | - | - | 24 |
| 1.6 | A6 | A6/1 | Y | Y | - | Y | - |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | - | Y | Y |  | Y | - | Y | Y | - | Y | Y |  | Y | - | - | Y | Y |  | Y | Y |  | Y | Y | 26 |
| A6/2 | Y | Y | - | Y | - |  | Y | Y | Y | - | Y | Y | Y | Y | Y | - | - | Y |  | Y | - | Y | Y | - | Y | Y |  | Y | - | - | Y | Y |  | Y | Y |  | Y | Y | 24 |
| A6/3 | Y | Y | - | Y | - |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | - | Y | Y |  | Y | - | Y | Y | - | Y | - |  | Y | - | - | Y | Y |  | Y | Y |  | Y | Y | 25 |
| 1.7 | A7 | A7/1 | Y | - | Y | - | - |  | - | - | - | - | Y | Y | - | Y | Y | - | - | Y |  | - | - | - | Y | - | - | - |  | Y | - | - | Y | Y |  | - | Y |  | - | Y | 13 |
| 1.8 | A8 | A8/1 to 4 | - | Y | Y | Y | - |  | Y | Y | - | - | Y | Y | Y | Y | Y | - | Y | Y |  | Y | - | Y | Y | - | Y | Y |  | Y | Y | - | Y | Y |  | Y | - |  | - | Y | 23 |
| A8/5 | - | Y | - | Y | - |  | Y | Y | - | - | Y | Y | Y | Y | Y | - | Y | Y |  | Y | - | Y | Y | - | Y | Y |  | Y | Y | - | Y | Y |  | Y | - |  | - | Y | 22 |
| 1.9.1 | A9-A1 | A9-A1/1 to 3 | - | Y | Y | - | - |  | Y | Y | - | - | Y | Y | Y | Y | Y | - | Y | Y |  | Y | - | Y | Y | - | Y | Y |  | Y | Y | - | - | Y |  | Y | - |  | - | Y | 21 |
| 1.9.2 | A9-A2 | A9-A2/1 to 8 | - | Y | Y | - | - |  | Y | Y | - | - | Y | Y | Y | Y | Y | - | Y | Y |  | Y | - | Y | Y | - | Y | Y |  | Y | Y | - | Y | Y |  | Y | - |  | - | - | 21 |
| 1.10 | A10 | A10/1 to 7 | - | Y | Y | Y | - |  | - | Y | - | Y | Y | Y | Y | Y | Y | - | Y | Y |  | Y | - | Y | Y | Y | Y | Y |  | Y | Y | - | - | Y |  | Y | - |  | - | Y | 23 |
| 1.11 | A11 | A11/1 | Y | - | Y | Y | - |  | Y | Y | - | - | Y | Y | Y | Y | - | Y | - | Y |  | Y | Y | Y | Y | Y | - | Y |  | Y | Y | - | Y | Y |  | Y | Y |  | - | - | 23 |
| A11/2 | Y | - | Y | Y | - |  | Y | Y | - | - | Y | Y | Y | Y | - | Y | - | Y |  | Y | Y | Y | Y | Y | - | Y |  | Y | Y | - | Y | Y |  | Y | Y |  | - | Y | 24 |
| 1.12 | A12 | A12/1 to 5 | Y | - | Y | Y | Y |  | Y | Y | - | Y | Y | Y | Y | Y | - | - | Y | Y |  | Y | Y | Y | Y | Y | - | Y |  | - | Y | - | Y | Y |  | Y | Y |  | - | Y | 25 |
| 1.13 | A13-A1 | A13-A1/1 | Y | Y | Y | Y | Y |  | Y | Y | - | Y | Y | Y | Y | Y | Y | Y | Y | Y |  | Y | - | Y | Y | Y | Y | Y |  | - | - | Y | Y | Y |  | Y | Y |  | Y | Y | 29 |
| A13-A1/2 & 3 | Y | Y | Y | Y | Y |  | Y | Y | - | - | Y | Y | Y | Y | Y | Y | Y | Y |  | Y | - | Y | Y | Y | Y | Y |  | - | - | Y | Y | Y |  | Y | Y |  | Y | Y | 28 |
| A13-A1/4 | Y | Y | Y | Y | Y |  | - | Y | - | - | Y | Y | Y | Y | Y | Y | Y | Y |  | Y | - | Y | Y | Y | Y | Y |  | - | - | Y | Y | Y |  | Y | Y |  | Y | Y | 27 |
| A13-A1/5 | Y | Y | Y | Y | Y |  | Y | Y | - | Y | Y | Y | Y | Y | Y | Y | Y | Y |  | Y | - | Y | Y | Y | Y | Y |  | - | - | Y | Y | Y |  | Y | Y |  | Y | Y | 28 |
| A13-A1/6 | Y | Y | Y | Y | Y |  | Y | Y | - | - | Y | Y | Y | Y | Y | Y | Y | Y |  | Y | - | Y | Y | Y | Y | Y |  | - | - | Y | Y | Y |  | Y | Y |  | Y | Y | 28 |
| A13-A2 | A13-A2/1 | Y | Y | Y | Y | Y |  | Y | Y | - | Y | Y | Y | Y | Y | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | Y |  | Y | Y | Y | Y | Y |  | Y | Y |  | Y | Y | 32 |
| A13-A3 | A13-A3/1  | Y | Y | Y | Y | Y |  | - | Y | - | - | Y | Y | Y | Y | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | - |  | - | - | Y | Y | Y |  | Y | Y |  | Y | Y | 27 |
| A13-A3/2 to 4 | Y | Y | Y | Y | Y |  | - | Y | - | - | Y | Y | Y | Y | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | - |  | - | - | Y | Y | Y |  | Y | Y |  | Y | Y | 27 |
| A13-A3/5 | Y | Y | Y | Y | Y |  | Y | Y | - | - | Y | Y | Y | Y | Y | Y | Y | Y |  | Y | Y | Y | Y | Y | Y | - |  | - | - | Y | Y | Y |  | Y | Y |  | Y | Y | 28 |
| A13-A4 | A13-A4/1 | Y | Y | Y | Y | Y |  | Y | Y | - | Y | Y | Y | - | Y | Y | - | - | Y |  | Y | Y | Y | Y | Y | Y | Y |  | Y | Y | Y | - | Y |  | Y | Y |  | Y | - | 27 |
| A13-A5 | A13-A5/1 | Y | Y | Y | Y | Y |  | Y | Y | - | Y | Y | Y | Y | Y | Y | - | - | Y |  | Y | Y | Y | Y | Y | Y | Y |  | Y | Y | Y | - | Y |  | Y | Y |  | Y | - | 28 |
| A13-A6 | A13-A6/1 | Y | Y | Y | - | Y |  | Y | Y | - | - | Y | - | Y | Y | - | - | Y | Y |  | Y | - | Y | Y | Y | - | - |  | - | Y | Y | - | Y |  | Y | Y |  | Y | - | 21 |
| A13-A7 | A13-A7/1 | Y | Y | Y | Y | - |  | Y | Y | - | - | Y | Y | Y | - | Y | - | Y | Y |  | Y | - | Y | Y | Y | Y | Y |  | Y | Y | - | - | Y |  | - | - |  | Y | Y | 23 |
| 1.14 | A14 | A14/1 to 3 | Y | - | - | Y | Y |  | Y | Y | - | Y | Y | Y | Y | Y | Y | - | Y | Y |  | Y | Y | Y | Y | - | Y | Y |  | Y | Y | Y | Y | Y |  | Y | Y |  | Y | Y | 28 |
| 1.15 | A15 | A15/1 to 4 | Y | Y | - | Y | - |  | Y | Y | - | - | - | Y | Y | Y | - | - | Y | Y |  | Y | - | Y | Y | Y | Y | Y |  | Y | Y | - | - | Y |  | Y | Y |  | - | - | 21 |
| 1.16 | A16 | A16/1 to 2 | Y | Y | Y | Y | Y |  | Y | Y | Y | - | Y | Y | Y | Y | Y | - | Y | Y |  | Y | Y | Y | Y | - | Y | Y |  | Y | Y | - | Y | Y |  | Y | Y |  | Y | - | 28 |
| A16/3 | Y | - | Y | Y | Y |  | Y | Y | Y | - | Y | Y | Y | Y | Y | - | Y | Y |  | Y | Y | Y | Y | - | Y | - |  | Y | Y | - | Y | Y |  | Y | Y |  | Y | - | 26 |
| A16/4 to 5 | Y | - | Y | Y | Y |  | Y | Y | Y | - | Y | Y | Y | Y | Y | - | Y | Y |  | Y | Y | Y | Y | - | Y | - |  | Y | Y | - | Y | Y |  | Y | Y |  | Y | - | 26 |
| A16/6 to 7 | Y | Y | Y | Y | Y |  | Y | Y | Y | - | Y | Y | Y | Y | Y | - | Y | Y |  | Y | Y | Y | Y | - | Y | Y |  | Y | Y | - | Y | Y |  | Y | Y |  | Y | - | 28 |
| 2 | A17 | A17/1 to 3 | Y | Y | - | Y | - |  | Y | Y | - | - | - | Y | Y | Y | Y | - | Y | Y |  | Y | - | - | Y | Y | Y | Y |  | Y | Y | - | - | Y |  | - | Y |  | - | - | 20 |
| A17/4 to 6 | Y | Y | - | Y | - |  | Y | Y | - | - | - | Y | Y | Y | Y | - | - | Y |  | Y | - | - | Y | Y | Y | Y |  | Y | Y | - | - | Y |  | - | Y |  | - | - | 19 |
| 4 | A18 | A18/1 to 11 | Y | Y | - | Y | - |  | Y | Y | - | - | - | Y | Y | Y | Y | - | - | Y |  | Y | Y | - | Y | Y | Y | Y |  | Y | Y | - | - | Y |  | - | Y |  | - | - | 20 |
| 7 | A19 |  |  |
| 7 (A) | A19-A1 | A19-A1/1 | Y | - | - | - | - |  | - | Y | - | - | Y | Y | Y | Y | Y | - | Y | Y |  | Y | - | - | Y | - | - | Y |  | - | - | - | - | Y |  | Y | Y |  | - | Y | 16 |
| 7 (B) | A19-A2 | A19-A2/1 | Y | Y | - | Y | - |  | Y | Y | - | Y | Y | Y | Y | Y | Y | - | Y | Y |  | Y | Y | - | Y | Y | - | Y |  | Y | Y | - | Y | Y |  | Y | Y |  | - | Y | 25 |
| 7 (C) | A19-A3 | A19-A3/1 to 20 | Y | Y | - | Y | - |  | Y | Y | - | Y | Y | Y | Y | Y | Y | - | Y | Y |  | Y | Y | - | Y | Y | - | Y |  | Y | Y | - | Y | Y |  | Y | Y |  | - | Y | 25 |
| 7 (D) | A19-A4 | A19-A4/1 to 4 | Y | Y | - | Y | - |  | Y | Y | - | Y | Y | Y | Y | Y | Y | - | Y | Y |  | Y | - | - | Y | Y | - | - |  | Y | Y | - | Y | Y |  | Y | Y |  | - | Y | 23 |
| 7 (E) | A19-A5 | A19-A5/1 & 2 | Y | - | - | Y | - |  | Y | Y | - | - | Y | Y | Y | Y | Y | - | Y | Y |  | Y | - | - | - | Y | - | Y |  | - | Y | - | Y | Y |  | Y | Y |  | - | Y | 20 |
| 7 (F) | A19-A6 | No PACP |  |  |
| 7 (G) | A19-A7 | No PACP |  |  |
| 7 (H) | A19-A8 | A19-A8/1 | Y | Y | - | Y | - |  | Y | Y | - | Y | Y | Y | Y | Y | Y | - | Y | Y |  | Y | Y | - | - | - | - | Y |  | Y | Y | - | Y | Y |  | Y | Y |  | - | Y | 23 |
| 7 (I) | A19-A9 | A19-A9/1 to 10 | Y | Y | - | Y | - |  | Y | Y | - | Y | Y | Y | Y | Y | Y | - | Y | Y |  | Y | - | - | - | - | Y | Y |  | Y | Y | - | Y | Y |  | Y | Y |  | - | Y | 23 |
| 7 (J) | A19-A10 | No PACP |  |  |
| 7 (K) | A19-A11 | A19-A11/1 to 5 | Y | Y | - | Y | - |  | Y | Y | - | - | Y | - | Y | Y | Y | - | Y | Y |  | Y | Y | - | - | Y | - | Y |  | Y | Y | - | Y | Y |  | Y | Y |  | - | Y | 22 |
| 8 | A20 | A20/1 & 2 | Y | Y | - | Y | - |  | Y | Y | - | - | Y | Y | Y | Y | - | - | Y | Y |  | Y | Y | - | - | Y | Y | Y |  | Y | Y | - | - | Y |  | - | Y |  | - | - | 20 |
| 9.1 | A21 |  |  |
| 9.1.1 | A21-A1 | No PACP |  |  |
| 9.1.2 | A21-A2 | No PACP |  |  |
| 9.1.3 | A21-A3 | A21-A3/1 to 3 | Y | Y | Y | Y | - |  | Y | Y | Y | Y | Y | Y | Y | Y | Y | - | Y | Y |  | Y | Y | - | Y | Y | Y | Y |  | Y | Y | - | - | Y |  | Y | Y |  | - | Y | 27 |
| 9.1.4 | A21-A4 | A21-A4/1 & 2 | Y | Y | - | Y | - |  | Y | Y | - | Y | Y | Y | Y | Y | Y | - | Y | Y |  | Y | Y | - | - | Y | Y | Y |  | Y | Y | - | - | Y |  | Y | Y |  | - | - | 23 |
| 9.1.5 | A21-A5 | A21-A5/1 to 3 | Y | Y | - | Y | Y |  | Y | Y | - | - | Y | Y | Y | Y | - | - | - | Y |  | Y | - | - | Y | Y | Y | Y |  | Y | Y | - | - | Y |  | - | Y |  | - | - | 20 |
| 9.1.6 | A21-A6 | A21-A6/1 & 2 | Y | Y | - | Y | - |  | Y | Y | - | - | - | Y | Y | Y | Y | - | Y | Y |  | Y | Y | Y | Y | Y | Y | Y |  | Y | Y | - | - | Y |  | Y | Y |  | - | - | 23 |
| 9.1.7 | A21-A7 | A21-A7/1 to 3 | Y | Y | - | Y | - |  | Y | Y | - | - | Y | Y | Y | Y | - | - | Y | Y |  | Y | - | Y | Y | Y | Y | Y |  | Y | Y | Y | Y | Y |  | Y | Y |  | Y | - | 25 |
| 9.1.8 | A21-A8 | A21-A8/1 to 3 | Y | Y | Y | Y | - |  | Y | Y | - | Y | Y | Y | Y | Y | Y | - | Y | Y |  | Y | Y | Y | Y | Y | Y | Y |  | Y | Y | - | Y | Y |  | Y | Y |  | - | Y | 28 |
| 9.1.9 | A21-A9 | A21-A9/1 to 9 | Y | Y | Y | Y | - |  | Y | Y | - | Y | Y | Y | - | Y | Y | - | - | Y |  | Y | - | Y | Y | Y | - | Y |  | Y | - | - | - | Y |  | Y | Y |  | - | - | 21 |
| 9.3 | A23 | No PACP |  |  |
| 10 | A24 |  |  |
| A24-A1 | A24-A1/1 to 2 | Y | Y | - | Y | - |  | Y | Y | - | - | Y | Y | Y | - | Y | - | Y | Y |  | Y | Y | - | - | Y | Y | Y |  | Y | Y | - | Y | Y |  | - | Y |  | - | - | 21 |
| A24-A1/3 | Y | Y | - | Y | - |  | - | Y | - | - | Y | Y | Y | - | Y | - | Y | Y |  | Y | Y | - | - | Y | Y | Y |  | Y | Y | - | Y | Y |  | - | Y |  | - | - | 20 |
| A24-A1/4 | Y | Y | - | Y | - |  | Y | Y | - | - | Y | - | Y | - | Y | - | Y | Y |  | Y | Y | - | - | Y | Y | Y |  | Y | Y | - | Y | Y |  | - | Y |  | - | - | 19 |
| A24-A1/5 | Y | Y | - | Y | - |  | Y | Y | - | - | Y | Y | Y | - | Y | - | Y | Y |  | Y | Y | - | - | Y | Y | Y |  | Y | Y | - | Y | Y |  | - | Y |  | - | - | 21 |
| A24-A1/6 to 7 | Y | Y | - | Y | - |  | - | Y | - | - | Y | Y | Y | - | Y | - | Y | Y |  | Y | Y | - | - | Y | Y | Y |  | Y | Y | - | Y | Y |  | - | Y |  | - | - | 20 |
| A24-A1/8 to 9 | Y | Y | - | Y | - |  | Y | Y | - | - | Y | Y | Y | - | Y | - | Y | Y |  | Y | Y | - | - | Y | Y | Y |  | Y | Y | - | Y | Y |  | - | Y |  | - | - | 21 |
| A24-A2 | A24-A2/1 & 2 | - | Y | - | Y | - |  | Y | Y | - | - | Y | Y | Y | - | Y | - | - | Y |  | Y | Y | - | Y | Y | Y | Y |  | Y | Y | - | Y | Y |  | Y | - |  | - | - | 20 |
| A24-A3 | A24-A3/1 & 2 | Y | - | - | Y | Y |  | Y | Y | - | - | Y | Y | - | - | - | Y | - | Y |  | Y | - | - | Y | Y | Y | Y |  | Y | - | - | Y | Y |  | Y | Y |  | - | Y | 20 |
| A24-A4 | A24-A4/1 & 2 | Y | - | - | - | Y |  | - | Y | - | - | Y | - | Y | - | - | - | - | Y |  | Y | Y | - | - | Y | Y | Y |  | Y | Y | - | - | Y |  | Y | Y |  | - | - | 16 |
| A24-A5 | A24-A5/1 & 2 | - | Y | - | Y | - |  | Y | Y | - | - | Y | Y | Y | - | Y | - | - | Y |  | Y | - | - | Y | - | Y | Y |  | Y | Y | - | Y | Y |  | Y | - |  | - | - | 18 |
| A24-A6 | A24-A6/1 & 2 | Y | Y | - | Y | Y |  | - | Y | - | Y | Y | - | Y | - | Y | - | - | Y |  | Y | - | - | Y | - | Y | Y |  | Y | Y | - | Y | Y |  | - | Y |  | - | - | 19 |
| A24-A7 | A24-A7/1 & 2 | Y | Y | - | Y | - |  | Y | Y | - | - | Y | - | Y | - | - | - | - | Y |  | Y | - | - | - | - | Y | Y |  | Y | Y | - | - | Y |  | Y | Y |  | - | - | 16 |

Annex 3

APG Management Team and List of APT Coordinators
for WRC-19 Agenda Items

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| **APG-19 Management Team** |
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| **WP 1: Land Mobile and Fixed Services (Agenda Items 1.11, 1.12, 1.14 and 1.15)** |
| **Designation** | **Name** | **Photo** | **Email** |
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| **WP 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))** |
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| **WP 3: Satellite Services (Agenda Items 1.4, 1.5, 1.6, 7, 9.1 (Issues 9.1.2, 9.1.3, 9.1.9) and 9.3)** |
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| Coordinators AI7 | **(Issues: C1, C2, C3, C6, C7, E, F, K and M):** Mr Phung Nyugen Phuong (Viet Nam)**(Issues: B, C4, G and J):** Ms Geetha Remy Vincent (Malaysia) **(Issues: A, C5, D, H, I and L):** Mr Iraj Mokarrami(Islamic Rep. of Iran)  |  | phuongpn@rfd.gov.vngeetha@measat.com iraj.mokarrami@cra.ir  |
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| **WP 4: Science Services (Agenda Items 1.2, 1.3 and 1.7)** |
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| Coordinator AI1.7 | Mr Nguyen Huy Cuong (Viet Nam) |  | cuongnh@rfd.gov.vn  |

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| **WP 5: Maritime, Aeronautical and Amateur Services (Agenda Items 1.1, 1.8, 1.9, 1.10 and 9.1 (Issues 9.1.4)** |
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| **WP 6: General Issues (Agenda Items 2, 4, 8, 9.1 (issues 9.1.6, 9.1.7) and 10)** |
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|  | **IMT, HIBS:**Ms Lyu Boya (People's Rep. of China)**Others:**Ms Qian Sun (People's Rep. of China)Mr Paul Burford (Australia) |  | lvboya@huawei.com sun\_qian\_cast@sina.compzburford@gmail.com  |

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